

All Chapters

1) Which of the following statements is true?

- A) Fire fighters are extraordinary people.
- B) Fire fighters are ordinary people who consciously put themselves in extraordinary situations.
- C) Fire fighters should be able to solve every problem in which they are called to respond to.
- D) Volunteer fire fighters are not expected to calmly evaluate emergency and non emergency situations and work to bring them to a successful conclusion.

Answer --> B

Notes) No reference, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Although firefighters are extremely motivated individuals you have to remember that they can not solve all problems that you will encounter.

The public must accept this reality and understand that not everything can be done at once.

2) Where was the first recorded major fire in the New World that occurred in 1608?

- A) Jamestown.
- B) New Amsterdam.
- C) New York.
- D) Boston.

Answer --> A

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

3) When did fire fighting tools, equipment, and fire fighting methods begin to change in North America?

- A) During the first quarter of the 18th Century.
- B) During the Industrial Revolution beginning in the last quarter of the 18th Century.
- C) During the mid 19th Century.
- D) During the first quarter of the 20th Century.

Answer --> B

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

4) Who was credited for organizing the first volunteer fire department?

- A) George Washington.
- B) Sam Adams.
- C) Thomas Jefferson.
- D) Benjamin Franklin.

Answer --> D

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

5) In which American city was the first volunteer fire company organized?

- A) New York.
- B) Boston.
- C) Philadelphia.
- D) Charleston.

Answer --> C

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The first paid fire company was formed in Boston in 1678.

6) In 1653, which city purchased it's first fire engine, even before forming the first ever paid fire company in 1678?

- A) Boston.
- B) New York.
- C) Philadelphia.
- D) Hartford.

Answer --> A

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

7) The first fire organization in North America was formed in 1647 in which American city.

- A) Boston.
- B) Philadelphia.
- C) New Amsterdam.
- D) Hartford.

Answer --> C

Notes) Page 11, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

New Amsterdam was later known as New York.

8) Fire insurance companies adopted distinctive symbols and posted them on each property that they protected. These symbols were called –

- A) Insurance marks.
- B) Fire marks.
- C) Maltese Crosses.
- D) Coat of arms.

Answer --> B

Notes) Reference Dropped In This Edition, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

9) The majority of the fire departments and firefighters in the USA and Canada are –

- A) Career.
- B) Part time.
- C) Paid On Call.
- D) Volunteer.

Answer --> D

Notes) Page 23, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

10) Many of the early fraternal groups were made up of military veterans and these organizations adopted the military's rank structure. Most modern day fire departments now use different designations, except for which of the following ranks?

- A) Privates and corporals.
- B) Sergeants and lieutenants.
- C) Lieutenants and captains.
- D) Captains and majors.

Answer --> C

Notes) Page 22, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

11) Firefighters who receive reimbursement for each call they attend are known as –

- A) Career.
- B) Part time.
- C) Paid On Call.
- D) Volunteer.

Answer --> C

Notes) Page 23, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

12) In the fire service which of the following would best characterize the statement, "obedience to the unenforceable" ?

- A) Integrity.
- B) Moral character.
- C) Pride.
- D) Work ethic.

Answer --> A

Notes) Page 19, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Doing the right thing simply because its right. Integrity is when you do the right thing even when no one else is watching.

All Chapters

13) Which of the following would best characterize truthfulness and honesty?

- A) Honorableness.
- B) Moral character.
- C) Pride.
- D) Work ethic.

Answer --> B

Notes) Page 19, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

14) In what year was the National Fire Protection Association NFPA formed?

- A) 1896.
- B) 1900.
- C) 1924.
- D) 1936.

Answer --> A

Notes) Page 12, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

15) Doing what needs to be done without being asked. Doing a job without complaining. Doing a job completely, and doing it to the best of your ability would be characterized by which of the following?

- A) Honorableness.
- B) Moral character.
- C) Pride.
- D) Work ethic.

Answer --> D

Notes) Page 20, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

16) The very first standard published by NFPA was –

- A) NFPA 1.
- B) NFPA 13.
- C) NFPA 100.
- D) NFPA 101.

Answer --> B

Notes) Page 12, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

NFPA 13 regulated the design and installation of fire protection sprinkler systems and structures.

All Chapters

17) The most basic mission of the fire service is to –

- A) Extinguish fires.
- B) Respond to all emergencies.
- C) Investigate fires.
- D) Save lives, property, and protect the environment.

Answer --> D

Notes) Page 20, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

18) Which of the following is an obsolete term for resistance to fire?

- A) Fire retardant.
- B) Fire resistant.
- C) Fireproof.
- D) Burn proof.

Answer --> C

Notes) Page 12, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The term is inappropriate because all materials except water will burn. This term has been replaced by terms such as fire resistive or fire resistant.

19) Hardware mounted on exit doors in public buildings that are locked from the inside that enable doors to be opened when pressure is applied to them is known as –

- A) Safety bar.
- B) Safety hardware.
- C) Egress hardware.
- D) Panic hardware.

Answer --> D

Notes) Page 12, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

20) Which of the following fires claimed the most lives?

- A) Iroquois Theater Fire in Chicago in 1903.
- B) Coconut Grove Nightclub Fire in Boston in 1942.
- C) Station Nightclub Fire in West Warwick Rhode Island in 2003.
- D) Ringling Brothers and Barnum & Bailey Circus Fire in Hartford in 1944.

Answer --> A

Notes) Pages 12–14, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
NTQ

Iroquois Theater Fire 1903 – 602 dead.
Coconut Grove Nightclub Fire 1942 – 492 dead.
Station Nightclub Fire 2003 – 100 dead.
Ringling Brothers Fire 1944 – 168 dead.

All Chapters

21) The ability of two or more systems or components to exchange information and use the information that has been exchanged is known as –

- A) Multitasking.
- B) Cross-communication.
- C) Interoperability.
- D) Interface.

Answer --> C

Notes) Page 14, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

22) The National Commission on Fire Prevention and Control was authorized by –

- A) NFPA 101 – Life Safety Code.
- B) The Boston Fire Prevention Code of 1979.
- C) The Fire Protection and Prevention Act of 1997.
- D) The Fire Research and Safety Act of 1968.

Answer --> D

Notes) Page 15, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The purpose of the commission was to determine how to reduce fire loss in America.

23) On average, approximately how many firefighters lose their lives in the line of duty each year in America?

- A) 50.
- B) 75.
- C) 86.
- D) 100.

Answer --> D

Notes) Page 15, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

24) On average, how many firefighters each year are injured while performing both emergency and nonemergency duties?

- A) 20000.
- B) 45000.
- C) 80000.
- D) 100000.

Answer --> C

Notes) Page 15, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

25) Which of the following are organizational principles that must be present, in order to operate effectively as a team member?

(1) Unity of command (2) Span of control (3) Division of labor (4) Dissemination of knowledge (5) Discipline

- A) 1, 3.
- B) 2, 3, 4.
- C) 1, 2, 3, 5.
- D) All the above.

Answer --> C

Notes) Pages 33–35, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

26) The organization principle, Unity of Command, essentially states that –

- A) All officers on the fire ground should agree with each other on any tactical fire fighting operation before it is performed.
- B) All firefighters should report to any officer on the fire ground.
- C) Each firefighter should report to only one supervisor.
- D) All firefighters should report directly to the chief of the department.

Answer --> C

Notes) Page 33, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

However, moving up through the chain of command, all personnel ultimately report to the Fire Chief.

27) ____ means that any fire officer can effectively supervise or manage only a certain number of individuals on the fire ground.

- A) Span of command.
- B) Span of control.
- C) Span of direction.
- D) Span of leadership.

Answer --> B

Notes) Page 33, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

28) As a rule of thumb, an officer can directly supervise ____ firefighters effectively.

- A) 1
- B) 2
- C) 3 – 7.
- D) 7 – 10.

Answer --> C

Notes) Page 33, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The actual number varies with the situation. Five firefighters is considered to be the optimum.

All Chapters

29) Division of labor in the fire service is necessary for all of the following reasons except –

- A) To assign responsibility.
- B) To prevent an unbalanced workload.
- C) To prevent duplication of effort.
- D) To make specific and clear-cut assignments.

Answer --> B

Notes) Page 33 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Division of labor is the process of dividing large jobs into smaller jobs in order to make them more manageable.

30) Setting the limits or boundaries for expected performance and enforcing them would be considered which of the following?

- A) Discipline.
- B) Rules.
- C) SOPs.
- D) Regulations.

Answer --> A

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

31) What is considered a negative connotation for the term discipline as it relates to the fire service?

- A) Self-realization.
- B) Suspension.
- C) Termination.
- D) Punishment.

Answer --> D

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

32) The highest and most positive form of discipline is –

- A) Positive discipline.
- B) Preventive discipline.
- C) Corrective discipline.
- D) Self-discipline.

Answer --> D

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

33) The main purpose of discipline is to –

- A) Punish.
- B) Educate.
- C) Provide direction.
- D) Correct inappropriate behavior.

Answer --> B

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

34) A fire company which deploys hoselines for fire attack and exposure protection is known as a –

- A) Hazardous materials company.
- B) Engine company.
- C) Truck company.
- D) Rescue company.

Answer --> B

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

35) Fire companies responsible for extinguishing wildland fires and also protecting structures in the wildland/urban interface are known as –

- A) Brush companies.
- B) Engine companies.
- C) Truck companies.
- D) Hazardous materials companies.

Answer --> A

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

36) A ____ provides emergency medical care to patients and may also transport them to a medical facility are –

- A) Rescue squad.
- B) Rescue company.
- C) Emergency medical company.
- D) Hazardous materials company.

Answer --> C

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called an ambulance company.

All Chapters

37) Which of the following is responsible for searching for and removing victims from areas of endanger or entrapment?

- A) Rescue squad/company.
- B) Emergency medical company.
- C) Hazardous materials company.
- D) Truck company.

Answer --> A

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

38) Which company would be responsible for mitigating a chemical spill?

- A) Truck company.
- B) Rescue company.
- C) Hazardous materials company.
- D) Emergency medical company.

Answer --> C

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

39) Which company would be responsible for performing forcible entry, search and rescue, ventilation and overhaul, utilities control, and would provide access to the upper levels of a structure?

- A) Truck company.
- B) Rescue company.
- C) Special rescue company.
- D) Emergency medical company.

Answer --> A

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

40) A firefighter is an individual who must meet all the following criteria except –

- A) Be a knowledgeable expert at all forms of fire fighting.
- B) Meet the requirements of the NFPA Standard 1001.
- C) Satisfy the age requirement set by the AHJ.
- D) Meet the medical requirements set forth in NFPA 1582.

Answer --> A

Notes) Page 26 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also meet the job related physical fitness requirements and minimum educational requirements set forth by the Authority Having Jurisdiction (AHJ).

All Chapters

41) Those who assist in emergency operations with traffic control, crowd control, and scene security are called –

- A) Information Systems Personnel.
- B) Fire Department Safety Officers.
- C) Fire Department Officers.
- D) Fire Police Personnel.

Answer --> D

Notes) Page 29 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

42) An individual who informs the public about fire hazards, fire causes, precautions, and actions taken during a fire is called –

- A) Fire Prevention Officer/Inspector.
- B) Fire and Arson Investigator.
- C) Fire and Life Safety Educator.
- D) Fire Protection Engineer/Specialist.

Answer --> C

Notes) Page 31 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

43) An individual who acts as a consultant to the upper administration of the fire department in the areas of department operations, and fire prevention is known as –

- A) Fire Prevention Officer/Inspector.
- B) Fire and Arson Investigator.
- C) Fire and Life Safety Educator.
- D) Fire Protection Engineer/Specialist.

Answer --> D

Notes) Page 31 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They also check architectural and fire protection systems plans for proposed buildings to ensure compliance with local fire and life safety codes and ordinances.

44) An individual who inspects a variety of occupancies to ensure code compliance and conducts technical and supervisory work in fire prevention is known as –

- A) Fire Prevention Officer/Inspector.
- B) Fire and Arson Investigator.
- C) Fire and Life Safety Educator.
- D) Fire Protection Engineer/Specialist.

Answer --> A

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

45) One who conducts the investigation of the fire area and makes analytical judgements based on the remains at the fire scene to determine the origin and cause of a fire is known as –

- A) Fire Prevention Officer/Inspector.
- B) Fire and Arson Investigator.
- C) Fire and Life Safety Educator.
- D) Fire Protection Engineer/Specialist.

Answer --> B

Notes) Page 31 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

46) One who oversees a fire department's occupational safety and health program is known as –

- A) Fire department incident safety officer.
- B) Fire department officer.
- C) Fire apparatus driver/operator.
- D) Fire department health and safety officer.

Answer --> D

Notes) Page 32 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Abbreviated HSO.

47) One who monitors operational safety during emergency incidents is known as –

- A) Fire department incident safety officer.
- B) Fire department officer.
- C) Fire apparatus driver/operator.
- D) Fire department health and safety officer.

Answer --> A

Notes) Page 29 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

48) One who manages the collection, entry, storage, retrieval, and dissemination of electronic databases such as fire reporting is known as –

- A) Informational systems personnel.
- B) Telecommunicator.
- C) Computer officer.
- D) System administrator.

Answer --> A

Notes) Page 32 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

49) Those who sustain a patient's life until more competent medical personnel arrive are known as –

- A) First Aid Firefighters.
- B) Red Cross workers.
- C) Bystanders.
- D) Emergency Medical Responders.

Answer --> D

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer changed from First Responders to Emergency Medical Responder or EMR. The book has it listed as Emergency Medical First Responder.

50) Those able to provide advanced life support (ALS) to a patient are called –

- A) ER Medics.
- B) EMTs.
- C) Paramedics.
- D) Medical Officers.

Answer --> C

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

51) Who of the following is responsible for administering all fire department training activities?

(1) Training Officer (2) Chief of Training (3) Drill–Master (4) Instructor

- A) 1
- B) 1, 2.
- C) 1, 2, 3.
- D) All the above.

Answer --> B

Notes) Page 33 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer Change: Drillmaster was dropped as a term.

The instructor delivers training courses to the other members of the department (NFPA 1041, Standard for Fire Service Instructor Professional Qualifications).

All Chapters

52) ____ is a guide to decision making within an organization.

- A) Policy.
- B) Rule.
- C) Procedure.
- D) Law.

Answer --> A

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Policies are determined by top management, then distributed two lower ranks to be implemented. They set the boundaries and establish standards of conduct that an organization expects its members to abide by.

53) A step-by-step written plan to help an organization to ensure that it consistently approaches a task in the correct way, in order to accomplish a specific objective is known as a –

- A) Policy.
- B) Rule.
- C) Procedure.
- D) Law.

Answer --> C

Notes) Page 36 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

And example would be a step-by-step procedure on how to ventilate a roof.

54) What is the difference between a directive and an order?

- A) Orders are based on policy and procedure, while directives are not.
- B) Directives are based on policy and procedures, while orders are not.
- C) Orders are subjective, while directives are objective.
- D) There is no clear difference between a directive and an order.

Answer --> D

Notes) Page 36 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer Change: Old answer was A.

According to IFSTA, the terms orders and directives basically mean the same thing, but exact definitions may vary between departments.

All Chapters

55) A predetermined plan used by fire departments for nearly every conceivable situation is called –

- A) Standard operating procedure (SOPs).
- B) Standing orders.
- C) Directives.
- D) Protocols.

Answer --> A

Notes) Page 36 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They are rules for how personnel should perform routine functions or emergency operations. Procedures are typically written down so that all firefighters can become familiar with them.

56) The National Fallen Firefighters Foundation hosted the Firefighter Life Safety Summit in 2004, which resulted in the Everyone Goes Home program and the 16 Firefighter Life Safety Initiatives intended to reduce line of duty deaths by ___ by the year 2014.

- A) 10%.
- B) 25%.
- C) 50%.
- D) 75%.

Answer --> C

Notes) Page 16 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

57) During natural disasters, which organization is usually the first to be called and the first to arrive in many communities in order to mitigate and address the potential hazards resulting from any type of natural disaster?

- A) FEMA.
- B) The Office of Homeland Security.
- C) The fire department.
- D) The police department.

Answer --> C

Notes) Page 17 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

58) The specialized or technical language of a trade, profession or similar group is known as –

- A) Jargon.
- B) Newspeak.
- C) Vernacular.
- D) Dialect.

Answer --> A

Notes) Page 18 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

59) The fire service is often referred to as a paramilitary organization because of its organizational characteristics that closely resemble the military. These characteristics would include which of the following?

- A) A common structure, including the chain of command.
- B) Ranks to define positions within the structure along with uniforms, badges and symbols of rank.
- C) An emphasis on teamwork, discipline, and following orders.
- D) All the above.

Answer --> D

Notes) Page 18 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

60) All officers should meet the requirements specified in –

- A) NFPA 1001.
- B) NFPA 1500.
- C) NFPA 1021.
- D) NFPA 1501.

Answer --> C

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

NFPA 1021 is the Standard for Fire Officer Professional Qualifications.

61) Which of the following cultural strengths would describe that part of the fire service that gives a firefighter a feeling of self-respect and self-worth?

- A) Loyalty.
- B) Courage.
- C) Respect.
- D) Pride.

Answer --> D

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Firefighters demonstrate this by taking pride in their personal appearance, displaying fire service symbols on personal vehicles, wearing nonuniform apparel with fire department name or Maltese Cross and collecting fire service memorabilia.

All Chapters

62) Which of the following cultural strengths would describe an attitude of esteem towards their peers, superiors, and fellow citizens?

- A) Loyalty.
- B) Courage.
- C) Respect.
- D) Pride.

Answer --> C

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This type of attitude, as well as the public-service firefighters provide, has always led the public to respect the work of the fire service and the firefighters that work in it.

63) Of all the personal characteristics firefighters have, which of the following is the most obvious?

- A) Loyalty.
- B) Courage.
- C) Respect.
- D) Compassion.

Answer --> B

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Courage is the ability to confront fear, pain, danger, or uncertainty.

64) Which of the following cultural strengths would prompt firefighters to risk their own lives to save a trapped or missing firefighter?

- A) Loyalty.
- B) Courage.
- C) Respect.
- D) Compassion.

Answer --> A

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Firefighters are faithfully loyal to the fire service, their department, and their coworkers.

All Chapters

65) Which of the following cultural strengths would describe a firefighter's feelings of care about the citizens they serve, their fellow firefighters, and their families?

- A) Loyalty.
- B) Courage.
- C) Respect.
- D) Compassion.

Answer --> D

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Firefighters show their compassion when they comfort victims while rendering medical care, by providing assistance when a fire leaves families homeless, and through the grief they show when another firefighter is killed in the line of duty.

66) The term used in codes and standards to identify the legal entity, such as a building or fire official, that has the statutory authority to enforce a code into approve or require equipment is known as –

- A) Municipality.
- B) Authority Having Jurisdiction.
- C) Fire District.
- D) Metropolis.

Answer --> B

Notes) Page 20 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Abbreviated AHJ.

67) Providing a coordinated approach to a wide variety of incidents; all responders use a similar, coordinated approach with a common set of authorities, protections, and resources is known as –

- A) Multitask Concept.
- B) Synchronize Concept.
- C) All-Hazard Concept.
- D) Systematic Concept.

Answer --> C

Notes) Page 21 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

68) The All-Hazard Concept would include all of the following elements except –

- A) Lobbying local, state, and federal government for funds.
- B) Emergency medical services.
- C) Hazardous materials mitigation.
- D) Emergency management services.

Answer --> A

Notes) Page 21 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Also included:

- Fire suppression protection.
- Technical rescue services.
- Airport and or seaport protection.
- Fire prevention services and public education.
- Community risk reduction.
- Fire caused determination.

69) Fire departments that are staffed with a mixture of career and volunteer firefighters are commonly called –

- A) Mixed departments.
- B) Combination departments.
- C) Compound departments.
- D) Composite departments.

Answer --> B

Notes) Page 23, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

70) When fire departments refer to external customers, who are they referring to?

- A) Citizens of the service area protected by the organization.
- B) EMS patients who are charged through billing services.
- C) Victims of interstate highway crashes that live outside the jurisdiction of the department.
- D) Municipalities outside the jurisdiction of the department who benefit from mutual aid responses.

Answer --> A

Notes) Page 24, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

71) The term used to describe personnel who provide emergency services to external customers is known as –

- A) Internal customers.
- B) Staff/Support functions.
- C) Line functions.
- D) Combination customers.

Answer --> C

Notes) Page 24, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

72) The term used to describe personnel who provide administrative and logistical support to line units is known as –

- A) Internal customers.
- B) Staff/Support functions.
- C) Line functions.
- D) Combination customers.

Answer --> B

Notes) Page 24, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

73) Who would you consider to be Internal Customers?

- A) Employees and members of an organization.
- B) Members of the public who live within the jurisdiction of a specific engine company or truck company.
- C) Those in the community who pay taxes in their fire district.
- D) All the above.

Answer --> A

Notes) Page 24, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

74) The basic unit of firefighting operations is called the –

- A) Division.
- B) Battalion.
- C) Company.
- D) Department.

Answer --> C

Notes) Page 25, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

75) The fire department company that performs technical rescues including rapid intervention for the rescue of firefighters is known as – ☐A

- A) Rescue squad.
- B) Rescue company.
- C) Hazardous materials company.
- D) Special rescue company.

Answer --> D

Notes) Page 26, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

76) Which of the following would be considered duties performed by a firefighter trained at the Firefighter II level?

- A) Performing overhaul activities at a fire scene.
- B) Coordinating an interior attack line at a structure fire.
- C) Attacking a vehicle fire.
- D) Performing horizontal and vertical ventilation on a structure fire as part of a team.

Answer --> B

Notes) Pages 27–28, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

77) A standardized approach to incident management that facilitates interaction between coordinating agencies that are adaptable to incidents of any size or type is known as –

- A) Incident command system.
- B) Incident management system.
- C) Targeted preplanning.
- D) Incident mediation system.

Answer --> A

Notes) Page 28, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

78) Certification for hazardous material technician is based on which NFPA standard, that is the Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents?

- A) NFPA 475.
- B) NFPA 471.
- C) NFPA 472.
- D) NFPA 473.

Answer --> C

Notes) Page 29, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

79) Medical personnel who are trained to provide basic emergency medical care and transportation for critical or emergent patients are known as –

- A) EMRs.
- B) EMTs.
- C) Paramedics.
- D) Advanced EMTs.

Answer --> B

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

80) Medical personnel who are trained to provide basic and limited advanced emergency medical care and transportation for critical or emergent patients are known as –

- A) EMRs.
- B) EMTs.
- C) Paramedics.
- D) Advanced EMTs.

Answer --> D

Notes) Page 30 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Abbreviated AEMT.

81) Uniform or nonuniform personnel who ensure code compliance by reviewing architectural plans and fire protection system plans, for both new construction and renovations are known as –
- ☐ A

- A) Fire marshals.
- B) Fire in life safety educators.
- C) Fire protection engineers/specialists.
- D) Plan examiners.

Answer --> D

Notes) Page 31 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

82) Technicians that maintain municipal fire alarm systems based on the requirements of NFPA 72, National Fire Alarm and Signaling Code are known as –

- A) Fire alarm maintenance personnel.
- B) Telecommunicators.
- C) Dispatchers.
- D) Information systems personnel.

Answer --> A

Notes) Page 32 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

83) Personnel who receive emergency and nonemergency phone calls, dispatch units, establish and maintain communication links to in service companies, and complete incident reports are known as –

- A) Dispatchers.
- B) Information systems personnel
- C) Telecommunicators.
- D) Clerical staff.

Answer --> C

Notes) Page 32 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The term telecommunicators has replaced dispatchers.

84) Uniformed personnel who train members of the department or other students and are certified to the Firefighter I requirements of NFPA 1041 Standard for Fire Service Instructor Professional Qualifications are known as –

- A) Instructors.
- B) Training officers.
- C) Drillmasters.
- D) Chief of training.

Answer --> A

Notes) Page 33 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

85) The formal line of authority, responsibility, and communication within an organization is known as –

- A) Standard operating procedures.
- B) Chain of command.
- C) Standard operating guidelines.
- D) Command structure.

Answer --> B

Notes) Page 33 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

86) As a firefighter, it is your responsibility to learn and adhere to your department's regulations. To ensure that members have access to these regulations, so they can fully understand them, and be able to comply, organizations should do which of the following – ☐ ☐

- A) Regulations should be distributed to them in written or electronic format.
- B) Regulations should be communicated to them verbally.
- C) Regulations should be posted in a conspicuous place in the facilities.
- D) All the above.

Answer --> D

Notes) Page 35 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

87) A set of principles, protocols, or procedures that explain how to do something or provide a set of minimum standards to be followed is called a –

- A) Code.
- B) Policy.
- C) Standard.
- D) Guide.

Answer --> C

Notes) Page 36 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

88) A collection of rules and regulations that has been enacted by law in a particular jurisdiction is known as a – ☐

- A) Code.
- B) Policy.
- C) Statute.
- D) Standard.

Answer --> A

Notes) Page 36 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

89) Organizations that provide pre-hospital patient care and/or transportation to a medical facility is called – ☐ ☐

- A) First Responders.
- B) Mobile aid stations.
- C) Emergency medical services (EMS).
- D) Mobile medical clinics.

Answer --> C

Notes) Page 37 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

90) What is the NFPA Standard on Health-Related Fitness Programs for Fire Department Members?

- A) NFPA 1001.
- B) NFPA 1500.
- C) NFPA 1823.
- D) NFPA 1583.

Answer --> D

Notes) Page 45 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

91) Approximately how many firefighter injuries are reported in the USA each year?

- A) 1000 to 4000.
- B) 5000 to 9000.
- C) 10,000 to 24,000.
- D) 72,000 to 83,000.

Answer --> D

Notes) Page 47 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change: Old answer was 100,000. New answer is based on statistics between 2001 and 2010.

92) Many firefighter injuries can be prevented through –

- A) Effective training.
- B) Maintain company discipline and accountability.
- C) Following established safety-related SOPs.
- D) All the above.

Answer --> D

Notes) Page 46 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

93) The USFA reported serious firefighter injuries for 2010, and found that __ of these injuries occurred on the fireground.

- A) 35%.
- B) 40%.
- C) 45%.
- D) 64%.

Answer --> C

Notes) Page 47 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was 52%.

94) Over the last decade approximately how many firefighters die each year in the USA in the line of duty?

- A) 50.
- B) 75.
- C) 85.
- D) 100.

Answer --> D

Notes) Page 46 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

However in 2010, the NFPA recorded 72 on-duty firefighter deaths in the United States, which represented the lowest figure since NFPA began collecting data in 1977.

All Chapters

95) The leading cause of all firefighter deaths is due to –

- A) Smoke inhalation.
- B) Falls.
- C) Stress and overexertion.
- D) Accidents involving apparatus, or firefighter personal vehicles, going to and returning from calls.

Answer --> C

Notes) Page 46 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

This category includes deaths from heart attacks and strokes.

96) Most firefighter injuries are –

- A) Inevitable.
- B) A direct result of preventable accidents.
- C) Taken in stride as part of the job.
- D) A symptom of the weaknesses in the national fire fighting curriculum.

Answer --> B

Notes) Page 48 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should be too smart and too professional to take unnecessary risks.

97) In 2010, approximately what percentage of firefighter deaths involve volunteers?

- A) 25%.
- B) 52%.
- C) 62%.
- D) 86%.

Answer --> C

Notes) Page 46 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

This should be no great surprise since the vast majority of firefighters in this country are volunteer. There were 44 volunteer firefighter deaths in 2010, 25 career firefighters, 2 state land management employees and 1 prison inmate.

All Chapters

98) Sharp or severe; having a rapid onset and short duration best describes which of the following?

- A) Acute.
- B) Chronic.
- C) Sudden.
- D) Cutting.

Answer --> A

Notes) Page 49 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

99) What is the NFPA Standard on Fire Department Occupational Safety and Health Program?

- A) NFPA 1002.
- B) NFPA 1500.
- C) NFPA 1600.
- D) NFPA 1221.

Answer --> B

Notes) Page 45 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

100) Cardiovascular diseases account for what percentage of firefighter fatalities?

- A) 20%.
- B) 35%.
- C) 45%.
- D) 60%.

Answer --> C

Notes) Page 49 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

101) Which of the following would be considered work related causes for cardiovascular disease in firefighters?

- A) Exposure to smoke and chemicals.
- B) Heat stress from fires in high temperatures.
- C) Psychological stress and long, irregular work hours.
- D) All the above.

Answer --> D

Notes) Page 49 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

102) To make less harsh or intense, best describes which of the following?

- A) Alleviate.
- B) Mitigate.
- C) Abate.
- D) Temper.

Answer --> B

Notes) Page 50 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

103) A condition, substance, or device that can directly caused injury or loss is known as –

- A) Hazard.
- B) Danger.
- C) Threat.
- D) Risk.

Answer --> A

Notes) Page 50 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

104) A 2010 study found that up to ___ of firefighters nationwide or overweight.

- A) 25%.
- B) 30%.
- C) 35%.
- D) 40%.

Answer --> D

Notes) Page 51 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This is 6% above the national average of the general population.

105) A written plan that identifies and analyzes the exposure to hazards and includes selection of appropriate risk management techniques, and monitoring of the results of those risk management techniques is referred to as a –

- A) Safety protocol.
- B) Safety program.
- C) Risk management plan.
- D) Safety management plan.

Answer --> C

Notes) Page 57 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

106) An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user, and not certified for fire fighting operations is called –

- A) Self-contained breathing apparatus (SCBA).
- B) Supplied-Air Respirator (SAR).
- C) Remote-Air Respirator (RAP).
- D) Forward-Air Respirator (FAR).

Answer --> B

Notes) Page 57 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

107) What is the term used in the fire service for a rehabilitation station at a fire or other incident where personnel can rest, rehydrate, and recover from the stresses of the incident?

- A) MASH.
- B) Triage.
- C) Aid station.
- D) Rehab.

Answer --> D

Notes) Page 57 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is the abbreviated term for rehabilitation.

108) Prior to 2007, what medical condition prevented firefighters from being hired as career firefighters in accordance with NFPA 1582?

- A) Hypertension.
- B) Asthma.
- C) Diabetes.
- D) Allergies.

Answer --> C

Notes) Page 51 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Since 2007, persons who are under a physician's care and have control over their diabetes maybe hired as a firefighter and medical responder.

109) Any agent, condition or experience that causes stress is called a – ☐ ☐

- A) Stress agent.
- B) Stress force.
- C) Stress enabler.
- D) Stressor.

Answer --> D

Notes) Page 52 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

110) Which NFPA standard is considered the Life Safety Code?

- A) NFPA 101.
- B) NFPA 1250.
- C) NFPA 1401.
- D) NFPA 1561.

Answer --> A

Notes) Page 59 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition

111) Stress can cause which of the following physical symptoms?

- A) Headache.
- B) Nausea.
- C) Weakness in the legs.
- D) All the above.

Answer --> D

Notes) Page 52 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

112) In 1970, the William–Streiger Occupational Safety And Health Act became federal law in the United States. What government agency was evolved as a result of this act?

- A) Occupational Safety and Health Administration (OSHA).
- B) Federal Rail Safety Administration (FRSA).
- C) Highway Safety Administration (HSA).
- D) Federal Safety Appliance Administration (FSAA).

Answer --> A

Notes) Page 60 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

113) An established set of criteria by which tactical decisions can be made based on an assessment of the benefits to be gained compared to the risks involved is known as a –

- A) National Safety Plan.
- B) Local Safety Plan.
- C) Risk Management Plan.
- D) Risk Analysis Survey.

Answer --> C

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

114) Which United States fire department has implemented an exemplary risk management plan?

- A) Phoenix (AZ) Fire Department.
- B) New York FDNY.
- C) Boston Fire Department.
- D) Los Angeles Fire Department.

Answer --> A

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

115) All of the following situations would NOT warrant firefighters jeopardizing their safety except for –

- A) When there is no possibility to save lives or property.
- B) If the property is a high value occupancy.
- C) When the building is abandoned or derelict.
- D) If the occupancy is in the incipient phase of burning.

Answer --> D

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is assumed that if the occupancy is in the incipient phase of burning that the relative danger to firefighters would be rather low.

116) Which should be considered the highest fireground priority?

- A) Having a viable preplan.
- B) Protecting your life and the lives of your fellow firefighters.
- C) Establishing a good water source early.
- D) Ventilating the structure while attempting interior fire attack and rescue.

Answer --> B

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

117) Which would be considered first on a list of key behaviors firefighters should exhibit on the fireground?

- A) Drive defensively.
- B) Don't ever breathe smoke.
- C) Think.
- D) Keep the crew intact.

Answer --> C

Notes) Page 63 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

118) All of the following would be considered main goals of a safety program except –

- A) Preventing damage to a structure during salvage and overhaul.
- B) Preventing human suffering, deaths, injuries, and exposures to hazardous atmospheres and contagious disease.
- C) Preventing damage to or loss of equipment.
- D) Reducing the incident and severity of accidents and hazardous exposures.

Answer --> A

Notes) Page 63 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

These would be the main goals of NFPA 1500.

119) Pathogenic microorganisms that are present in the human blood and can cause diseases in humans are called –

- A) Pathogens.
- B) Viruses.
- C) Bloodborne Pathogens.
- D) Bloodborne bacteria.

Answer --> C

Notes) Page 64 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

120) All of the following would be considered cognitive symptoms of stress except –

- A) Moodiness.
- B) Memory problems.
- C) Poor judgment.
- D) Anxious thoughts.

Answer --> A

Notes) Page 53 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Moodiness would be considered an emotional symptom of stress.

Other cognitive symptoms would be inability to concentrate, dwelling on the negative, and constant worrying.

121) All of the following would be considered emotional symptoms of stress except –

- A) Irritability or short temper.
- B) Loss of sex drive.
- C) Agitation, inability to relax.
- D) Feeling overwhelmed.

Answer --> B

Notes) Page 53 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Loss of sex drive would be considered a physical symptom of stress.

Other emotional symptoms would include moodiness, feeling lonely and isolated, depression or general unhappiness.

All Chapters

122) All the following would be considered physical symptoms of stress except for –

- A) Sleeping too much or too little.
- B) Nausea or dizziness.
- C) Muscle tension, spasms or nervous tics.
- D) Shortness of breath.

Answer --> A

Notes) Page 53 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Sleeping too much or too little would be considered behavioral symptoms of stress.
See page 53 for other physical symptoms of stress.

123) All the following would be considered behavioral symptoms of stress except for –

- A) Being easily confused.
- B) Procrastinating or neglecting responsibilities.
- C) Isolating yourself from other people.
- D) Butterflies in the stomach.

Answer --> D

Notes) Page 53 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Butterflies in the stomach would be considered a physical symptom of stress.
See page 53 for other behavioral symptoms of stress.

124) A program to help employees and their families would work or personal problems is known as –

- A) Department benevolent program.
- B) Employer assistance program.
- C) Employee assistance program.
- D) All the above.

Answer --> C

Notes) Page 54 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

125) __ have statistically been proven to be the most expensive single type of accident in terms of worker's compensation.

- A) Lung illnesses.
- B) Knee injuries.
- C) Back injuries.
- D) Lacerations and abrasions.

Answer --> C

Notes) Page 74 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

126) Firefighters should remember to bend their knees before lifting any object. All of the following will occur except –

- A) The spine will be in a more comfortable position.
- B) The load will be farther away from the fulcrum.
- C) The powerful leg muscles will do most of the lifting.
- D) The load will be lifted closer to the fulcrum.

Answer --> B

Notes) Page 74 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

127) Horseplay during training sessions –

- A) Must not be allowed since it may lead to accidents and injuries.
- B) Must be ignored since it is often inevitable.
- C) May be encouraged occasionally to promote cooperation.
- D) May be tolerated occasionally because it releases tension.

Answer --> A

Notes) Page 74 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

128) When is it permissible for a firefighter to ride on the tailboard of the apparatus?

- A) When the apparatus is moving slower than 30 mph.
- B) If there are no more jump seats available on the apparatus.
- C) Only when going to a working structure fire.
- D) Never.

Answer --> D

Notes) Page 72 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should never stand on or in a moving apparatus, with the exception of while loading hose as the apparatus moves slowly forward.

129) Which of the following is the NFPA Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

- A) NFPA 1971.
- B) NFPA 1975.
- C) NFPA 1977.
- D) NFPA 1403.

Answer --> A

Notes) Page 55 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

130) A training exercise that involves the use of an unconfined open flame or fire in a structure or other combustibles to provide a controlled burning environment is called a –

- A) Live Fire Exercise.
- B) Live Burn Exercise.
- C) Controlled Burn Exercise.
- D) A and B.

Answer --> D

Notes) Page 78 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

131) The training structure specially designed to contain live fires for the purpose of fire-suppression training is called –

- A) Burn Building.
- B) Burn Barn.
- C) Controlled Fire Structure (CFS).
- D) Burn Structure.

Answer --> A

Notes) Page 78 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

132) __ is the operation of fire service training or suppression covering one or several aspects of fire fighting.

- A) Session.
- B) Evolution.
- C) Exercise.
- D) All the above.

Answer --> B

Notes) Page 78 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

133) The Standard on Live Fire Training Evolutions is –

- A) NFPA 1400.
- B) NFPA 1500.
- C) NFPA 1451.
- D) NFPA 1403.

Answer --> D

Notes) Page 78 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

134) Which of the following is the Standard on Fire Department Infection Control Program?

- A) NFPA 1581.
- B) NFPA 1582.
- C) NFPA 1583.
- D) NFPA 1584.

Answer --> A

Notes) Page 55 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

135) The most comprehensive NFPA standard dealing with firefighter safety and health is –

- A) NFPA 1581.
- B) NFPA 1584.
- C) NFPA 1500.
- D) NFPA 1582.

Answer --> C

Notes) Page 56 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

NFPA 1500 is the Standard on Fire Department Occupational Safety and Health Program.

136) NFPA 1500 requires fire departments to establish a program to counsel personnel involved in highly stressful incidents. What is this program call?

- A) Diffusing management.
- B) Critical incident stress management.
- C) Wellness management.
- D) Health management.

Answer --> B

Notes) Page 59 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

137) In a structure fire, which of the following would be the first "Tactical Priority"?

- A) Fire control (incident stabilization).
- B) Loss control (property conservation).
- C) Rescue (life safety).
- D) Firefighter safety (life safety).

Answer --> D

Notes) Page 78 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

138) OSHA requirements only apply to which of the following groups?

- A) Federal employees.
- B) Private sector employees.
- C) All firefighters in the United States.
- D) A and B only.

Answer --> D

Notes) Page 60 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

However 25 U.S. states and 2 territories operate Occupational Health & Safety plans that provide equivalent protection under federal OSHA standards.

139) The level of care that all persons should receive is known as the –

- A) Standard of response.
- B) Code of care.
- C) Standard of care.
- D) Code of ethics.

Answer --> C

Notes) Page 61 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Care that does not meet this standard is considered inadequate.

140) The National Fallen Firefighters Foundation is committed to helping the US Fire Administration meet its stated goal of reducing firefighter fatalities by ___ within five years.

- A) 25%.
- B) 30%.
- C) 40%.
- D) 50%.

Answer --> A

Notes) Page 61 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

141) The National Fallen Firefighters Foundation is committed to helping the US Fire Administration meet its stated goal of reducing firefighter fatalities by ___ within ten years.

- A) 35%.
- B) 40%.
- C) 50%.
- D) 65%.

Answer --> C

Notes) Page 61 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

142) The National Fallen Firefighters Foundation believes that adoption of 16 Firefighter Life Safety Initiatives is a vital step in meeting its goal of reducing firefighter deaths. Which of the following would be considered the first initiative?

- A) Define and advocate the need for a cultural change relating to safety; incorporating leadership, management, supervision, accountability and personal responsibility.
- B) All firefighters must be empowered to stop unsafe practices.
- C) Create a national research agenda and data collection system that relates to the initiatives.
- D) Thoroughly investigate all firefighter fatalities, injuries, and near misses.

Answer --> A

Notes) Page 61 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

143) All of the following statements regarding operating at highway incidents is true except –

- A) Position fire apparatus to block oncoming traffic.
- B) Turn front wheels of blocking apparatus away from the emergency.
- C) Keep all apparatus lights on to alert oncoming traffic of the emergency.
- D) Never walk with your back to the traffic.

Answer --> C

Notes) Page 80 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Turn off all forward facing lights, including headlights.

Minimize flashing lights on the vehicle's sides and rear.

Turn off lights the face approaching traffic, to avoid blinding or distracting drivers.

Turn off all headlights, unless they are being used to illuminate the work area or warn motorists that the vehicle is in an unexpected location.

144) You are working at a motor vehicle accident involving two vehicles on a four lane interstate highway. The accident has occurred in the extreme left hand lane. What lanes should you close in order to safely operate at this scene?

- A) Only the lane the accident has occurred in.
- B) The lane the accident occurred in, plus the next lane over.
- C) The lane the accident occurred in, plus the next two lanes over.
- D) Close the entire highway and have the State Police detour traffic around the accident.

Answer --> B

Notes) Page 82 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

At least one lane should be closed, in some cases two. But one is the minimum.

All Chapters

145) Crowd control at an emergency scene is usually the responsibility of –

- A) Law enforcement agencies.
- B) Firefighters working at the scene.
- C) The incident commander.
- D) Safety officers present at the scene.

Answer --> A

Notes) Page 83 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The key to this question, is "usually." If police officers are not available, the responsibility may be handed to firefighters. The incident commander is ultimately responsible for the security of the scene.

146) In many cases the best way to maintain scene security is to –

- A) Establish control zones.
- B) Block all streets leading to the scene.
- C) Have an abundance of uniformed police officers on-scene.
- D) All the above.

Answer --> A

Notes) Page 83 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

147) The control zone closest to the incident is called the –

- A) Hazard area.
- B) Hot zone.
- C) Warm zone.
- D) Cold zone.

Answer --> B

Notes) Page 84 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

148) The Phoenix Arizona Fire Department has implemented an exemplary risk management plan that helps officers make reliable decisions during emergency responses. Which of the following would not be considered an example of one of their plan elements?

- A) Each emergency response is begun with the assumption that responders can protect lives and property.
- B) Responders will risk their lives a lot, if necessary, to save savable lives.
- C) Responders will risk their lives a little, and in a calculated manner, to save savable property.
- D) Responders will risk their lives a little to recover victims that have already been lost.

Answer --> D

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Responders will not risk their lives at all to recover victims and property that have already been lost.

All Chapters

149) Before entering a hazard zone, firefighters should give their tags or passports to the –

- A) Company Officer they arrived with.
- B) Incident Commander.
- C) Designated Accountability Officer (AO).
- D) Ranking fire officer at the scene.

Answer --> C

Notes) Page 86 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

150) The personnel accountability system in which entry and expected time of exit are based on the pressure in the lowest-reading SCBA in the team is referred to as the –

- A) Tag System.
- B) SCBA Tag System.
- C) Apparatus Tag System.
- D) Cascade Tag System.

Answer --> B

Notes) Page 86 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

151) Your knowledge of a situation or environment around you during an emergency incident is known as –

- A) Environmental awareness.
- B) Situational awareness.
- C) Tunnel vision.
- D) Topography.

Answer --> B

Notes) Page 67 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

152) The international distress signal broadcast by voice is –

- A) SOS.
- B) Mayday.
- C) Three blasts of the apparatus air horns.
- D) Firefighter down.

Answer --> B

Notes) Page 86 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

153) Which statement regarding "Personnel Accountability" is NOT true?

- A) The system should be standardized and used at every incident.
- B) The system should only account for fire department personnel who respond to the scene in fire department apparatus.
- C) An accountability system identifies and tracks all personnel working at an incident.
- D) All personnel must be familiar with the system and participate when operating at an emergency incident.

Answer --> B

Notes) Page 85 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Personnel accountability should track all persons working at the scene.

154) Long-term and reoccurring best describes which of the following?

- A) Acute.
- B) Chronic.
- C) Sudden.
- D) Cutting.

Answer --> B

Notes) Page 49 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

155) Which of the following would be considered part of the simplified Phoenix model?

- A) Risk a lot to save a lot.
- B) Risk a little to save a little.
- C) Risk nothing to save nothing.
- D) All the above.

Answer --> D

Notes) Page 62 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

156) In most states the CDL (commercial drivers license) is required to operate all but which of the following vehicles?

- A) Fuel truck.
- B) Passenger bus.
- C) Fire apparatus in ambulance.
- D) Tractor-trailer truck.

Answer --> C

Notes) Page 67 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

157) Which of the following would not be considered one of the basic causes of fire apparatus collisions?

- A) Excessive speed by the fire apparatus driver/operator.
- B) Age of the driver/operator.
- C) Improper backing of the apparatus.
- D) Reckless driving by the public.

Answer --> B

Notes) Page 66 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Also included would be:

Fire apparatus design or maintenance.

Lack of driving skills and experience by the fire apparatus driver/operator.

158) According to the USFA, what is the second leading cause of firefighter fatalities?

- A) Smoke inhalation or direct flame contact.
- B) Falls.
- C) Contact with electrical utilities.
- D) Accidents that occur while responding to and returning from emergencies.

Answer --> D

Notes) Page 68 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

159) What percentage of fatal crashes involving firefighters can be attributed to firefighters operating their private vehicles?

- A) 25%.
- B) 35%.
- C) 45%.
- D) 55%.

Answer --> A

Notes) Page 68 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

160) Which of the following statements regarding operating fire apparatus and department vehicles is not true?

- A) Slowdown. Speed is less important than arriving safely.
- B) Take the fastest route to an emergency scene.
- C) Use a low gear when starting from a dead stop.
- D) Keep all the wheels on the road surface at all times.

Answer --> B

Notes) Pages 68–69 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The correct answer should be – Take the safest route to an emergency, and avoid dangerous routes.

All Chapters

161) An intermediate partial bulkhead that reduces the surge effect in a partially loaded liquid tank is known as a –

- A) Baffle.
- B) Piling.
- C) Abutment.
- D) Breast wall.

Answer --> A

Notes) Page 71 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

162) No one should ever be allowed to ride on the exterior of the apparatus with the exception of hose loading operations. When this is done, the apparatus must be driven forward and be driven no faster than –

- A) 5 mph.
- B) 7 mph.
- C) 8 mph.
- D) 10 mph.

Answer --> A

Notes) Page 72 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

163) Handtools are also known as –

- A) Stationary tools.
- B) Manual tools.
- C) Unpowered tools.
- D) All the above.

Answer --> C

Notes) Page 75 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

164) All of the following would be considered unpowered tools with the exception of –

- A) Pipe poles.
- B) Picks.
- C) Pry bars.
- D) Spreaders.

Answer --> D

Notes) Page 75 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Spreaders would be considered hydraulic extrication tools.

All Chapters

165) According to an NFPA study, how many firefighters died in training related incidents between 1996 and 2005?

- A) 45
- B) 68
- C) 100
- D) 123

Answer --> C

Notes) Page 76 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

166) Operation of fire and emergency services training covering one or several aspects of firefighting is known as –

- A) A training evolution.
- B) A training session.
- C) A practical training evolution.
- D) A and C.

Answer --> D

Notes) Page 77 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

167) All the following would be considered tactical objectives of the National Incident Management System except for –

- A) Operate as part of the team.
- B) Report to the closest supervisor or officer in your area or division.
- C) Remain constantly aware of your situation.
- D) Advise your supervisor of any changes in the situation.

Answer --> B

Notes) Page 79 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Firefighters should report to only one supervisor.

Also included:

Manager air supply.

Enter and withdraw from a hazardous area as a team.

168) Which of the following statements in regards to positioning apparatus on a roadway at an emergency scene is correct?

- A) Apparatus should be parked as far off the roadway as possible to avoid being hit by oncoming traffic.
- B) Apparatus should be parked at an angle, with the front wheels turned toward the scene.
- C) Apparatus should be parked at an angle, with the front wheels turned away from the scene.
- D) Apparatus should be parked at an angle, with the pump panel facing oncoming traffic.

Answer --> C

Notes) Pages 80–81 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This helps to ensure that the vehicle will not strike working personnel if it is hit from behind. The pump panel should be positioned on the protected side away from traffic.

All Chapters

169) If additional apparatus are called to an emergency scene on a roadway, they should form a second barrier and be positioned ____ from the first apparatus.

- A) 50 to 100 feet.
- B) 150 to 200 feet.
- C) 200 to 300 feet.
- D) 250 to 325 feet.

Answer --> B

Notes) Page 81 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

170) All the following would be considered guidelines for maintaining situational awareness at a roadway incident except for –

- A) Walk facing away from ongoing traffic.
- B) Look before you move.
- C) Follow department SOPs.
- D) Keep an eye on moving traffic.

Answer --> A

Notes) Page 81 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Walk facing oncoming traffic.

171) Limiting the access of nonemergency personnel to an emergency scene is known as –

- A) Crowd restraint.
- B) Crowd restriction.
- C) Crowd supervision.
- D) Crowd control.

Answer --> D

Notes) Page 83 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

172) The area beneath a wall in which the wall is likely to land if it loses structural integrity is known as the –

- A) Collapse sector.
- B) Collapse zone.
- C) Collapse area.
- D) Collapse region.

Answer --> B

Notes) Page 84 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

173) Collapse zones are established under which of the following conditions?

- A) Prolonged heat or fire have weakened the structure.
- B) A defensive strategy has been adopted.
- C) Interior operations cannot be justified.
- D) All the above.

Answer --> D

Notes) Page 84 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

174) Traditionally, collapse zones must extend the distance ____ of the height of the structure.

- A) 1 time.
- B) 1 1/2 times.
- C) 2 times.
- D) 2 1/2 times.

Answer --> B

Notes) Page 85 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

175) Fire department internal communications is responsible for which of the following functions?

- A) To process and act on information.
- B) To relay alarms and coordinate field communications.
- C) To receive telecommunications and dispatch resources.
- D) To house communication personnel and dispatch field personnel.

Answer --> C

Notes) Page 96, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

176) Most people who call the fire department are experiencing some kind of problem or difficulty upsetting enough to want assistance. In view of this, telecommunicators must possess which of the following skills?

(1) Customer Service (2) A high degree of fire knowledge (3) Personal communications skills

- A) 1, 2.
- B) 1, 3.
- C) 2, 3.
- D) 1, 2, 3.

Answer --> B

Notes) Page 100, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

177) Any location or facility at which 911 calls are answered either by direct calling, rerouting, or diversion is known as –

- A) Public safety answering point.
- B) Dispatch center.
- C) Telecommunications center.
- D) Headquarters.

Answer --> A

Notes) Page 96, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Also known as PSAP.

178) A telecommunicator's duties include all of the following except –

- A) Staying in contact with the incident commander.
- B) Receiving requests for information and/or additional resources.
- C) Keeping records for each request for assistance and how each one was handled.
- D) Assigning duties to companies operating on the fire ground.

Answer --> D

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

179) Who is most likely to have the most contact with the public within the emergency services system?

- A) Telecommunicators.
- B) Police Officers.
- C) Firefighters.
- D) EMTs, and Paramedics.

Answer --> A

Notes) Page 97, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

180) Which statement regarding Telecommunicators is NOT true?

- A) Telecommunicators must be able to weigh the worthiness of individuals for assistance.
- B) Telecommunicators must project a sense of competence.
- C) Telecommunicators must be able to dispatch emergency responders in a timely manner.
- D) Telecommunicators must be knowledgeable about associated social services that are available to the caller.

Answer --> A

Notes) Page 97, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

The purpose of the telecommunicator is to relay information, not weigh the worthiness of individual calls.

All Chapters

181) Which NFPA standard describes the Standard for Installation, Maintenance, and Use of Emergency Services Communications Systems?

- A) NFPA 1900.
- B) NFPA 1061.
- C) NFPA 1060.
- D) NFPA 1221

Answer --> D

Notes) Page 97, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

182) What percent of United States is covered by enhanced 911?

- A) 45%.
- B) 68%.
- C) 77%.
- D) 96%.

Answer --> D

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

183) If you were assigned to monitor the watch room, you would have which of the following responsibilities –

- A) Listen to all radio communications, and answer the telephone.
- B) Acknowledge the receipt of alarms.
- C) Notify crew members of telephone calls and messages.
- D) All the above.

Answer --> D

Notes) Page 101, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

184) As it is applied to the fire service, what does CAD mean?

- A) Computer–Aided Drafting.
- B) Computer–Aided Dispatch.
- C) Computer Agency Dispatch (center).
- D) Computer Associated Dispatch.

Answer --> B

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

185) Radio systems used in the fire service can be classified in all the following ways except for –

- A) By location and size; either fixed, mobile, or portable.
- B) By the type of signal used; either analog or digital.
- C) By manufacturer and country code.
- D) By transmission signal; either direct, repeated, or trunked.

Answer --> C

Notes) Page 103, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

186) A fixed, nonmobile radio at a center location is known as –

- A) Telecommunicator radio.
- B) Dispatch radio.
- C) Base station radio.
- D) Internal radio.

Answer --> C

Notes) Page 104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

187) Which is the most widely used method for transmitting fire alarms?

- A) The public telephone system.
- B) Alarm pull boxes.
- C) Alarm company emergency reporting.
- D) Non-wired fire alarms.

Answer --> A

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

188) Which type of telephone line does not have access to the public switch network and does not have a dial tone?

- A) Residential lines.
- B) Commercial lines.
- C) Telephone fire alarm box.
- D) Hot lines.

Answer --> C

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. CodeRQ

Telephone fire alarm or call boxes are equipped with a telephone for direct voice contact with the telecommunication center.

All Chapters

189) What do TDD/TTY phones do?

- A) They allow the caller to speak over the phone line even if an electronic alarm is also being transmitted over the same line.
- B) They allow the telecommunicator to immediately dial back up a caller, if for any reason the connection has been terminated.
- C) They allow the telecommunicator to know the exact location of the caller even if the caller hangs up.
- D) They allow the hearing or speech-impaired community to communicate over the phone system.

Answer --> D

Notes) Page 96, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

190) Equipment designed and approved to be used in flammable atmospheres that are in capable of releasing sufficient electrical energy to cause the ignition of a flammable atmospheric mixture are called –

- A) Intrinsically safe equipment.
- B) Explosion proof equipment.
- C) Explosion resistant equipment.
- D) Intrinsic safety equipment.

Answer --> A

Notes) Page 104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

191) Amplitude Modulation AM waves vary the strength of the signal to reflect the speaker's voice and are sometimes referred to as –

- A) Analog wave signals.
- B) Medium wave signals.
- C) Digital wave signals.
- D) Highband wave signals.

Answer --> B

Notes) Page 105, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

192) Which of the following statements regarding digital radios is correct?

- A) Digital transmission systems have supplemented and, in some cases, replaced analog transmission systems.
- B) Digital radios have improved audio quality and make better use of their assigned frequency or band.
- C) A digital transmitter converts the voice into digital data packets, which are then broadcast to the receiver.
- D) All the above.

Answer --> D

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

193) What is the first thing a telecommunicator should ask when receiving an emergency call?

- A) The callers call back number.
- B) The location of the emergency.
- C) The type of emergency.
- D) The name and location of the caller.

Answer --> C

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

The telecommunicator should also ask the number and location of people involved, as well as the cross street, building name, neighborhood, area of city or county, or any nearby landmarks.

194) Which of the following refers to the straight-line travel of radio signals between the antenna connected to the transmitter and the antenna connected to the receiver?

- A) Indirect communication.
- B) Remote access communication.
- C) Direct communication.
- D) Digital communication.

Answer --> C

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Direct communication does not allow the same radio channel to be used by other groups that are located at a greater distance from the first group.

195) When answering business calls, personnel should do all of the following except –

- A) Be prepared to take a message.
- B) Answer all calls promptly.
- C) Post or deliver any messages promptly.
- D) Terminate calls promptly.

Answer --> D

Notes) Page 100, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Allow the caller to hang up first. Always be the last to hang up.

196) When one radio transmits and another receives, the type of communication is called –

- A) Simplex system.
- B) Multiplex system.
- C) Truncated system.
- D) Duplex system.

Answer --> A

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

A simplex system is a two-party system operating on one frequency because only one radio can transmit at a time.

All Chapters

197) Wired telegraph circuit boxes are most commonly used in –

- A) Metropolitan and heavy industrial areas.
- B) Residential areas.
- C) Rural areas.
- D) Wilderness areas.

Answer --> A

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

198) The function included with some portable radios which permit units at an incident to communicate directly to each other our called –

- A) Walkie-talkie mode.
- B) Local mode.
- C) Proximity mode.
- D) Talk-around mode.

Answer --> D

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

199) All of the following would be examples of "Public Alerting Systems" except –

- A) Alarm initiating devices.
- B) Wired telegraph circuit boxes.
- C) Radio fire alarm boxes.
- D) Civilian walk in reporting.

Answer --> A

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

200) 911 systems that combine telephone and computer equipment, and provide the dispatcher with instant information as to the exact location a call is being made from is called –

- A) X-911.
- B) M-911.
- C) E-911.
- D) A-911.

Answer --> C

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Enhanced 9-1-1

All Chapters

201) Repeaters are normally used to overcome problems of barriers to direct communications. They are used to increase the range of the radio system and to send signals over tall barriers. This is known as a

- A) Simplex radio communication.
- B) Multiplex radio communication.
- C) Full-duplex communication.
- D) Half-duplex communication.

Answer --> D

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

202) Which 9-1-1 feature provides the telecommunicator with the location the call is being made from?

- A) Called party hold.
- B) ALI.
- C) ANI.
- D) ALL.

Answer --> B

Notes) Page 98, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Automatic Location Identification

203) ____ allows radio communication in both directions simultaneously such as communications on a landline telephone.

- A) Half-duplex.
- B) Full-duplex.
- C) Simplex.
- D) Digital.

Answer --> B

Notes) Page 106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

204) Wired telegraph circuit boxes transmit which of the following information?

- A) The location of the box.
- B) The location of the emergency.
- C) The nature of the emergency.
- D) All the above.

Answer --> A

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

205) A radio fire alarm box alerts the telecommunicator by –

- A) An audible signal.
- B) A visual light indicator.
- C) A printed record indicating the location.
- D) All the above.

Answer --> D

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

206) The radio system in which a radio frequency is dedicated to a single function such as operations is known as –

- A) Conventional system.
- B) Progressive system.
- C) Trunked system.
- D) Simplex system.

Answer --> A

Notes) Page 108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

207) One of the most effective ways of alerting firefighters of an emergency is via –

- A) Telephone.
- B) Pagers.
- C) Sirens.
- D) Home electronic monitors.

Answer --> B

Notes) Page 102, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

208) All radio communications in the United States are under the authorization of the –

- A) FAA.
- B) FCC.
- C) FDA.
- D) DOT.

Answer --> B

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Federal Communications Commission.

All Chapters

209) For the most part, wired telegraph circuit boxes have been eliminated from many municipalities because problems with –

- A) Power outages.
- B) Reoccurring breakdowns.
- C) False Alarms.
- D) Vandalism.

Answer --> C

Notes) Page 99, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

210) The radio system that improves efficiency by assigning transmissions two available frequencies is known as –

- A) Trunked system.
- B) Progressive system.
- C) Conventional system.
- D) Duplex system.

Answer --> A

Notes) Page 108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

211) All of the following methods are normally used to alert unstaffed station personnel of emergencies except –

- A) Pagers.
- B) Home electronic monitors.
- C) Telephones.
- D) House bell or gong.

Answer --> D

Notes) Page 102, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Also cell phones, text messaging, sirens, and whistles are used to alert personnel.

212) In order to be compliant with the National Incident Management System (NIMS), most fire departments communicate over radio waves using –

- A) 10 Codes.
- B) Signals.
- C) Numeric codes.
- D) Clear text.

Answer --> D

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

All Chapters

213) When speaking on a portable radio firefighters should –

- A) Speak slightly louder than normal.
- B) Speak slightly quieter than normal.
- C) Shout into the radio.
- D) Speak as quickly as possible to free up the channel for other radio traffic.

Answer --> A

Notes) Page 115, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

214) Which of the following features of a trunked radio system allows the transmission of calls to two or more talk groups?

- A) Private call.
- B) Dynamic regrouping.
- C) Multigroup call.
- D) Multi-call.

Answer --> C

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Once the connection is established, the talkgroups can communicate with each other.

215) Which of the following features of a trunked radio system permits one radio to call another much like a telephone call?

- A) Truncated call.
- B) Multigroup call.
- C) Dynamic regrouping.
- D) Private call.

Answer --> D

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

The conversation is private and will not be heard by others on the channel or talkgroup.

216) Which of the following features of a trunked radio system has an emergency alert feature that, if activated, sends a signal to the agency's dispatch center?

- A) Truncated system.
- B) Private call.
- C) Dynamic regrouping.
- D) Multigroup call.

Answer --> C

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

217) There are four main limitations or barriers to all radio transmissions. They include distance and all but which of the following?

- A) Power requirements.
- B) Physical barriers.
- C) Interference.
- D) Ambient noise.

Answer --> A

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

218) The use of plain English, including certain standard words and phrases, in radio communications transmissions is known as –

- A) Clear Voice.
- B) Plain Voice.
- C) Clear Text.
- D) Plain Text.

Answer --> C

Notes) Page 109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

219) Why should firefighters refrain from touching the antenna of a radio while transmitting?

- A) Doing so blocks incoming messages.
- B) Doing so blocks your outgoing message.
- C) Radio frequency burns might result.
- D) The will become damaged.

Answer --> C

Notes) Essentials Of Fire Fighting And Fire Department Operation.

No reference in this edition, but question appears on many tests.

220) When using a radio, you should hold the radio/microphone –

- A) Right against your lips.
- B) 1/2 inch away from your lips.
- C) 1 to 2 inches away from your lips.
- D) 2 to 3 inches away from your lips.

Answer --> C

Notes) Page 115, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

221) Any physical barrier between the transmitter and receiver can block a radio signal. Signals can be totally blocked, partially blocked, or reflected. To overcome physical barriers, you may need to –

- A) Turn your body 90 degrees.
- B) Lift the portable radio higher.
- C) Raise the antenna up straight.
- D) All the above.

Answer --> D

Notes) Page 110, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

222) Radio dead zones in rural areas may not be possible to overcome without the addition of
â[A]A

- A) Higher radio towers.
- B) Higher wattage radios.
- C) Vehicle-mounted or fixed repeaters.
- D) Digital transformers.

Answer --> C

Notes) Page 110, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

223) During radio communications, the person who initiates the message using both verbal and nonverbal communication is known as the –

- A) Messenger.
- B) Sender.
- C) Receiver.
- D) Interference.

Answer --> B

Notes) Page 112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

224) During radio communications, the person who the sender is attempting to communicate to is known as the –

- A) Target.
- B) Feedback.
- C) Receiver.
- D) Interference.

Answer --> C

Notes) Page 112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

225) In radio communication, the content of the sender is trying to communicate to the receiver is known as the –

- A) Message.
- B) Broadcasts.
- C) Notification.
- D) Briefing.

Answer --> A

Notes) Page 112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

226) In radio communication, anything that may prevent the receiver from completely understanding the message is known as –

- A) Conflict.
- B) Obstruction.
- C) Resistance.
- D) Interference.

Answer --> D

Notes) Page 112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

227) Every firefighter at the emergency scene should follow two basic rules to control communication. The first is, units or individuals must identify themselves in every transmission, as outlined in the local radio protocols.

- A) Units or individuals must identify their current positions in every transmission, as outlined in the local radio protocols.
- B) Besides chief officers, only company officers leading fire department companies, should be issued radios at emergency scenes.
- C) All individuals using portable radios must be at least 25 feet away from any apparatus staged at an emergency scene.
- D) The receiver must acknowledge every message by repeating the essence of the message to the sender.

Answer --> D

Notes) Page 112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

228) To ensure that radio communication is heard and understood, you should follow all the following guidelines except for –

- A) Know what you are going to say before you open the microphone.
- B) Avoid expression in your speech; use a monotone whenever possible.
- C) Do not transmit until the radio frequency is clear.
- D) Use a voice quality that is not too strong nor too weak.

Answer --> B

Notes) Pages 114–115, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Use a moderate amount of expression in your speech, which is not too monotone nor overemphasized. Place emphasis carefully.

All Chapters

229) What is the first statement the telecommunicator should convey when receiving an emergency call?

- A) Address the location of the emergency.
- B) Identify the agency.
- C) Gather information from the caller.
- D) Confirm the callers identity.

Answer --> B

Notes) Page 124, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

230) What is the most common building material in North America?

- A) Wood.
- B) Steel.
- C) Brick.
- D) Gypsum.

Answer --> A

Notes) Page 134, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

231) Which is normally an interior wall that supports only its own weight?

- A) Load-bearing wall.
- B) Non load-bearing wall.
- C) Partition wall.
- D) Fire wall.

Answer --> B

Notes) Page 160, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

232) A wall that is used for structural support is called a –

- A) Load-bearing wall.
- B) Cantilever wall.
- C) Partition wall.
- D) Fire wall.

Answer --> A

Notes) Page 147, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

233) A wall that separates a space into rooms is called a –

- A) Veneer wall.
- B) Cantilever wall.
- C) Partition wall.
- D) Fire wall.

Answer --> C

Notes) Page 160, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

234) A wooden structural panel form by gluing and compressing wood strands together under pressure is known as –

- A) Veneer board.
- B) Compressed board.
- C) Oriented strand board.
- D) Plywood.

Answer --> C

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This material has replaced plywood and planking in the majority of construction applications. Roof decks, walls, and subfloors, are all commonly made with OSB.

235) Walls with a surface layer of attractive material laid over a base of common material is called a –

- A) Veneer wall.
- B) Cantilever wall.
- C) Overhang wall.
- D) Fire wall.

Answer --> A

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

236) Green wood is wood –

- A) That has just been sawn into lumber.
- B) That has a characteristic green grain such as poplar.
- C) With a high moisture content.
- D) That is unpainted or unfinished.

Answer --> C

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

237) Which of the following would be considered masonry?

(1) Bricks (2) Blocks (3) Stones (4) Unreinforced concrete products (5) Reinforced concrete products

- A) 1, 3, 5.
- B) 1, 2, 3.
- C) 3, 4, 5.
- D) 1, 2, 3, 4, 5.

Answer --> D

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

238) Firefighter Karen says that the reaction of wood to fire conditions depends mainly on the size of the wood.

Firefighter Kim says that the reaction of wood to fire conditions depends mainly on the moisture content of the wood.

Who is correct?

- A) Firefighter Karen.
- B) Firefighter Kim.
- C) Both are correct.
- D) Neither are correct.

Answer --> C

Notes) Page 134, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

239) All of the following statements are true regarding the reaction of wood to fire conditions, except –

- A) The two main factors regarding the reaction of wood to fire conditions are: the size of the wood and the wood's moisture content.
- B) Smaller pieces of wood can not be protected by drywall or gypsum to increase the resistance to heat and fire.
- C) Larger pieces of wood will retain much of their original structural integrity, even after extensive fire exposure.
- D) The smaller the size of the wood, the more likely it is to lose its structural integrity.

Answer --> B

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

240) Which of the following statements is NOT true?

- A) Wood with a high moisture content will burn at a slower rate than wood with a lower moisture content.
- B) The smaller the wood size of a structural member, the faster it will lose its structural integrity.
- C) Heavy timber constructed buildings will retain much of its structural integrity even after extensive exposure to fire.
- D) Fire retardants will almost always be totally effective in reducing fire spread.

Answer --> D

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Fire retardants are not always totally effective in reducing fire spread. Also, pressure-treated wood weakens the wood's fire carrying ability by as much as 25%.

241) What common problem occurs when water is used to extinguish a chimney flue fire?

- A) Chemical decomposition of the brick.
- B) Spalling and cracking of the brick.
- C) Deterioration of the mortar between the bricks.
- D) All of the above.

Answer --> B

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

242) Steel structural members will begin to fail at temperatures near or above –

- A) 500 degrees F.
- B) 1000 degrees F.
- C) 1500 degrees F.
- D) 2000 degrees F.

Answer --> B

Notes) Page 137, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

243) The temperature at which steel will begin to fail depends on all of the following factors except –

- A) The size of the steel member.
- B) The amount of load it is subjected to.
- C) The geometry of the member.
- D) The age of the steel member.

Answer --> D

Notes) Page 137, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

244) Which of the following statements is NOT true?

- A) If water is applied to a hot steel member, it increases the chances that the member will collapse.
- B) Firefighters should always try to determine how long a steel member has been exposed to heat.
- C) Heat expands steel and can cause elongating of members, which can push out load bearing walls.
- D) All of the above statements are true.

Answer --> A

Notes) Page 137, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

245) Which statement regarding reinforced concrete is true?

- A) Heating may cause a failure of the bond between the concrete and the steel reinforcement.
- B) Possesses the tensile strength of steel.
- C) Loses it's strength and spalls when heated.
- D) All of the above.

Answer --> D

Notes) Pages 138–139, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

246) Which of the following types of building materials has a high water content, is excellent in heat resistance, and is an excellent fire retardant?

- A) Steel.
- B) Glass/Fiberglass.
- C) Reinforced Concrete.
- D) Gypsum.

Answer --> D

Notes) Page 139, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

247) Which statement is NOT true regarding the use of cast iron as a building material?

- A) Cast iron is used rarely in modern construction.
- B) Cast iron does not stand up well to fire and intense heat.
- C) Cast iron is typically found in older buildings.
- D) The primary concern to firefighters is that the bolts or other connections that hold cast iron to a building can fail, causing heavy sections to fall.

Answer --> B

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Cast iron actually stands up quite well to fire and intense heat.

All Chapters

248) Fiberglass is typically used in building construction –

- A) As non-conducting structural units.
- B) As veneer walls.
- C) For insulation purposes.
- D) All the above.

Answer --> C

Notes) Page 140, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Fiberglass may be combustible and can be difficult to extinguish.

249) Type I building construction is often called –

- A) Fire-resistive construction.
- B) Fireproof construction.
- C) Non-combustible construction.
- D) Semi-combustible construction.

Answer --> A

Notes) Page 144, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

250) The ability for a Type I construction to confine a fire to a certain area, can be compromised by which of the following?

- A) Combustible materials found within the walls of the structure.
- B) The nature of the room's contents.
- C) Openings made in partitions or improperly dampered or improperly designed heating systems.
- D) Combustible materials found in the foundation.

Answer --> C

Notes) Page 144, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

251) Type II construction buildings often have flat, built-up roofs. What is the main fire hazard in this type of construction type?

- A) The roof contains combustible foam insulation and felt paper covered with asphalt waterproofing.
- B) The absence of fire stops.
- C) Poorly designed heating and air conditioning systems.
- D) Often are supported by wooden beams.

Answer --> A

Notes) Page 145, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

252) Which building construction type is often referred to as "Wood-Framed" construction?

- A) Type II.
- B) Type III.
- C) Type IV.
- D) Type V.

Answer --> D

Notes) Page 147, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Type V construction is commonly known as wood frame or stick frame.

253) Which building construction type is referred to as "Ordinary Construction?"

- A) Type I.
- B) Type II.
- C) Type III.
- D) Type V.

Answer --> C

Notes) Page 145, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

254) Which building construction type is often referred to as "Heavy Timber" construction?

- A) Type II.
- B) Type III.
- C) Type IV.
- D) Type V.

Answer --> C

Notes) Page 146, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

255) The primary fire concern regarding Type III building construction is –

- A) Fire spread through concealed spaces.
- B) Fire spread through heating and air conditioning systems.
- C) Fire spread caused by excessive fire stops.
- D) All the above.

Answer --> A

Notes) Page 145, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Voids exist inside the wooden channels created by roof and truss systems and between wall studs that will allow for the spread of fire unless fire stops are installed in these voids.

All Chapters

256) Old factories, mills and warehouses would most likely be classified as which of the following building construction classifications?

- A) Type II.
- B) Type III.
- C) Type IV.
- D) Type V.

Answer --> C

Notes) Page 146, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

257) Pressure treating wood will weaken the wood's load carrying ability by as much as –

- A) 10%.
- B) 15%.
- C) 20%.
- D) 25%.

Answer --> D

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

258) The strength of a truss support is directly proportional to –

- A) The nature of the materials used to make the truss.
- B) The number of members that make up the truss.
- C) The thickness of the truss.
- D) The age of the truss.

Answer --> B

Notes) Page 166, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

259) Wooden trusses and I-beam supports are commonly made from –

- A) 1 x 3 or 1 x 4 inch boards.
- B) 2 x 3, 2 x 4, or 2 x 6 inch boards.
- C) 2 x 8 inch boards.
- D) 3 x 6 or 3 x 8 inch boards.

Answer --> B

Notes) Page 166, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

260) Expansion of excess moisture within masonry materials due to the exposure to the heat of a fire, resulting in tensile forces within the material, and causing it to break apart is known as –

- A) Spalling.
- B) Compressing.
- C) Fracturing.
- D) Rupturing.

Answer --> A

Notes) Page 135, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

261) Structural supports made from long steel bars that are bent at an 90 degree angle with flat or angular pieces welded to the top and bottom are known as –

- A) Cast iron truss.
- B) Lightweight wooden truss.
- C) Lightweight steel truss.
- D) Iron truss.

Answer --> C

Notes) Page 137, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

262) A non-loadbearing wall, often of glass and steel, fixed to the outside of a building and serving especially for cladding is known as –

- A) Retaining wall.
- B) Loadbearing wall.
- C) Non-loadbearing wall.
- D) Curtain wall.

Answer --> D

Notes) Page 137, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

263) What do the decorative stars sometimes seen on older buildings represent?

- A) They show that the building has won an architectural award in the past.
- B) They mark the location of fire department standpipe connections.
- C) They are reinforcement stars, which may mean that the structure is of questionable stability.
- D) Nothing, they are merely a decorating trend that was popular in the early 20th century.

Answer --> C

Notes) Reference missing, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The stars are connected by tension rods to stars located on the opposite side of the building.

All Chapters

264) Metal or wooden plates used to connect and strengthen the intersections of metal and wooden truss components are known as –

- A) Gang plates.
- B) Gusset plates.
- C) Goose plates.
- D) Gable plates.

Answer --> B

Notes) Page 165, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

265) What type of building construction should a firefighter suspect on a building with a rounded or arched roof?

- A) Lightweight steel trusses.
- B) Bowstring trusses.
- C) Heavy timber construction.
- D) Lightweight wooden trusses.

Answer --> B

Notes) Page 165, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

266) All trusses are made using the strongest geometric shape known, which is the –

- A) Square.
- B) Octagon.
- C) Rhombus.
- D) Triangle.

Answer --> D

Notes) Page 164, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

267) Steel bars that are placed in concrete forms before the cement is poured are known as –

- A) Abutments.
- B) Rebar.
- C) Cornerstones.
- D) Footings.

Answer --> B

Notes) Page 138, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

268) The type of building construction that uses renewable, environmentally friendly or recycled materials is known as –

- A) Natural construction.
- B) Green construction.
- C) Hybrid construction.
- D) All the above.

Answer --> D

Notes) Page 141, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

269) A second roof constructed over an older roof is called a –

- A) Secondary roof.
- B) Hidden roof.
- C) Rain roof.
- D) Storm roof.

Answer --> C

Notes) Page 172, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This type of construction can leave a concealed space that is not visible from the outside of a building.

270) Doors that have either a solid core or a hollow core are best known as –

- A) Panel doors.
- B) Slab doors.
- C) Ledge doors.
- D) Swinging doors.

Answer --> B

Notes) Page 181, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also known as flush doors.

271) __ are also called pocket doors when used as an interior door.

- A) Sliding doors.
- B) Revolving doors.
- C) Overhead doors.
- D) Tubular doors.

Answer --> A

Notes) Page 179, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

272) Which of the following types of revolving doors has a 1/4 inch cable holding the doors apart? To collapse the mechanism, the firefighter only needs to push the doors (wings) in opposite directions.

- A) Book-fold type.
- B) Drop-arm type.
- C) Metal-Braced type.
- D) Classic type.

Answer --> A

Notes) Page 180, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

273) __ windows are windows that usually consist of two sashes that meet in the center that are locked together with a latch or a bolt on the inside.

- A) Double-hung.
- B) Casement.
- C) Projected.
- D) Jalousie.

Answer --> A

Notes) Page 187, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also known as Checkrail windows.

274) The type of window often called "crank out window" best describes which of the following?

- A) Awning windows.
- B) Jalousie windows.
- C) Checkrail windows.
- D) Casement windows.

Answer --> D

Notes) Page 187, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

275) Which window is usually associated with factories, warehouses, and other commercial or industrial locations?

- A) Casement windows.
- B) Projecting windows.
- C) Awning windows.
- D) Jalousie windows.

Answer --> B

Notes) Page 189, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

276) __ consists of large sections of glass usually about 1 foot in width, and are as long as the width of the opening of the window.

- A) Awning windows.
- B) Jalousie windows.
- C) Projected windows.
- D) Casement windows.

Answer --> A

Notes) Page 189, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

277) __ have small 4 inch wide sections that run as long as the window's width, and normally constructed without frames.

- A) Awning windows.
- B) Jalousie windows.
- C) Projected windows.
- D) Casement windows.

Answer --> B

Notes) Page 189, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called louvered windows.

278) Small pieces of wood that are joined in too long boards using epoxy resins and glues are called –

- A) Finger-joint timber.
- B) Laminated timber.
- C) Particle board.
- D) Synthetic wood.

Answer --> A

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

279) Boards made from small particles and flakes generated in manufacture of lumber, and used for external or internal wall panels and for furniture are called –

- A) Finger-joint timber.
- B) Laminated timber.
- C) Particle board.
- D) Synthetic wood.

Answer --> C

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

280) Also known as plywood or glulam, ____ are sheets of wood used for roof and floor decking, walls, and stair treads among other uses.

- A) Finger-joint timber.
- B) Laminated timber.
- C) Particle board.
- D) Synthetic wood.

Answer --> B

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

281) Which of the following laminated wood products is closer in appearance and strength the hardwood?

- A) Medium density fiberboard.
- B) Laminated timber.
- C) Particle board.
- D) Synthetic wood.

Answer --> A

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

It is used for doors and door-surrounds, decorative moldings, rails, skirtings, and cornices.

282) Which material is produced into sheets and boards, and is manufactured from recycled plastic from liquid containers, primarily milk bottles?

- A) Medium density fiberboard.
- B) Laminated timber.
- C) Particle board.
- D) Synthetic wood.

Answer --> D

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Synthetic wood is primarily used for exterior rails, stairs, and decks.

283) In the United States which of the following would be considered the NFPA standard for Building Construction and Safety Code?

- A) NFPA 1011.
- B) NFPA 610.
- C) NFPA 4000.
- D) NFPA 5000.

Answer --> D

Notes) Page 142, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

284) Steel structural members that are covered with either spray-on fire proofing or fully encased in a UL tested and approved system, are known as –

- A) Protected steel.
- B) Coated steel.
- C) Reinforced steel.
- D) Fireproof steel.

Answer --> A

Notes) Page 144, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

285) Solid materials, such as wood blocks, used to prevent or limit the vertical and horizontal spread of fire and products of combustion in hollow walls or floors, above false ceilings, in penetrations for plumbing or electrical installations are called –

- A) Fire blocks.
- B) Fire stops.
- C) Fire breaks.
- D) All the above.

Answer --> B

Notes) Page 145, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

286) The National Building Code of Canada defines three types of building construction. Which of the following would not be considered one of these?

- A) Combustible construction.
- B) Noncombustible construction.
- C) Heavy timber construction.
- D) Ordinary construction.

Answer --> D

Notes) Page 151, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

287) A fire-rated wall with a specified degree of fire resistance, built of fire-resistive materials and usually extending from the foundation up and through the roof of the building, that is designed to limit the spread of fire within a structure or between adjacent structures is known as a –

- A) Fire stop.
- B) Party wall.
- C) Fire wall.
- D) Ridge wall.

Answer --> C

Notes) Page 160, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

288) A load-bearing wall shared by two adjacent structures is known as –

- A) Party wall.
- B) Rafter wall.
- C) Purlin.
- D) Rain wall.

Answer --> A

Notes) Page 160, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

289) The portion of the exterior walls of a building that extends above the roof is known as a –

- A) Ridge.
- B) Parapet.
- C) Eave.
- D) Rafter.

Answer --> B

Notes) Page 162, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

It is also a low wall at the edge of the roof.

290) The horizontal line at the junction of the top edges of two sloping roof surfaces is call the –

- A) Ridge.
- B) Parapet.
- C) Eave.
- D) Rafter.

Answer --> A

Notes) Page 162, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

291) The edge of a pitched roof that overhangs an outside wall is called a –

- A) Ridge.
- B) Parapet.
- C) Eave.
- D) Rafter.

Answer --> C

Notes) Page 162, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Attic vents in typical eaves provide an avenue for an exterior fire to enter the attic.

All Chapters

292) What would you consider one of the most dangerous types of roof construction?

- A) Mansard roofs.
- B) Gambrel roofs.
- C) Lantern roofs.
- D) Arched roofs.

Answer --> D

Notes) Page 163, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The rapid collapse of arched roofs involved in fire has contributed to many firefighter injuries and fatalities.

293) Which of the following would be considered general types of roof supports used in residential and commercial construction?

- A) Beams.
- B) Truss assemblies.
- C) Rafter assemblies.
- D) A and B.

Answer --> D

Notes) Page 165, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

294) An inclined beam that supports a roof, runs parallel to the slope of the roof, and to which the floor decking is attached, is known as a –

- A) Parallel cord truss.
- B) Joist.
- C) Purlin.
- D) Rafter.

Answer --> D

Notes) Page 165, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

295) A truss constructed with the top and bottom chords parallel is known as –

- A) Parallel cord truss.
- B) Parallel rafter.
- C) Purlin.
- D) Parallel plate.

Answer --> A

Notes) Page 165, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

These trusses are used as floor joists and multistory buildings and ceiling joists in buildings with flat roofs.

All Chapters

296) Horizontal structural members used to support a ceiling or floor are called –

- A) Purlins.
- B) Joists.
- C) Ceiling plates.
- D) Rafter plates.

Answer --> B

Notes) Page 166, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

297) A horizontal member between trusses that support the roof are called –

- A) Purlin.
- B) Joist.
- C) Ceiling plate.
- D) Rafter plate.

Answer --> A

Notes) Page 166, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

298) A concealed space between the top floor and the roof of a structure is called a –

- A) Cockloft.
- B) Crawlspace.
- C) Attic.
- D) Dormer.

Answer --> A

Notes) Page 170, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

299) The weight of a structure, structural members, building components, and any other features permanently attached to the building that are constant and immobile are known as –

- A) Dead weight.
- B) Live load.
- C) Dead load.
- D) Structural load.

Answer --> C

Notes) Page 170, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

300) The type of roof installation generally found in cold, snowy climates to prevent ice damming and icicle formation at the eaves are called –

- A) Ice roofs.
- B) Cold roofs.
- C) Green roofs.
- D) White roofs.

Answer --> B

Notes) Page 171, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

301) The type of roof installation containing solar panels that produce clean and reliable energy that can be used in a wide range of applications are called –

- A) Ice roofs.
- B) Photovoltaic roofs.
- C) Green roofs.
- D) White roofs.

Answer --> B

Notes) Page 171, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

302) The type of roof installation that incorporates rooftop gardens are called –

- A) Eco-roofs.
- B) Photovoltaic roofs.
- C) Green roofs.
- D) White roofs.

Answer --> C

Notes) Page 170, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

303) The removal of load-bearing interior walls, or the removal of load-bearing pillars or columns in a structure would be an example of –

- A) Security modifications.
- B) Permitted structural modifications.
- C) Nonpermitted modifications.
- D) Aesthetic modifications.

Answer --> C

Notes) Page 173 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

304) Which of the following would be the best definition for the term live load?

- A) Items within a building that are movable but are not included as a permanent part of the structure such as merchandise, stock, furnishings, occupants, firefighters, and the water used for fire suppression.
- B) Force placed upon a structure by the addition of people, objects, or weather.
- C) Weight of the structure, structural members, building components, and any other feature permanently attached to the building that are constant in immobile.
- D) A and B.

Answer --> D

Notes) Page 174 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

305) The continuous and unobstructed way of exit travel from any part of a building or structure to a public way, consisting of three separate and distinct parts: exit access, exit, and exit discharge is called –

- A) Means of egress.
- B) Means of escape.
- C) Means of evacuation.
- D) Means of passage.

Answer --> A

Notes) Page 174 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

306) Stairs that are not required to be part of the means of egress system and typically connect no more than two levels are called –

- A) Escape stairs.
- B) Interior stairs.
- C) Short stairs.
- D) Convenience stairs.

Answer --> D

Notes) Page 175 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Also called access stairs.

307) Which of the following types of stairs are enclosed with fire-rated construction, usually with either a one or two hour rating, depending on the building ?

- A) Fire resistive stairs.
- B) Flameproof stairs.
- C) Protected stairs.
- D) Fire escape stairs.

Answer --> C

Notes) Page 175 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

All Chapters

308) Which of the following statements regarding obtaining access to the upper floors of a building is true?

- A) No matter how secure fire escapes appear, they may not hold the weight of firefighters or occupants, and should never be used.
- B) Firefighters should use interior stairways for gaining access to upper floors of a building.
- C) Firefighters should use fire department ground ladders and aerial devices to gain access to upper floors of a building.
- D) All the above.

Answer --> D

Notes) Page 176 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

309) A door that rotates around a vertical axis by means of hinges secured to the side jambs of the doorway framing is commonly called a –

- A) Swinging door.
- B) Sliding door.
- C) Folding door.
- D) Vertical door.

Answer --> A

Notes) Page 178 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

310) A door that is suspended from an overhead track and may use steel or nylon rollers is called a –

- A) Swinging door.
- B) Sliding door.
- C) Folding door.
- D) Vertical door.

Answer --> B

Notes) Page 179 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

311) A door that opens in a vertical plane and is known as an overhead door and often found in industrial occupancies for applications such as loading docks, garage doors, and freight elevator doors is commonly called a –

- A) Revolving door.
- B) Sliding door.
- C) Folding door.
- D) Vertical door.

Answer --> D

Notes) Page 180 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

All Chapters

312) A door that is hung from an overhead track with rollers or glides similar to those used in a sliding door is commonly called a –

- A) Revolving door.
- B) Pocket door.
- C) Folding door.
- D) Vertical door.

Answer --> C

Notes) Page 179 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

A folding door can either be bifolding or multifolding.

313) A door constructed with three or four sections or wings that rotate in a circular frame is called a –

- A) Revolving door.
- B) Pocket door.
- C) Circular door.
- D) Round door.

Answer --> A

Notes) Page 180 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

314) Which of the following windows have only one sash that can be opened?

- A) Double-hung window.
- B) Single-hung window.
- C) Casement window.
- D) Awning window.

Answer --> B

Notes) Page 187 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

315) A fix window consists only of a frame and a glazed stationery sash. It can be used alone or in combination with movable windows. Which of the following would be considered another name for a fixed window?

- A) Display window.
- B) Picture window.
- C) Deadlight.
- D) All the above.

Answer --> D

Notes) Page 187 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

All Chapters

316) Which of the following windows has two or more sashes of which at least one moves horizontally within the window frame?

- A) Horizontal sliding window.
- B) Awning window.
- C) Jalousie window.
- D) Pivoting window.

Answer --> A

Notes) Page 189 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

317) Which of the following windows has a sash that pivots horizontally or vertically about a central axis?

- A) Horizontal sliding window.
- B) Awning window.
- C) Jalousie window.
- D) Pivoting window.

Answer --> D

Notes) Page 189 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ.

318) Which common roof style slopes down from the outside edges to the center of the building?

- A) Mansard.
- B) Gambrel.
- C) Butterfly.
- D) Shed.

Answer --> C

Notes) Page 162, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

319) Which would not be considered one of the three basic shapes of roofs?

- A) Shed.
- B) Flat.
- C) Arched.
- D) Pitched.

Answer --> A

Notes) Page 161, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

320) The study of the physical world around us that includes the sciences of chemistry and physics is called –

- A) Physical science.
- B) Environmental science.
- C) Physio–Ecology.
- D) Natural sciences.

Answer --> A

Notes) Page 208 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A physical science is the study of the physical world. Properties of physics and chemical reactions are part of the physical world.

Environmental, Physio–Ecology and Natural sciences would all be included in the Biological Sciences.

321) Energy exists in which of the following states?

(1) Kinetic energy (2) Chemical energy (3) Thermal energy (4) Potential energy (5) Physical energy

- A) 1, 4.
- B) 2, 5.
- C) 2, 3, 5.
- D) All the above.

Answer --> A

Notes) Page 209, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

322) Stored energy possessed by an object that can be released in the future to perform work is known as –

- A) Kinetic Energy.
- B) Power.
- C) Heat.
- D) Potential Energy.

Answer --> D

Notes) Page 209 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

323) The energy possessed by a moving object is known as –

- A) Kinetic Energy.
- B) Traveling Energy.
- C) Spontaneous Energy.
- D) Dynamic Energy.

Answer --> A

Notes) Page 209 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

324) __ is a rapid and self-sustaining chemical process that yields heat and usually light.

- A) Fire.
- B) Combustion.
- C) Oxidation.
- D) A and B.

Answer --> D

Notes) Page 209 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

325) Iron rusting is a prime example of which of the following reactions?

- A) Oxidation reaction.
- B) Endothermic reaction.
- C) Chemical reaction.
- D) Physical reaction.

Answer --> A

Notes) Page 209 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

326) Our atmosphere contains __ oxygen.

- A) 10%.
- B) 21%.
- C) 75%.
- D) 85%.

Answer --> B

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

327) Chemical reactions in which a substance absorbs heat energy are called –

- A) Oxidation reactions.
- B) Exothermic heat reactions.
- C) Endothermic heat reactions.
- D) Combustion reactions.

Answer --> C

Notes) Page 210 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

328) Chemical reactions between two or more materials that changes the materials and produces heat, flames, and toxic smoke are –

- A) Oxidation reactions.
- B) Exothermic heat reactions.
- C) Endothermic heat reactions.
- D) Combustion reactions.

Answer --> B

Notes) Page 210 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Exothermic reactions are chemical reactions that release thermal energy or heat.

329) Oxidation reactions can be characterized by which of the following?

(1) Endothermic (2) Exothermic (3) Energy Releasing (4) Energy Absorbing (5) Non-reactive

- A) 1, 4.
- B) 2, 3.
- C) 1, 5.
- D) 5

Answer --> B

Notes) Page 208 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

330) The four main components of the Fire Tetrahedron include fuel, heat, oxygen and –

- A) Inhibited chemical chain reaction.
- B) Continuous chemical chain reaction.
- C) Self-sustained chemical reaction.
- D) Partial chemical chain reaction.

Answer --> C

Notes) Page 212, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

331) Which of the following statements regarding the Fire Tetrahedron is NOT true?

- A) If one component of the Fire Tetrahedron is removed, then combustion will not occur.
- B) If ignition of a fire has already occurred, and if one of the components of the Fire Tetrahedron is removed, then the fire will be extinguished.
- C) The Fire Triangle has always been a more accurate representation of combustion, than the Fire Tetrahedron.
- D) A self-sustaining chemical reaction, may be rapid or slow.

Answer --> C

Notes) Page 212, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

332) An oxidizer would be defined as –

- A) A material that yields oxygen or other oxidizing gases during the course of a chemical reaction.
- B) A material that suppresses the release of oxygen during the course of a chemical reaction.
- C) A material that bonds with oxygen during the course of a chemical reaction, causing suppression of combustion.
- D) A material that is chemically inert, and therefore does neither utilize nor yield oxygen or other oxidizing gases during the course of a chemical reaction.

Answer --> A

Notes) Page 208, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

333) Which is an example of "Potential Energy?"

- A) The water as it flows from a hydrant into the tank of a 1000 gallon pumper.
- B) The water inside a charged hoseline.
- C) The water as it leaves the hose as the nozzle is opened.
- D) The water that remains on the floor of a room after it has been used to extinguish a fire.

Answer --> B

Notes) Page 209, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

334) Which is an example of "Kinetic Energy?"

- A) The water sitting in the tank of a 1000 gallon pumper apparatus.
- B) The water inside a charged hoseline.
- C) The water as it leaves the hose as the nozzle is opened.
- D) The water that remains on the floor of a room after it has been used to extinguish a fire.

Answer --> C

Notes) Page 209, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

335) What is a measurement of kinetic energy?

- A) Temperature.
- B) Joules.
- C) Work.
- D) Speed.

Answer --> A

Notes) Page 209, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A fuel's kinetic energy is the result of molecules that are vibrating. Thermal energy increases as the vibration of the molecules increase.

336) Which statement is true?

- A) Heat energy will move from objects of higher temperature to those of lower temperature.
- B) Heat energy will move from objects of lower temperature to those of higher temperatures.
- C) Heat energy is self-fueling.
- D) Heat energy destroys matter.

Answer --> A

Notes) Page 216, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

337) In the SI system the unit for "work" is –

- A) Newtons.
- B) Joule.
- C) Horse Power.
- D) WK.

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

338) A joule is equal to –

- A) 1 newton over a distance of 1 millimeter.
- B) 1 newton over a distance of 1 kilometer.
- C) 1 newton over the distance of 1 meter.
- D) 1 newton over the distance of 10 meters.

Answer --> C

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

339) __ is a form of energy characterized by vibration of molecules and capable of initiating in supporting chemical changes and changes of state.

- A) Potential energy.
- B) Kinetic energy.
- C) Work.
- D) Heat.

Answer --> D

Notes) Page 208, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

340) The amount of energy delivered over a period of time is called –

- A) Potential energy.
- B) Kinetic energy.
- C) Power.
- D) Work.

Answer --> C

Notes) Page 35 – Essentials 4th Edition. Question not found in 6th edition, but left in by Knightlite.

341) The amount of heat necessary to raise one pound of water 1 degree Fahrenheit is known as a –

- A) Calorie.
- B) British Thermal Unit (BTU).
- C) Kilocalorie.
- D) Joule.

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

342) Water will be in a frozen state at which of the following temperatures.

(1) 0 Degrees F (2) 0 Degrees C (3) 32 Degrees F (4) 32 Degrees C

- A) 1, 4.
- B) 2, 3.
- C) 1, 2, 3.
- D) All the above.

Answer --> C

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This is a trick question. It is not asking for the freezing temperature, but rather at what temperatures would you expect to see water frozen.

All Chapters

343) Water will boil at which of the following temperatures?

(1) 202 Degrees F (2) 212 Degrees F (3) 100 Degrees F (4) 100 Degrees C (5) 145 Degrees F

- A) 1, 2.
- B) 2, 4.
- C) 1, 4.
- D) All the above.

Answer --> B

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Although water will boil at 212 degrees F, firefighters should be well aware that the scalding temperature of water is 145 degrees F. Although at 145, the water does not boil, it still can cause severe tissue damage.

344) The temperature scale in which water freezes at 0 and boils at 100 is known as –

- A) Fahrenheit.
- B) Celsius.
- C) Kelvin.
- D) None of the above.

Answer --> B

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

345) The amount of heat necessary to raise one gram of water 1 degree Celsius is known as a –

- A) Calorie.
- B) British Thermal Unit (BTU).
- C) Kilocalorie.
- D) Joule.

Answer --> A

Notes) Not listed in 6th Edition, but important to know.

346) How many joules of heat energy must be added to a kilogram of water in order to increase its temperature by 1 degree celsius?

- A) 10
- B) 4200
- C) 1055
- D) 100

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

4.2 Joules is the quantity of heat required to change the temperature of 1 g of water 1 degree C.

All Chapters

347) The chemical decomposition of a substance through the action of heat is called –

- A) Oxidation.
- B) Thermal Decay.
- C) Pyrolysis.
- D) Thermal Degeneration.

Answer --> C

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

348) Which of the following would be considered forms of ignition?

(1) Autoignition (2) Mechanical ignition (3) Piloted ignition (4) Spontaneous ignition.

- A) 1, 2.
- B) 1, 3.
- C) 1, 3, 4.
- D) All the above.

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

349) Which type of ignition occurs when a mixture of fuel and oxygen encounter an external heat source with sufficient heat energy to start the combustion reaction?

- A) Passive ignition.
- B) Active ignition.
- C) Piloted ignition.
- D) Autoignition.

Answer --> C

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

350) __ occurs without any external flame or spark to ignite the fuel gases or vapors.

- A) Passive ignition.
- B) Active ignition.
- C) Piloted ignition.
- D) Autoignition.

Answer --> D

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

351) The lowest temperature at which a combustible material ignites in the air without a spark or flame is known as the –

- A) Flash point.
- B) Fire point.
- C) Autoignition temperature.
- D) Piloted ignition temperature.

Answer --> C

Notes) Page 212, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

352) Which would NOT be considered common sources of heat that result in the ignition of fuel?

- A) Chemical energy.
- B) Mechanical energy.
- C) Electrical energy.
- D) Light energy.

Answer --> D

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

353) Which is the most common source of heat in combustion reactions?

- A) Electrical energy.
- B) Mechanical energy.
- C) Chemical energy.
- D) Sound energy.

Answer --> C

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

354) A form of chemical heat energy that occurs when a material increases in temperature without the addition of external heat is called –

- A) Self-heating.
- B) Spontaneous ignition.
- C) Reactionary heating.
- D) A and B.

Answer --> D

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version: Spontaneous heating changed to spontaneous ignition.

All Chapters

355) For spontaneous ignition to occur, all but which of the following factors are required?

- A) The insulation properties of the material immediately surrounding the fuel must be such that the heat cannot dissipate as fast as it is being generated.
- B) The rate of heat production must be great enough to raise the temperature of the material to its ignition temperature.
- C) The rate of heat production must be proportional to the amount of fuel present.
- D) The available air supply in and around the material being heated must be adequate to support combustion.

Answer --> C

Notes) Page 218, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

"C" makes no sense at all.

356) The measure of a material's ability to transfer heat energy to other objects is known as –

- A) Convection.
- B) Conduction.
- C) Radiation.
- D) Temperature.

Answer --> D

Notes) Page 208 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The greater the energy, the higher the temperature. Measure of the average kinetic energy of the particles in a sample of matter, expressed in terms of units or degrees designated on a standard scale.

357) Resistance heating, overcurrent, arcing, and sparking are all examples of which type of heating?

- A) Electrical heating.
- B) Mechanical heating.
- C) Conduction heating.
- D) Reduction heating.

Answer --> A

Notes) Pages 218–219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

358) A high temperature luminous electrical discharge across a gap or through a medium such as charred insulation would be considered –

- A) Resistance heating.
- B) Arcing.
- C) Sparking.
- D) Overcurrent.

Answer --> B

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

359) The heat that is produced when electrical current flows through a conductor is called –

- A) Resistance heating.
- B) Arcing.
- C) Sparking.
- D) Overcurrent.

Answer --> A

Notes) Page 218, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

360) Luminous particles formed and spattered away from a point of arcing is referred to as –

- A) Resistance heating.
- B) Arcing.
- C) Sparking.
- D) Overcurrent.

Answer --> C

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

361) When a current flowing through a conductor exceeds its design limits, it may overheat and present an ignition hazard. This type of heating is called –

(1) Overcurrent (2) Bleeding (3) Overload (4) Overheat

- A) 1, 4.
- B) 2, 4.
- C) 1, 3.
- D) 2, 3.

Answer --> C

Notes) Page 218, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

362) All of the following materials would be considered spontaneous heating materials except –

- A) Spandex and other synthetic cloths.
- B) Charcoal.
- C) Linseed oil-soaked rags.
- D) Hay and manure.

Answer --> A

Notes) Page 218, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

363) The heat energy that is generated by friction or compression is called –

- A) Mechanical heat energy.
- B) Resistance heat energy.
- C) Automated heat energy.
- D) Mechanized heat energy.

Answer --> A

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

364) The movement of two surfaces against each other creates –

- A) Heat of compression.
- B) Heat of friction.
- C) Heat of resistance.
- D) Heat of abrasion.

Answer --> B

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

365) ___ is generated when a gas is compressed.

- A) Heat of compression.
- B) Vapor heating.
- C) Vapor compression.
- D) Heat of evaporation.

Answer --> A

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

366) Which statement regarding heat is NOT true?

- A) The transfer of heat from one point or object to another is the basic concept of the study of fire behavior.
- B) Heat moves from warmer objects to cooler objects.
- C) The greater the temperature difference between two bodies, the lesser the transfer rate of heat will be.
- D) The transfer of heat from one body to another is measured as energy flow over time.

Answer --> C

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The greater the temperature difference between two bodies, the greater the transfer rate of heat will be.

367) Heat can be transferred from one body to another by three mechanisms. Which would NOT be considered a mechanism of heat transfer?

- A) Diffusion.
- B) Conduction.
- C) Convection.
- D) Radiation.

Answer --> A

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

368) Physical flow or transfer of heat energy can be transferred from one body to another by direct contact of the two bodies, or by an intervening heat conduction medium. This would be known as –

- A) Convection.
- B) Radiation.
- C) Conduction.
- D) Absorption.

Answer --> C

Notes) Page 219, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

369) Of all the choices below, which is the best conductor of heat?

- A) Liquids.
- B) Gases.
- C) Fiberglass.
- D) Metals.

Answer --> D

Notes) Page 220, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

370) The transfer of heat by the movement of heated fluids or gases, usually in an upward direction is known as –

- A) Conduction.
- B) Convection.
- C) Diffusion.
- D) Radiation.

Answer --> B

Notes) Page 221, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

371) Which statement regarding heat transfer is true?

- A) The flow of heat is from the warmer area to the cooler area.
- B) The flow of heat is from the cooler area to the warmer area.
- C) Heat can be conducted through a vacuum.
- D) All of the above can be correct under certain circumstances.

Answer --> A

Notes) Page 220, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

372) Heat generated from the sun in the form of waves would be known as –

- A) Conduction.
- B) Convection.
- C) Radiation.
- D) Diffusion.

Answer --> C

Notes) Page 222, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

373) You are in a basement of a building, the fire has heated up a pipe to such a high temperature that it has ignited a floor joist several yards away. This type of heat transfer would be known as –

- A) Convection.
- B) Conduction.
- C) Radiation.
- D) Indirect heating.

Answer --> B

Notes) Page 220, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

All Chapters

374) There is a fire on the lower floor of a stairwell. The temperature in the stairwell increases to a level where the ceiling ignites several floors up. This is an example of –

- A) Convection.
- B) Conduction.
- C) Radiation.
- D) Indirect heating.

Answer --> A

Notes) Page 221, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

375) There is a fully involved structure fire in a residential neighborhood. The houses are so close together that there is a serious exposure problem. What form of heat transfer creates the greatest risk to the exposed structures?

- A) Conduction.
- B) Convection.
- C) Radiation.
- D) Absorption.

Answer --> C

Notes) Page 222, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

376) The radiation of heat is the transmission of energy as an electromagnetic wave, without an intervening medium. Which of the following would also be considered examples of electromagnetic waves?

- A) Light waves.
- B) Radio waves.
- C) X-rays.
- D) All the above.

Answer --> D

Notes) Page 222, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

377) Materials that absorb heat but do not participate actively in a combustion reaction are known as –

- A) Active agents.
- B) Passive agents.
- C) Heating agents.
- D) Reactive agents.

Answer --> B

Notes) Page 212, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

378) The fuel that is being oxidized or burned during combustion is referred to as a –

- A) Reducing agent.
- B) Oxidizing agent.
- C) Organic agent.
- D) Inorganic agent.

Answer --> A

Notes) Page 223, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

379) Fuel is found in which of the following states of matter?

- A) Gas.
- B) Solid.
- C) Liquid.
- D) All the above.

Answer --> D

Notes) Page 225, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

380) Which of the following forms of matter will burn?

- A) Gases.
- B) Liquids.
- C) Solids.
- D) All the above.

Answer --> A

Notes) Page 225, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Thermal energy is required to change solids and liquids into the gaseous state.

381) The weight of a given volume of pure vapor or gas compared to the weight of an equal volume of dry air at the same temperature and pressure is known as –

- A) Vapor density.
- B) Vapor pressure.
- C) Vapor expansion rate.
- D) Vapor volume.

Answer --> A

Notes) Page 226, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

382) Most gases are heavier than air, however, there are exceptions. Which of the following gases has a vapor density which makes it lighter than air?

- A) Methane.
- B) Ethane.
- C) Propane.
- D) Butane.

Answer --> A

Notes) Page 225, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The vapor density of methane is 0.55.

The vapor density of propane is 1.52.

The vapor density of carbon monoxide is 0.96. Carbon monoxide is slightly lighter than air which will give it a tendency to rise in a very still ambient airflow.

383) You are called to a home where there is a smell of gas inside the residence. After speaking to the home owner he tells you that his gas grill propane tank was leaking inside his kitchen. You are told by the IC to attempt to remove the remaining gas with a ventilation fan. Where should you position the fan?

- A) In a window on the highest level of the residence.
- B) Outside the kitchen door blowing into the home.
- C) Mounted high on a jack on the kitchen doorway blowing out.
- D) Right of the threshold of the doorway blowing out.

Answer --> D

Notes) Page 225, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

Since propane is heavier than air it will fall to the lower levels of the room. Positioning the ventilation fan on the floor will be more effective than positioning at higher levels.

384) You are called to a two story residence for a carbon monoxide call. The Captain hands you the meter and tells you to meter the entire residence. Where would you expect to find the highest readings?

- A) In the basement.
- B) On the first floor.
- C) In the stairway leading to the second floor.
- D) On the second floor.

Answer --> D

Notes) Page 225, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

Carbon monoxide has a vapor density of 0.96, and therefore its vapor density makes it just a little lighter than air.

Because of this fact the CO gas will rise to the highest level in the residence.

CO detectors should be placed at the highest level in the residence and always remember to meter the second story, even if the source of the CO is in the basement.

All Chapters

385) The ratio of the mass of a given volume of a liquid compared to its mass of an equal volume of water at the same temperature is called –

- A) Mass.
- B) Volume.
- C) Specific gravity.
- D) Weight.

Answer --> C

Notes) Page 226 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

386) The specific gravity of water equals.

- A) 1
- B) 10
- C) 100
- D) 1000

Answer --> A

Notes) Page 226, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

387) Substances with a specific gravity greater than water will be –

- A) Heavier than water.
- B) Lighter than water.
- C) Will have a value greater than 1
- D) A and C.

Answer --> D

Notes) Page 226, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

388) The transformation of a liquid to vapor or gaseous state is known as –

- A) Vaporization.
- B) Vapor pressure.
- C) Vapor expansion.
- D) Vapor density.

Answer --> A

Notes) Page 226, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

389) The pressure produced or exerted by vapors released by a liquid is known as –

- A) Vaporization.
- B) Vapor pressure.
- C) Vapor expansion.
- D) Vapor density.

Answer --> B

Notes) Page 226, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Vapor pressure is the measure of a tendency of a substance to evaporate. It is the pressure at which a vapor is in equilibrium with its liquid phase for a given temperature.

390) The minimum temperature at which a liquid gives off enough vapors to form an ignitable mixture with air near a liquid's surface is called it's –

- A) Ignition point.
- B) Fire point.
- C) Flash point.
- D) Ignitable point.

Answer --> C

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

391) The minimum temperature at which a liquid produces sufficient vapors to support combustion once the fuel is ignited is called it's –

- A) Ignition point.
- B) Fire point.
- C) Flash point.
- D) Ignitable point.

Answer --> B

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The fire point is usually a few degrees above the flash point.

392) Most ignitable liquids –

- A) Have a specific gravity less than one.
- B) Have a higher density than water.
- C) Are polar solvents.
- D) Are not flammable.

Answer --> A

Notes) Page 228, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

393) Which would be considered a polar solvent?

- A) Ethanol.
- B) Gasoline.
- C) Fuel oil.
- D) Diesel.

Answer --> A

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Polar solvents will mix well with water. Hydrocarbon fuels are lighter than water and will not mix with water. Diesel, fuel oil and gasoline are all hydrocarbons and will float on top of the water.

394) When considering solubility of a liquid fuel, which of the following would you expect to dissolve in water?

- A) Polar solvents.
- B) Nonpolar solvents.
- C) Hydrocarbon liquids.
- D) All of the above.

Answer --> A

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

395) The degree to which a solid, liquid, or gas dissolves in a solvent is known as it's -

- A) Melting point.
- B) Solubility.
- C) Ionization point.
- D) Ionization quotient.

Answer --> B

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

396) __ describes materials that are capable of being mixed .

- A) Miscible.
- B) Mixability.
- C) Polarity.
- D) Solubility.

Answer --> A

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

397) The chemical decomposition of a substance through the action of heat is known as –

- A) Thermal breakdown.
- B) Pyrolysis.
- C) Turbo oxidation.
- D) Vaporization.

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

398) The size of solid fuels significantly effects the ignitability of the fuel. In view of this, which of the following statements is true regarding a solid fuel's surface to mass ratio?

- A) As the surface area decreases the ignitability increases.
- B) As the surface area increases the ignitability decreases.
- C) As the surface area increases the ignitability increases.
- D) None of the above – Surface area plays no role in the ignitability of a solid fuel.

Answer --> C

Notes) Pages 228–229, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

399) The physical position of a fuel plays a role in the rate of pyrolysis. Fire will spread more rapidly when a solid fuel is in a __ position because of –

- A) Horizontal / Radiation.
- B) Vertical / Diffusion.
- C) Vertical / Conduction.
- D) All the above.

Answer --> C

Notes) Page 230, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

400) For wood, when does pyrolysis begin?

- A) At temperatures below 400 degrees F.
- B) At 850 degrees F.
- C) Roughly around 1000 degrees F.
- D) On or above 1300 degrees F.

Answer --> A

Notes) Page 228, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

401) At which stage of pyrolysis will the majority of moisture already have been released and charring has begun?

- A) Stage 1.
- B) Stage 2.
- C) Stage 3.
- D) Stage 4.

Answer --> B

Notes) Page 229, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

402) At which stage of pyrolysis will free burning of a wood material exist?

- A) Stage 1.
- B) Stage 2.
- C) Stage 3.
- D) Stage 4.

Answer --> D

Notes) Page 229, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

403) The total amount of thermal energy that could be generated by the combustion reaction if a fuel were completely burned is known as –

- A) Heat of combustion.
- B) The heat release rate.
- C) Exothermic work.
- D) The pyrolysis rate.

Answer --> A

Notes) Page 223, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Different materials will release different levels of energy depending on their chemical makeup. Heat of combustion is usually expressed in kilojoules per gram.

404) The energy released per unit of time as a given fuel burns is known as the –

- A) Oxidizing rate.
- B) Pyrolysis rate.
- C) Exothermic work.
- D) Heat release rate.

Answer --> D

Notes) Page 223, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The heat release rate often displayed as HRR is usually expressed in kilowatts. HRR is dependent on the type, quantity, and orientation of the fuel.

All Chapters

405) What is the primary oxidizing agent in most fires?

- A) Fuels with large surface areas.
- B) Fuels with small surface areas.
- C) The oxygen contained and released within the fuel.
- D) Oxygen in the atmosphere.

Answer --> D

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

406) At room temperature (70 degrees F or 21 degrees C), what is the minimum concentration of atmospheric oxygen that will support combustion?

- A) 21%.
- B) 14%.
- C) 10%.
- D) 8%.

Answer --> B

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Research also shows however, that in compartment fires, as temperatures increase, lower concentrations of oxygen are needed to support flaming combustion.

407) Oxygen enriched atmospheres are atmospheres –

- A) With concentrations of oxygen that exceed 23.5%.
- B) With concentrations of oxygen that are below 21%.
- C) That contain oxygen, no matter what the concentration is.
- D) That lack any trace of oxygen.

Answer --> A

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

408) Which would not be considered a common oxidizer?

- A) Calcium Hypochlorite.
- B) Hydrogen Peroxide.
- C) Noble Gases.
- D) Methyl Ethyl Ketone Peroxide.

Answer --> C

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Noble gases are inert.

All Chapters

409) According to OSHA any atmosphere having less than __ oxygen in the air as being oxygen deficient and a hazard to firefighters not wearing SCBA.

- A) 17.5%.
- B) 18.5%.
- C) 19.5%.
- D) Any concentration under 21%.

Answer --> C

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

410) In which of the following occupancies may you expect to find oxygen enriched atmospheres?

- A) Hospitals and health care facilities.
- B) Industrial occupancies.
- C) Private homes.
- D) All the above.

Answer --> D

Notes) Page 232, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Many private homes have oxygen supplies for breathing equipment for patients with respiratory problems. Always be alert for this potential hazard.

411) In order for combustion to occur, a fuel must be converted into a gaseous state. The range between the upper flammable and lower flammable limit in which a substance can be ignited is known as the –

- A) Explosive range.
- B) Flammable range.
- C) Combustion range.
- D) A and B only.

Answer --> D

Notes) Page 232, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

412) What would be the flammable range of propane?

- A) 5% – 15%.
- B) 2.1% – 9.5%.
- C) 1.4% – 7.4%
- D) 3.3% – 19%

Answer --> B

Notes) Page 233, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Knightlite added these questions not for the purpose that you should really memorize these values, but rather to point out that the LFL levels are really quite low. As a firefighter you should be aware that it does not take much material leaking to be put in a dangerous situation.

All Chapters

413) What would be the flammable range of gasoline?

- A) 5% – 15%.
- B) 2.1% – 9.5%.
- C) 1.4% – 7.4%
- D) 3.3% – 19%

Answer --> C

Notes) Page 233, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Knightlite added these questions not for the purpose that you should really memorize these values, but rather to point out that the LFL levels are really quite low. As a firefighter you should be aware that it does not take much material leaking to be put in a dangerous situation.

414) What would be the flammable range of methane?

- A) 5% – 15%.
- B) 2.1% – 9.5%.
- C) 1.4% – 7.4%
- D) 3.3% – 19%

Answer --> A

Notes) Page 233, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Knightlite added these questions not for the purpose that you should really memorize these values, but rather to point out that the LFL levels are really quite low. As a firefighter you should be aware that it does not take much material leaking to be put in a dangerous situation.

415) What would be the flammable range of Ethanol?

- A) 5% – 15%.
- B) 2.1% – 9.5%.
- C) 1.4% – 7.4%
- D) 3.3% – 19%

Answer --> D

Notes) Page 233, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Knightlite added these questions not for the purpose that you should really memorize these values, but rather to point out that the LFL levels are really quite low. As a firefighter you should be aware that it does not take much material leaking to be put in a dangerous situation.

All Chapters

416) Some extinguishing agents such as Halon interrupts the flame-producing chemical reaction and terminates the combustion reaction. This can best be described as –

- A) Extinguishment by temperature reduction.
- B) Extinguishment by fuel removal.
- C) Extinguishment by oxygen dilution.
- D) Extinguishment by chemical flame inhibition.

Answer --> D

Notes) Page 234, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

417) Which of the following potential fuel packages would you estimate to have the LOWEST HRR?

- A) Mattress (polyurethane foam).
- B) Gasoline/kerosene (2 sq. ft. pool).
- C) Small wastebasket.
- D) Christmas Tree (dry).

Answer --> C

Notes) Page 224, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A small wastebasket would have an HRR of 4 to 18 kW. In contrast a dry Christmas tree would have an HRR of 500 to 650 kW. A polyurethane easy chair has an HRR of 1352 to 1900 kW. Remember HRR means heat release rate.

418) Smoke generated from a fire contains toxic or asphyxiant gases. Which of the following would NOT be considered one such gas?

- A) Hydrogen cyanide (HCN)
- B) Carbon monoxide (CO)
- C) Water vapor (H₂O)
- D) Carbon dioxide (CO₂)

Answer --> C

Notes) Page 215, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

419) The most common hazardous material contained in smoke is –

- A) Hydrogen cyanide (HCN).
- B) Carbon monoxide (CO).
- C) Water vapor (H₂O).
- D) Carbon dioxide (CO₂).

Answer --> B

Notes) Page 215, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

420) Which compound acts as a chemical asphyxiant by binding with hemoglobin in the blood?

- A) Carbon monoxide.
- B) Carbon dioxide.
- C) Carbon trioxide.
- D) Hydrogen cyanide.

Answer --> A

Notes) Page 215, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

CO combines more than 200 times as quickly with hemoglobin as oxygen, thus drastically decreasing the blood's ability to carry oxygen.

421) Which compound acts as a chemical asphyxiant by preventing the body from using oxygen at the cellular level?

- A) Carbon monoxide.
- B) Carbon dioxide.
- C) Carbon trioxide.
- D) Hydrogen cyanide.

Answer --> D

Notes) Pages 215–216, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

HCN (hydrogen cyanide) is a byproduct in the combustion of polyurethane foam, which is commonly used in furniture and bedding.

422) Which compound is a product of complete combustion of organic materials?

- A) Carbon monoxide.
- B) Carbon dioxide.
- C) Carbon trioxide.
- D) Hydrogen cyanide.

Answer --> B

Notes) Page 216, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Carbon dioxide is considered a simple asphyxiant in that it displaces oxygen. CO₂ also acts as a respiratory stimulant, by increasing the respiratory rate.

All Chapters

423) Class A fires are fires involving ordinary combustible materials such as all of the following except –

- A) Paper.
- B) Wood.
- C) Gasoline.
- D) Plastic.

Answer --> C

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Class A fires involve combustible solids. Gasoline is a liquid, and would therefore be a Class B fire.

424) Water is commonly used to extinguish Class A fires by cooling the material below its ignition temperature. Class A foams are used to enhance water's ability to extinguish Class A fires by –

- A) Reducing the water surface tension allowing it to penetrate more easily into the burning material.
- B) Increasing the water surface tension so that the water beads up on the ignited material sealing the material off from oxygen.
- C) Reducing the temperature of the water, which enhances the cooling effect of the liquid.
- D) Class A foams are never used on Class A fires.

Answer --> A

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

425) All of the following materials would be classified as a Class B fire except –

- A) Burning Lacquer.
- B) Burning Alcohol.
- C) Burning Rubber.
- D) Burning Paint.

Answer --> C

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Class B fires involve flammable liquids. Rubber is a solid and therefore would come under Class A.

All Chapters

426) Which is the most effective method of extinguishing a Class B fire?

- A) Cooling the fire with water.
- B) Removing the fuel from the fire.
- C) Enhancing the chain reaction.
- D) Inhibiting the chain reaction.

Answer --> D

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

427) Energized electrical equipment and household appliances would be classified as –

- A) Class A fires.
- B) Class B fires.
- C) Class C fires.
- D) Class D fires.

Answer --> C

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

428) The safest way to fight a class C fire is to –

- A) Cool the fire with a 45 degree fog stream of water.
- B) De-energize the source and then treat the fire as a Class A or Class B fire.
- C) Use a dry chemical extinguisher.
- D) Use a carbon dioxide or halon extinguisher.

Answer --> B

Notes) Reference dropped from this chapter in 6th Edition– Question kept in by Knightlite, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

429) Class D fires are those that involve combustible metals. Which of the following would NOT be considered a combustible metal?

- A) Carbon.
- B) Potassium.
- C) Magnesium.
- D) Sodium.

Answer --> A

Notes) Reference dropped from this chapter in 6th Edition– Question kept in by Knightlite, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

430) Which extinguishing agent should never be used to extinguish a Class C fire?

- A) Water.
- B) Halon.
- C) Carbon dioxide.
- D) Dry chemical.

Answer --> A

Notes) Reference dropped from this chapter in 6th Edition– kept in by Knightlite, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Any extinguishing agent must not conduct electricity. Water conducts electricity.

431) Class B fuels would include all of the following except –

- A) Liquids.
- B) Greases
- C) Gases.
- D) Garbage.

Answer --> D

Notes) Page 235, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Garbage would be considered a Class A fuel.

432) Anything that occupies space and has mass is known as –

- A) A solid.
- B) A physical entity.
- C) A potential energy source.
- D) Matter.

Answer --> D

Notes) Page 208, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

433) ___ is the capacity to perform work; occurs when a force is applied to an object over a distance, or when a chemical, biological, or physical transformation is made in a substance.

- A) Energy.
- B) Power.
- C) Joule.
- D) All the above.

Answer --> A

Notes) Page 209, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

434) Materials produced and released during burning best describes which of the following?

- A) Smoke.
- B) Fire gases.
- C) Products of ignition.
- D) Products of combustion.

Answer --> D

Notes) Page 214, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

435) The result of exothermic reactions, occurring spontaneously in some materials under certain conditions, whereby heat is generated at a rate sufficient to raise the temperature of the material is known as –

- A) Self-heating.
- B) Spontaneous heating.
- C) Spontaneous ignition.
- D) Spontaneous combustion.

Answer --> A

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

436) A (An) ___ is defined as a fire that occurs within an enclosed room or space within a building.

- A) Structure fire.
- B) Partition fire.
- C) Enclosure fire.
- D) Compartment fire.

Answer --> D

Notes) Page 236, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

437) ___ describes the condition in which all four elements of the fire tetrahedron come together and combustion begins.

- A) Flashover.
- B) Decay.
- C) Ignition.
- D) Growth.

Answer --> C

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Ignition is the process of initiating self-sustained combustion.

All Chapters

438) In compartment fires, when the fuel available to burn is limited, the fire is said to be ___. Likewise, if the amount of available oxygen is limited, the condition is known as –

- A) Heat controlled, oxygen limited.
- B) Fuel controlled, oxygen limited.
- C) Fuel controlled, ventilation controlled.
- D) Heat controlled, ventilation limited.

Answer --> C

Notes) Page 239, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

439) Linseed oil rags igniting would be an example of which of the following?

- A) Piloted ignition.
- B) Autoignition.
- C) Ignition by spark.
- D) Ignition by flame.

Answer --> B

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer Change: Nonpiloted ignition changed to autoignition.

440) Piloted ignition is caused by –

- A) Spontaneous ignition.
- B) Convection.
- C) A spark or flame.
- D) Conduction.

Answer --> C

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

441) The first stage of the burning process in a confined space in which the substance being oxidized is producing heat is called the –

- A) Decay stage.
- B) Ignition stage.
- C) Growth stage.
- D) Incipient stage.

Answer --> D

Notes) Page 241, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

During the incipient stage of a fire the oxygen content in the air has not been significantly reduced.

All Chapters

442) After a compartment fire has become ignited, a fire plume begins to develop above the burning fuel. As the plume develops it begins to draw air in from the surrounding space into the column. Which stage of fire development does this best describe?

- A) Incipient.
- B) Growth.
- C) Flashover.
- D) Fully developed.

Answer --> A

Notes) Page 242, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

443) As a fire plume develops, it entrains air from the surrounding space into the column. The air moving into the plume has an overall cooling effect on the temperatures within the plume. Taking this into consideration, where would you expect within a compartment fire, that the temperatures within the plume would be at the hottest temperatures?

- A) Fuel packages in the center of the compartment unobstructed by walls.
- B) Fuel packages next to walls of the compartment.
- C) Fuel packages in corners of the compartment.
- D) All fuel packages will yield plumes with equal temperatures.

Answer --> C

Notes) Page 243, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Fuel packages in corners of the container have less air available to cool the plume, thus temperatures are higher.

444) When a fire is ignited by a spark or a flame it is referred to as a –

- A) Piloted ignition.
- B) Nonpiloted ignition.
- C) Spontaneous combustion.
- D) Direct ignition.

Answer --> A

Notes) Page 210, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

445) As a fire progresses from ignition to decay, which of the following factors will affect its behavior and development within a compartment?

- A) The volume and ceiling height of the compartment as well as the thermal properties of the enclosure.
- B) Ventilation and changes in ventilation.
- C) Ambient conditions, fuel type, and the availability and location of additional fuel.
- D) All the above

Answer --> D

Notes) Page 234, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

446) During the incipient stage of a fire hot gases begin to spread horizontally across the ceiling of a compartment. This is called –

(1) Rollover (2) Mushrooming (3) Ceiling Jet (4) Flameover

- A) 1, 4.
- B) 1, 2.
- C) 2, 3.
- D) 3, 4.

Answer --> C

Notes) Page 242, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Ceiling jet is the scientific or engineering term for mushrooming. This complex process of heat transfer begins to increase the overall temperature of the room.

447) At which stage of a fire is fuel and oxygen virtually unlimited, and is characterized by the rapid release of heat?

- A) Incipient.
- B) Growth.
- C) Flashover.
- D) Fully developed.

Answer --> B

Notes) Page 243, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

448) __ is the transition between the growth and fully developed fire stages, and is not a specific event, such as ignition. Broadly defined as the temperature inside a compartment that results in the simultaneous ignition of all combustible contents in the space.

- A) Backdraft.
- B) Rollover.
- C) Flameover.
- D) Flashover.

Answer --> D

Notes) Page 247, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

449) At what stage of fire development do burning fuels in a compartment fire, release their maximum amounts of heat possible from the available fuel packages, and produce large volumes of fire gases?

- A) Ignition.
- B) Growth.
- C) Fully Developed.
- D) Decay.

Answer --> C

Notes) Page 246, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

450) __ occurs where flames move through or across the unburned gases at the top of a compartment during a fire's progression.

- A) Flashover.
- B) Backdraft.
- C) Rollover.
- D) Mushrooming.

Answer --> C

Notes) Page 248, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Rollover may occur during the growth stage of a fire, as a hot-gas layer forms near the ceiling of the compartment.

451) Rollover differs from flashover in that –

- A) Only the flammable gases are burning and not the room contents.
- B) Only the room contents are burning and not the flammable gases.
- C) Rollover is not a dangerous situation for firefighters and flashover is.
- D) Rollover will continue even though the main body of the fire has been extinguished.

Answer --> A

Notes) Page 248, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

452) In a normal structure fire, heat is stratified in what is called thermal layers within a room, with the hottest gases rising to the top of the room, and the cooler air accumulating near the floor. What mistakes can firefighters make that may cause a thermal imbalance to the thermal layering of the room?

- A) Ventilating the structure before applying water to the fire.
- B) Improperly applying water to the fire and not ventilating the room.
- C) Directing the water stream towards the base of the fire in a ventilated room.
- D) All of the above.

Answer --> B

Notes) Page 244, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

453) The intense heat produced during flashover can result in firefighter disorientation as well as thermal burns.

Firefighter Jim says that the most effective way for firefighters to manage this risk is by maintaining an awareness of developing fire conditions.

Firefighter Paul says that the most effective way for firefighters to manage this risk is by controlling the fire environment through effective fire control and ventilation tactics.

Firefighter Joe says that the most effective way for firefighters to manage this risk is by training flashover survival techniques.

Who is correct?

- A) Firefighter Jim.
- B) Firefighter Paul.
- C) Firefighter Joe and Paul.
- D) Firefighter Jim and Paul.

Answer --> D

Notes) Page 247 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

You must be aware of your environment and the ever-changing or deteriorating conditions within the fire room. Don't put yourself in a position where you will be caught in a flashover. Manage this risk by controlling the environment. Don't let the environment control you.

454) One of the most important physical properties that a firefighter should know about smoke is that smoke is –

- A) The product of incomplete combustion.
- B) Toxic.
- C) High in carbon monoxide.
- D) Unburned fuel that is ready to ignite.

Answer --> D

Notes) Page 250, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Everyone knows that smoke is toxic and contains a high concentration of carbon monoxide, but what firefighters forget is that smoke is unburned fuel that is ready to ignite. A smoky condition can rapidly escalate to a flashover condition.

455) At which of the following temperatures can a flashover occur?

- A) 900 degrees F.
- B) 1150 degrees F.
- C) 1200 degrees F.
- D) All the above.

Answer --> D

Notes) Page 248, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

There is no exact temperature associated with the occurrence of flashover. Typically, flashover will occur in ceiling temperatures reach 1100 degrees F.

All Chapters

456) At what stage of a fire does oxygen concentrations fall to the point where flaming combustion can no longer be supported?

- A) Decay stage.
- B) Ventilation stage.
- C) Oxygen limiting stage.
- D) Fuel limiting stage.

Answer --> A

Notes) Page 246, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

During the decay stage the fire goes from ventilation controlled to fuel controlled. Combustion can not be supported if there is no fuel to burn.

457) Initiation of combustion of a material by an internal chemical or biological reaction that has produced sufficient heat to ignite the material is known as –

- A) Self-heating.
- B) Self-ignition.
- C) Delayed heating.
- D) Spontaneous ignition.

Answer --> D

Notes) Page 217, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

458) The instantaneous explosion or rapid burning of superheated gases that occurs when oxygen is introduced into an oxygen-depleted confined space is known as a –

- A) Backdraft.
- B) Flashover.
- C) Rollover.
- D) Flameover.

Answer --> A

Notes) Page 249, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

459) Which are typical characteristics of a potential backdraft?

- A) Black smoke becoming dense gray yellow, with little or no visible flame.
- B) Smoke leaving the structure in puffs or intervals.
- C) Pressurized smoke exiting through small openings.
- D) All the above.

Answer --> D

Notes) Page 249, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Other indicators of backdraft would include little or no visible flame, inward drawn smoke, smoke stained windows, and heat-induced cracking of glass.

All Chapters

460) A method to help prevent backdraft from occurring is to –

- A) Open the structure at the lowest point involved.
- B) Open the structure at the highest point involved.
- C) Break all windows at the level of involvement before entering the structure.
- D) All the above.

Answer --> B

Notes) Page 248, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

461) Firefighter Jon says that backdraft will always occur immediately or soon after making an opening into a building or involved compartment.

Firefighter Liz says that the mixing of hot, flammable products of combustion with the air through the action of gravity currents, pressure differential, and wind effects sometime takes some time.

Firefighter Mike says that firefighters should delay entry until actions are taken to change conditions inside the building or compartment.

Who is correct?

- A) Firefighter Jon and Liz.
- B) Firefighter Liz and Mike.
- C) Firefighter Jon and Mike.
- D) They are all correct.

Answer --> B

Notes) Page 250, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Never assume that backdraft will always occur immediately after an opening is made in a building or involved compartment. Gases should be cooled with hose streams and the structure should be ventilated with vertical ventilation.

462) Which statement is NOT true?

- A) A fire may be extinguished by reducing oxygen content using an inert gas.
- B) A fuel can be separated from air by blanketing it with foam.
- C) Reducing the oxygen content in the area will assist in extinguishing the fire.
- D) Self-oxidizing fuels can easily be extinguished by oxygen dilution.

Answer --> D

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

463) A broken natural gas line is on fire. Your engine company turns off the shut off valve, thus extinguishing the fire. This is an example of which of the following fire extinguishing methods?

- A) Temperature reduction.
- B) Fuel removal.
- C) Oxygen exclusion.
- D) Chemical flame inhibition.

Answer --> B

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

464) You walk into your kitchen to find a pan of cooking oil in flames on your stove. You quickly cover the pan with its lid. This is an example of which fire extinguishing method?

- A) Temperature reduction.
- B) Fuel removal.
- C) Oxygen exclusion.
- D) Chemical flame inhibition.

Answer --> C

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

465) If a fire is in the smoldering phase of combustion, which of the following is not an option for extinguishing the fire?

- A) Reduction of temperature.
- B) Reduction of fuel.
- C) Elimination of oxygen.
- D) Elimination of fuel.

Answer --> B

Notes) Page 246, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

466) One of the most common methods of extinguishing fires is –

- A) Temperature reduction by cooling with water.
- B) Fuel removal.
- C) Oxygen reduction.
- D) Chemical flame inhibition.

Answer --> A

Notes) Page 250, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

467) All of the following extinguishing agents act by chemical flame inhibition except –

- A) Dry Chemical.
- B) Carbon Dioxide.
- C) Halon–replacement agents.
- D) Halogenate agents.

Answer --> B

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Carbon dioxide extinguishers work by oxygen exclusion.

468) The tendency or capacity to remain afloat in a liquid or rise in a gas is known as –

- A) Plume.
- B) Ceiling Jet.
- C) Mushrooming.
- D) Buoyant.

Answer --> D

Notes) Page 221, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

469) At what temperature does water turn to steam?

- A) 100 degrees F.
- B) 145 degrees F.
- C) 212 degrees F.
- D) 245 degrees F.

Answer --> C

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Remember water can scald at 145 degrees F.

470) When water is converted to steam it expands approximately __ times.

- A) 170.
- B) 1700.
- C) 17000.
- D) 170000.

Answer --> B

Notes) Page 251, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

471) ___ is composed of at least one inlet opening, one exhaust opening, and the connecting volume between the openings.

- A) Flow channel.
- B) Convection path.
- C) Open compartment.
- D) Flow path.

Answer --> D

Notes) Page 222, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The direction of the flow is determined by difference in pressure. Heat and smoke in a high-pressure area will float towards the area of low pressure.

472) The buoyant layer of hot gases and smoke produced by a fire in a compartment is called the –

- A) Upper layer.
- B) Radiant layer.
- C) Radiation layer.
- D) High-heat layer.

Answer --> A

Notes) Page 223, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

473) A petroleum-based organic compound that contains only hydrogen and carbon is known as a –

- A) Hydrogenous fuel.
- B) Carbonaceous fuel.
- C) Hydrocarbon fuel.
- D) Polar solvent.

Answer --> C

Notes) Page 227, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

474) A liquid having a flashpoint at or above 100 degrees F and below 200 degrees F is known as a(an) –

- A) Combustible liquid.
- B) Unstable liquid.
- C) Flammable liquid.
- D) Inflammable liquid.

Answer --> A

Notes) Page 228, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

475) At normal oxygen levels, Nomex does not burn, however when placed in an oxygen-enriched atmosphere of approximately ____ oxygen, it will burn vigorously.

- A) 22%.
- B) 26%.
- C) 29%.
- D) 31%.

Answer --> D

Notes) Page 231, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

476) Molecular fragments that are highly reactive are called –

- A) Electrons.
- B) Neutrons.
- C) Molecular particles.
- D) Free radicals.

Answer --> D

Notes) Page 233, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

477) All buildings exchange air inside the structure with the air on the outside of the structure in which of the following ways?

- A) Constructed opening such as windows, doors, and passive ventilation devices.
- B) Leakage through cracks and other gaps in the construction.
- C) Heating, ventilating, and air conditioning HVAC systems.
- D) All the above.

Answer --> D

Notes) Page 238, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

478) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements contains heat within the compartment causing a localized increase in temperature and fire growth?

- A) Heat reflectivity.
- B) Heat absorption.
- C) Insulation.
- D) Retention.

Answer --> C

Notes) Page 240, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

479) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements maintains temperature by absorbing and releasing large amounts of heat slowly?

- A) Heat reflectivity.
- B) Heat absorption.
- C) Insulation.
- D) Retention.

Answer --> D

Notes) Page 240, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

480) The thermal properties of a compartment can contribute to the rapid spread of fire throughout the compartment. These thermal properties can also make extinguishing more difficult and reignition possible. Which of the following elements increases fire spread through the transfer of radiant heat from wall surfaces to adjacent fuel sources?

- A) Heat reflectivity.
- B) Heat absorption.
- C) Insulation.
- D) Retention.

Answer --> A

Notes) Page 240, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

481) The outcome of combustion is a confined space in which gas is tend to form into layers, according to temperature, with the hottest gases found at the ceiling in the coolest gases at the floor. This phenomenon is called –

- A) Thermal plateau.
- B) Thermal stratification.
- C) Thermal plane.
- D) Thermal layering.

Answer --> D

Notes) Page 244, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

482) Which statement regarding the role of ambient conditions on fire development are true?

- A) High humidity can impede the natural movement of smoke.
- B) Cold temperatures can impede the natural movement of smoke.
- C) Wind speed and direction can be extremely significant in fire development.
- D) All the above.

Answer --> D

Notes) Page 240, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

483) The level at a compartment opening where the difference in pressure exerted by expansion and buoyancy of hot smoke floating out of the opening in the inward pressure of cooler, ambient temperature air flowing in through an opening is equal is known as –

- A) Neutral plane.
- B) Thermal plane.
- C) Equilibrium plane.
- D) Ambient plane.

Answer --> A

Notes) Page 244, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

484) Over the years, the fire service has coin words and phrases to describe various fire events that result in rapid fire development. These would include all the following but –

- A) Flashover.
- B) Mushrooming.
- C) Backdraft.
- D) Smoke explosion.

Answer --> B

Notes) Page 247, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Although mushrooming is a term used in the fire service, it does not describe rapid fire development.

485) Sometimes during a fire, the wind can increase the pressure inside a structure, and thus drive smoke and flames into unburned portions of the container and on to advancing firefighters, which can upset tactical ventilation efforts. This would be an example of –

- A) Natural ventilation.
- B) Forced ventilation.
- C) Unplanned ventilation.
- D) Positive pressure ventilation.

Answer --> C

Notes) Page 252, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

486) Wind-driven conditions can occur in almost any type of structure. Wind speeds as low as ____ can create wind-driven conditions.

- A) 10 mph.
- B) 15 mph.
- C) 20 mph.
- D) 25 mph.

Answer --> A

Notes) Page 252, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

487) Planned, systematic, and coordinated removal of heated air, smoke, gases or other airborne contaminants from a structure, replacing them with cooler and/or fresher air to meet the incident priorities of life safety, incident stabilization, and property conservation is known as –

- A) Preplanned ventilation.
- B) Strategic ventilation.
- C) Planned ventilation.
- D) Tactical ventilation.

Answer --> D

Notes) Page 253, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

488) Which of the following would not be considered part of a firefighter's personal protective equipment?

- A) Protective hoods, hearing protection, and eye protection.
- B) Helmet, gloves, turnout coat and bunker pants.
- C) Pocket spanner wrench, escape rope, and flashlight.
- D) SCBA and PASS system.

Answer --> C

Notes) Page 259, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. CodeRQ

Although this equipment is extremely handy, it's not necessarily part of the firefighter's personal protective equipment.

489) Which NFPA standard is the Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

- A) NFPA 1971.
- B) NFPA 1900.
- C) NFPA 1001.
- D) NFPA 1981.

Answer --> A

Notes) Page 261, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This NFPA standard addresses the requirements for helmets, coats, trousers, boots, eye protection, protective gloves, and protective hoods. It requires that all components must include a permanent label that shows compliance with the standard (See Figure 6.3).

The label contains the following statement:

THIS STRUCTURAL FIRE FIGHTING PROTECTIVE (name of component) MEETS THE (name of component) REQUIREMENTS OF NFPA® 1971, (current edition) EDITION.

All Chapters

490) Although the traditional function of the fire helmet was to shed water, the primary purpose of the helmet includes all but which of the following?

- A) Protect the firefighter from heated or scalding water and embers from reaching the ears and neck.
- B) Protect the firefighter from heat and cold.
- C) Protect the firefighter from cranial impact.
- D) Identify the firefighters rank.

Answer --> D

Notes) Page 264, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Although helmets can also help to identify personnel and shell color indicates the firefighter's rank, markings indicate the unit, and removable identification labels indicate accountability, the primary reason you wear a helmet is to protect your head.

491) Safety glasses and goggles protect against __ of all eye hazards.

- A) 75%.
- B) 85%.
- C) 95%.
- D) 100%.

Answer --> B

Notes) Page 265, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

492) Hearing protection should be used by firefighters in the United States if exposed to noise levels of –

- A) 80 dBa.
- B) 85 dBa.
- C) 90 dBa.
- D) 95 dBa.

Answer --> C

Notes) Page 270, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The level in Canada is 85 dBa.

All Chapters

493) The most common use of ear protection for firefighters, is to protect the firefighter's hearing while –

- A) Riding apparatus that exceeds the maximum noise exposure levels.
- B) Using gasoline powered machinery.
- C) Performing interior fire fighting operations.
- D) All the above.

Answer --> A

Notes) Page 270, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

When riding apparatus, the noise exceeds maximum noise exposure levels (90 decibels in the U.S., 85 decibels in Canada).

494) Protective hoods are designed to protect which part of the firefighter's body from extreme heat?

- A) Ears.
- B) Neck.
- C) Face.
- D) All the above.

Answer --> D

Notes) Page 266, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Protective hoods protect the firefighter from exposure to heat, embers, and debris. These hoods cover areas that may not be protected by the SCBA facepiece, helmet, ear flaps, or coat collar.

495) Protective hoods are NOT made from which of the following materials?

- A) Nomex.
- B) PBI.
- C) Cotton.
- D) Kevlar.

Answer --> C

Notes) Page 266, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighter hoods are typically made of fire-resistant material which are available with long or short skirts (See Figure 6.8). You should tuck the skirts inside the protective coat, thus forming a continuous layer of protection.

All Chapters

496) NFPA 1971 requires that all turnout coats be made using __ layers.

- A) 2
- B) 3
- C) 4
- D) 5

Answer --> B

Notes) Page 266, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They include three components: the outer shell, moisture barrier, and thermal barrier (See Figure 6.9).

497) The most interior layer of a turnout coat protects the firefighter from –

- A) Severe heat.
- B) Moisture.
- C) Cuts and abrasions.
- D) Corrosive liquids.

Answer --> A

Notes) Page 266, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This layer can also keep the firefighter warm in cold weather.

498) A built-in harness and hand loop at the back of the neck that permits a rescuer to grab and drag a downed firefighter is called a –

- A) Firefighter Drag Loop (FDL).
- B) Drag Rescue Device (DRD).
- C) Rescue Loop (RL).
- D) Downed Firefighter Loop (DFL).

Answer --> B

Notes) Page 267, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

499) Which is the least important characteristic of gloves, in relation to their role in firefighter personal protection?

- A) The ability of the gloves to protect against heat and cold.
- B) The ability of the gloves to be resistant to cuts and punctures.
- C) The ability of the gloves to be resistant to absorption of liquids.
- D) The ability of the gloves to offer maximum dexterity.

Answer --> D

Notes) Page 267, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Your gloves must allow enough dexterity and tactile feel for you to perform your job effectively. You have to be able to grasp tools and nozzles or manipulate small objects such as control knobs on portable radios.

All Chapters

500) Which NFPA standard is the Standard on Protective Clothing and Equipment for Wildland Fire Fighting?

- A) NFPA 1971.
- B) NFPA 1972.
- C) NFPA 1975.
- D) NFPA 1977.

Answer --> D

Notes) Page 270, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

501) It is recommended that wildland firefighters wear underwear made of –

- A) 100% Cotton.
- B) 50% Cotton, 50% Nomex.
- C) 75% Nomex, 25% PBI.
- D) 100% Gore-Tex.

Answer --> A

Notes) Page 276, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Wearing underwear made of synthetic materials, such as nylon or polyester, when fighting a wildland fire may cause the material to melt when heated and can stick to your skin, causing serious burns.

502) Which fabric would be considered unsuitable to be worn by firefighters?

- A) Cotton.
- B) Nomex.
- C) PBI.
- D) Spandex.

Answer --> D

Notes) Page 276, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Cotton is the recommended fabric.

503) Which statement regarding personal protective equipment is NOT true?

- A) Polycarbonate helmets that have come in contact with hydraulic oil should be taken out of service and checked for any weakening.
- B) A dirty outer shell of the turnout coat will be more fire resistant than a clean one.
- C) Structure fire fighting gear is generally too bulky, too hot, and too heavy to be practical for wildland fire fighting.
- D) The second layer of a firefighter's protective coat is to act as a moisture barrier.

Answer --> B

Notes) Page 277, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hydrocarbon contamination will reduce the fire resistance of your gear, thus it is important to always keep it clean and free of such contaminants.

All Chapters

504) NFPA 1851 defines four types of cleaning for personal protective clothing. They include 'Routine Cleaning' as well as all of the following except –

- A) Advanced cleaning.
- B) Specialized cleaning.
- C) Disinfected cleaning.
- D) Contact cleaning.

Answer --> C

Notes) Page 278, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The type of cleaning is determined by the amount and type of contamination and whether the equipment must be removed from service to perform the cleaning.

505) Which of the following would be considered common respiratory hazards?

(1) Oxygen deficiency. (2) Elevated temperatures. (3) Particulate contaminants. (4) Gases and vapors. (5) Airborne pathogens.

- A) 1, 3.
- B) 1, 2, 4.
- C) 1, 2, 3, 4.
- D) 1, 2, 3, 4, 5.

Answer --> D

Notes) Page 281, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. CodeRQ

506) A condition caused by a deficiency in the amount of oxygen reaching the body tissues is referred to as –

- A) Respiratory compromise.
- B) Pulmonary Edema.
- C) Hypoxia.
- D) Asphyxiation.

Answer --> C

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hypoxia is defined as a potentially fatal condition caused by a lack of oxygen.

All Chapters

507) The accumulation of fluids in the lungs is known as –

- A) Respiratory compromise.
- B) Pulmonary Edema.
- C) Respiratory arrest.
- D) Asphyxiation.

Answer --> B

Notes) Page 283, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Pulmonary edema can cause death from asphyxiation. The effects of tissue damage from inhaling hot air is not immediately reversible by introducing cool fresh air.

508) A condition that causes death because of a deficient amount of oxygen and excessive amount of carbon monoxide and/or other gases in the blood is known as –

- A) Hypoxia.
- B) Respiratory shutdown.
- C) Respiratory arrest.
- D) Asphyxiation.

Answer --> D

Notes) Page 283, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

509) At what concentration of atmospheric oxygen will a firefighter experience a decrease in the ability to perform strenuous work along with impaired coordination?

- A) 21%.
- B) 15 to 19%.
- C) 12 to 14%.
- D) 10 to 12%.

Answer --> B

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition
CodeRQ

510) At what concentration of atmospheric oxygen content will a firefighter experience dizziness, headache, and rapid fatigue?

- A) 21%.
- B) 15 to 19%.
- C) 10 to 12%
- D) 8 to 10%.

Answer --> C

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

511) Unconsciousness will result at what concentration of atmospheric oxygen?

- A) 17%.
- B) 15 to 19%.
- C) 10 to 12%.
- D) 8 to 10%.

Answer --> D

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

This exposure also results in mental failure, ashen face, blueness of the lips, nausea, and vomiting.

512) At what percentage of atmospheric oxygen will cause coma within 40 seconds followed by death?

- A) 12%.
- B) 10%.
- C) 8%.
- D) 6%.

Answer --> D

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition
CodeRQ

513) Which of the following gases are responsible for most of the fire related fatalities?

(1) Carbon dioxide. (2) Hydrogen Sulfide. (3) Phosgene. (4) Ammonia. (5) Hydrogen cyanide.
(6) Carbon monoxide.

- A) 1, 3.
- B) 5, 6.
- C) 2, 3, 4.
- D) 2, 3, 5, 6.

Answer --> B

Notes) Pages 284–285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
NTQ

HCN can be inhaled, ingested, or absorbed into the body, and targets the heart and brain.

CO attaches to hemoglobin about 200 times more effectively than oxygen does. Carbon monoxide excludes oxygen from the blood, leading to hypoxia of the brain and tissues, followed by death if the process is not reversed.

All Chapters

514) Firefighters are exposed to a greater range and concentration of hazards than the general public, and they have a higher likelihood of several types of cancers because of that exposure. In fact, firefighters are ___ times more likely to develop kidney cancer than the general public.

- A) 2
- B) 3
- C) 4
- D) 5

Answer --> C

Notes) Page 260, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

515) A(An) ___ Atmosphere contains less than the normal 19.5 percent oxygen. At least 16 percent oxygen is needed to produce flames or sustain human life.

- A) Oxygen-deficient.
- B) Hypoxic
- C) Carbon monoxide.
- D) Hydrogen cyanide.

Answer --> A

Notes) Page 282, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Normal atmospheric air contains 21% oxygen.

516) Small particles that may be suspended in the air and are harmful to the respiratory system are called –

- A) Particulate contaminants.
- B) Smoke.
- C) Toxic dust.
- D) All the above.

Answer --> A

Notes) Page 283, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Particulates are very small particles of solid material, such as dust, that are suspended in the atmosphere.

517) Which of the following gases are colorless?

- A) Carbon monoxide.
- B) Hydrogen chloride.
- C) Hydrogen cyanide.
- D) All of the above.

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

518) Which gas has a bitter almond odor?

- A) Carbon monoxide.
- B) Hydrogen chloride.
- C) Hydrogen cyanide.
- D) Phosgene.

Answer --> C

Notes) Page 183, Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

Reference dropped from 6th edition, but question left in for reference.

519) Which of the following terms is characterized by activities required for rescue, fire suppression, and property conservation at fires that produce high radiant, conductive, or convective heat; includes aircraft, hazardous materials transport, and storage tank fires?

- A) Structure firefighting.
- B) Proximity firefighting.
- C) Heavy rescue and extrication.
- D) EMS operations.

Answer --> B

Notes) Page 261, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

520) Which of the following terms is characterized by activities required for rescue, fire suppression, and property conservation in structures, vehicles, vessels, and similar types of properties.

- A) Rescue and extrication.
- B) Proximity fire fighting.
- C) Structural Fire Fighting.
- D) Wildland firefighting.

Answer --> C

Notes) Page 261, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

521) Which gas is the end product of complete combustion of carboniferous materials?

- A) Carbon dioxide.
- B) Hydrogen chloride.
- C) Carbon monoxide.
- D) Phosgene.

Answer --> A

Notes) Page 286, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

522) Which gas is the end product of incomplete combustion?

- A) Carbon dioxide.
- B) Hydrogen chloride.
- C) Carbon monoxide.
- D) Phosgene.

Answer --> C

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

523) What is the NFPA Standard on Fire Department Occupational Safety and Health Program?

- A) NFPA 1981.
- B) NFPA 1500.
- C) NFPA 1501.
- D) NFPA 1961.

Answer --> B

Notes) Page 261, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All equipment must be designed and constructed based on NFPA's standards.

524) The danger of inhalation of CO is that it binds to hemoglobin ___ times more readily than does oxygen, thus precluding oxygen from the blood.

- A) 50 times.
- B) 100 times.
- C) 200 times.
- D) 300 times.

Answer --> C

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

This term is called – Carboxyhemoglobin.

525) At what concentration in the air is carbon monoxide considered dangerous?

- A) 0.005 percent.
- B) 0.10 percent.
- C) 1000 ppm.
- D) B and C.

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

At these concentrations, unconsciousness can result after 1 hour.

All Chapters

526) Which of the following are signs and symptoms of carbon monoxide poisoning?

- A) Headaches, and dizziness.
- B) Unconsciousness after one hour.
- C) Nausea and vomiting.
- D) All the above.

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

527) At what concentration of CO can result in unconsciousness after 1 hour?

- A) 100 ppm.
- B) 400 ppm.
- C) 800 ppm.
- D) 1000 ppm.

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

528) Hydrogen Chloride (HCL) is a colorless gas, with a pungent odor, and is an intense irritant to mucous membranes. These gases are primarily released during fires as a result of the combustion of –

- A) Wood.
- B) Metal.
- C) Plastics.
- D) All of the above.

Answer --> C

Notes) Page 183, Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

Dropped from 6th edition. Question kept in for reference.

529) You are called to the scene of an interior aircraft fire which contains a great deal of polyurethane foam. What toxic gas should you be particularly concerned about?

- A) Carbon dioxide
- B) Hydrogen chloride
- C) Hydrogen cyanide
- D) Nitric oxide

Answer --> C

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

You will also get hydrogen cyanide released at clothing stores, and rug shops.

All Chapters

530) Your engine company has been called to the scene of a supermarket, where a row of freezers are on fire. Which compound can you expect to be present?

- A) Benzene.
- B) Chlorine.
- C) Toluene.
- D) Phosgene.

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Phosgene is often produced when refrigerants such as freon come in contact with flame.

531) Which of the following compounds is often called "Silo Gas?"

- A) Carbon monoxide.
- B) Phosgene.
- C) Nitrogen dioxide.
- D) Carbon dioxide.

Answer --> C

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is listed under Nitrous gases, but no direct reference to Silo gas.

532) A 1.28% or 12,800 ppm concentration of carbon monoxide in the air will cause immediate unconsciousness, and danger of death within –

- A) 2 minute.
- B) 1 to 3 minutes.
- C) 3 to 5 minutes.
- D) 5 to 10 minutes.

Answer --> B

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

533) Which toxic gas may you expect to be stored at facilities where wood alcohol, ethylene, dry ice, or carbonated soft drinks are manufactured?

- A) Carbon monoxide.
- B) Carbon dioxide.
- C) Nitrogen dioxide.
- D) Hydrogen cyanide.

Answer --> B

Notes) Page 286, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

534) Besides freon, which of the following would be considered dangerous refrigerants that irritate the respiratory track and eyes?

- A) Ammonia.
- B) Chlorine.
- C) Sulfur dioxide.
- D) A and C only.

Answer --> D

Notes) Page 286, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Sulfur dioxide reacts with moisture in the lungs to form sulfuric acid.

535) Which gas would you expect to find in a water treatment plant?

- A) Chlorine gas.
- B) Sulphur dioxide.
- C) Nitrous oxide.
- D) Hydrogen sulfide.

Answer --> A

Notes) Page 286, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The water is purified with chlorine although the plant itself may smell like rotten eggs – Hydrogen Sulfide.

536) HCN is ___ times more toxic than CO.

- A) 10
- B) 20
- C) 27
- D) 35

Answer --> D

Notes) Page 285, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The effects of HCN on the body will depend on the concentration, length, and type of exposure. Large amounts, high concentrations, and lengthy exposures are more likely to cause severe effects, including permanent heart and brain damage or death.

537) All of the following factors affect a firefighter's ability to use SCBA effectively except –

- A) The firefighter must be in good physical condition and reasonably agile.
- B) The firefighter must be well trained and confident about using SCBA.
- C) The firefighter must be able to remain calm in stressful situations.
- D) The firefighter uses soft contact lenses.

Answer --> D

Notes) Page 295, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

The firefighter must also have adequate pulmonary capacity, and have a strong cardiovascular system. In addition, the facepiece should properly fit the firefighter. Weight gain or weight loss may affect the seal.

All Chapters

538) Depending on the model, a SCBA can increase a firefighter's weight by as much as –

- A) 10 lbs.
- B) 15 lbs.
- C) 20 lbs.
- D) 35 lbs.

Answer --> D

Notes) Page 296, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The weight of SCBA units, average between 25 and 35 pounds (11 kg and 16 kg).

539) NFPA 1500 prohibits firefighters donning SCBA from –

- A) Wearing soft contact lenses.
- B) Wearing beards or facial hair that prevents a complete seal.
- C) Wearing prescription glasses.
- D) Sporting nose rings and other facial piercings.

Answer --> B

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Wearing eyeglasses is also prohibited if the side frames pass through the seal area. Eyeglass kits are provided with all full facepiece masks.

540) Which of the following SCBA types are used the most in the fire service today?

- A) Open circuit SCBA.
- B) Closed circuit SCBA.
- C) Rebreather apparatus.
- D) Remote circuit SCBA.

Answer --> A

Notes) Page 289, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

541) Firefighters using SCBA should always be cognizant of the limitations of the equipment. All of the following would be considered limitations of the equipment except –

- A) Limited visibility.
- B) Decreased ability to communicate.
- C) Increased weight.
- D) The emotional stability of the firefighter.

Answer --> D

Notes) Page 296, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Obviously, the emotional state of the firefighter has nothing to do with the limitations of the equipment. Another limitation of the equipment would include decreased mobility.

All Chapters

542) Structural personal protective clothing is designed to cover all portions of your skin when you are –

- A) Crawling.
- B) Bending.
- C) Moving.
- D) All the above.

Answer --> D

Notes) Page 263, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

543) Which of the following would NOT be considered one of the four basic SCBA component assemblies?

- A) Facepiece assembly.
- B) Cascade assembly.
- C) Backplate and harness assembly.
- D) Regulator assembly.

Answer --> B

Notes) Page 290, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The fourth would be the Air Cylinder assembly.

544) Fully charged, a typical 30-minute bottle will contain __ cubic feet of breathing air at 4,500 psi.

- A) 35
- B) 45
- C) 55
- D) 65

Answer --> B

Notes) Page 291, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

That is 1270 Liters.

545) SCBA regulators are found in which of the following locations?

- A) On the facepiece.
- B) On the firefighter's chest.
- C) On a waist strap.
- D) All the above.

Answer --> D

Notes) Page 291, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Most newer SCBA have regulators that are located on the facepiece.

All Chapters

546) During the normal operation of SCBAs the mainline valve is __, while the bypass valve is –

- A) Fully open, closed.
- B) Partially open, closed.
- C) Partially opened, partially closed.
- D) Closed, fully opened.

Answer --> A

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

On some SCBA systems, the bypass valve controls a direct airline from the cylinder in the event that the regulator fails.

547) Before donning SCBAs, a firefighter should check both the cylinder gauge and the regulator gauge, to make sure the cylinder is full, and that the two readings are within –

- A) 50 psi of each other.
- B) 100 psi of each other.
- C) 150 psi of each other.
- D) 200 psi of each other.

Answer --> B

Notes) Page 318, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

548) Modern SCBA units have audible alarms that alert the firefighter when the pressure in the tank becomes less than approximately –

- A) 1/2 full.
- B) 1/4 full.
- C) 1/3 full.
- D) 1/8 full.

Answer --> B

Notes) Page 293, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

549) Which of the following is not a recommended method for preventing or controlling internal fogging of the facepiece?

- A) Using the cool air from the cylinder to clear away internal condensation.
- B) Using one hand to quickly pull the facepiece away from the face, and with the other hand to wipe the condensation clean with the protective hood.
- C) Use a nosecup to deflect exhalations.
- D) Applying an antifogging agent to the inside of the facepiece.

Answer --> B

Notes) Page 306 – Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

NOTE:

In cold weather, condensation can be reduced if the firefighter dons the facepiece just before he/she leaves the warm engine. Donning the facepiece enroute to the call will fill the faceplate with warm humid moisture which can quickly condense when the firefighter leaves the apparatus and enters much colder air.

All Chapters

550) What is the purpose of a 'heads-up' (HUD) display?

- A) Displays the current cylinder pressure on the inside of the facepiece lens, or mask-mounted regulator and allows the firefighter to monitor the cylinder's air supply without having to read an external gauge.
- B) Displays the ambient temperature of the room, so the firefighter can monitor excessive temperatures that may cause equipment failure.
- C) Displays levels of Carbon monoxide, Oxygen and hydrocarbons in the atmosphere, so the firefighter can constantly monitor the area for toxic gases.
- D) Generates a narrow field in the facepiece where the firefighter can literally see through the smoke, much like a miniature thermal imaging camera.

Answer --> A

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

551) Which NFPA Standard states that all new SCBA must be equipped with a rapid intervention crew universal air connection (RIC UAC)?

- A) NFPA 1990.
- B) NFPA 1981.
- C) NFPA 1980.
- D) NFPA 1982.

Answer --> B

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

552) Which NFPA standard requires that goggles or other appropriate primary eye protection be worn when participating in operations where protection from flying particles or chemical splashes is necessary?

- A) NFPA 1900.
- B) NFPA 1500.
- C) NFPA 1971.
- D) NFPA 1600.

Answer --> B

Notes) Page 265, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

553) Which statement regarding Closed-Circuit breathing apparatus is NOT true.

- A) They are commonly used in modern day fire fighting.
- B) They can sustain a firefighter from 30 minutes to 4 hours.
- C) They weigh less than open circuit systems.
- D) Their cylinders contain pure oxygen.

Answer --> A

Notes) Page 289, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They are now used in shipboard operations, extended hazardous materials incidents, some rescue operations, and by industrial fire brigades.

All Chapters

554) A Personal Alert Safety System (PASS) is activated when –

- A) The user remains motionless for a measured period of time.
- B) When the air in the SCBA falls below 500 psi.
- C) When there is a malfunction with the SCBA regulator.
- D) If the user runs out of air in the cylinder.

Answer --> A

Notes) Page 270, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

555) PASS devices should be checked at least –

(1) Weekly (2) Bi-Weekly (3) Monthly (4) Every 6 months (5) Before each use (6) Daily

- A) 5, 6.
- B) 6
- C) 2
- D) 3

Answer --> A

Notes) Pages 297–298, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

556) A PASS alarm will activate if a firefighter remains motionless for more than –

- A) 10 seconds.
- B) 30 seconds.
- C) 60 seconds.
- D) 90 Seconds.

Answer --> B

Notes) Page 270, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

557) All the following are methods for donning SCBA except –

- A) Donning From A Seat Method.
- B) Over-The-Head Method.
- C) Coat Method.
- D) Over-The-Arm Method.

Answer --> D

Notes) Page 297, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also included is donning from a rear mount or compartment mount.

All Chapters

558) According to NFPA 1404, Standard for a Fire Department Self-Contained Breathing Apparatus Program, an air cylinder should not be stored with no less than __ of its capacity.

- A) 100%.
- B) 95%.
- C) 90%.
- D) 85%.

Answer --> C

Notes) Page 297, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

559) Firefighters, while inspecting SCBA equipment should check for which of the following?

- A) Check to see if remote gauges and cylinder gauges are within 100 psi of each other.
- B) Ensure that both harness and facepiece straps are fully extended.
- C) Make sure all valves are in their proper position.
- D) All the above should be checked.

Answer --> D

Notes) Page 298, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

In addition:

Check the low-pressure alarm.

Check the PASS device to ensure that it is working.

Check all battery-powered functions.

560) A firefighter donning a SCBA by putting one arm at a time through the shoulder straps, best describes which of the following methods?

- A) Over-the-head method.
- B) Coat method.
- C) Over-the-arm method.
- D) Arm-lift-shoulder method.

Answer --> B

Notes) Page 320, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

561) Most firefighter gloves are made from –

- A) Leather.
- B) Nomex.
- C) Kevlar.
- D) Nylon.

Answer --> A

Notes) Page 272, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

562) Which statement regarding SCBAs is NOT true?

- A) Never stand to don SCBA while the vehicle is moving.
- B) Seat belts must be worn by firefighters at all times, except while donning SCBA.
- C) Do not keep facepieces connected to their regulators during storage.
- D) The SCBA's position should match the proper wearing position of the firefighter.

Answer --> B

Notes) Page 299, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should not remove seat belts for donning SCBA.

563) Which of the following would be considered standard mounts for donning SCBA?

(1) Side mount (2) Rear mount (3) Inverted mount (4) Compartment mount (5) Backup mount

- A) 1, 3.
- B) 2, 3.
- C) 3, 4, 5.
- D) 1, 2, 4, 5.

Answer --> D

Notes) Page 300 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

564) The protective hood should be pulled up in place over the head –

- A) Before the facepiece has been donned.
- B) After the facepiece has been donned.
- C) Before the helmet and the facepiece is donned.
- D) Protective hoods are not necessary if the helmet is equipped with side flaps.

Answer --> B

Notes) Page 266, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

565) When donning an SCBA facepiece the –

- A) Lower straps should be tightened first.
- B) The temple straps must be tightened first.
- C) The top strap must be tightened first.
- D) All straps must be tightened by pulling them outward from the sides.

Answer --> A

Notes) Page 301, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Facepiece straps should be tightened by pulling opposing straps evenly and simultaneously to the rear . Pulling straps outward to the sides may damage the facepiece. Some facepieces do not come with top straps.

All Chapters

566) All the following statements are true regarding donning SCBA facepieces except –

- A) No hair should come between the firefighter's skin and the sealing surface of the facepiece.
- B) Positive pressure should be checked by gently breaking the seal by inserting two fingers under the edge of the facepiece.
- C) Facepieces should be cleaned with paper towels.
- D) Do not submerge lower pressure hoses in water.

Answer --> C

Notes) Page 305, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Do not use paper towels for cleaning facepieces. Paper towels will scratch the lens.

567) The first step in doffing an SCBA is to –

- A) Remove the facepiece.
- B) Make sure you are out of the contaminated area, and be sure that SCBA is no longer required.
- C) Disconnect low pressure hose from the regulator, or remove regulator from the facepiece.
- D) Discontinue the flow of air from the regulator to the facepiece.

Answer --> B

Notes) Page 302, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It makes little sense to doff the SCBA if you are still in a contaminated area. Always be aware of your surroundings. Its called situational awareness.

568) Inspections are typically performed daily, weekly, or whenever firefighters report for duty. However, the period between inspections must not exceed –

- A) 2 days.
- B) 3 days.
- C) 5 days.
- D) 1 week.

Answer --> D

Notes) Page 303, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Qualified SCBA repair technicians must also inspect the units annually and after any repairs have been completed.

569) SCBA faceplates should be cleaned by which of the following methods?

- A) Washed and sanitized to remove hydrocarbons and harmful substances.
- B) Scrubbed with a soft abrasive pad and a strong disinfectant.
- C) Washed with hot water and dried with a paper towel.
- D) Soaked in a bath of 70% ethanol for a period of 30 minutes.

Answer --> A

Notes) Page 306, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Keeping facepieces clean and sanitized helps prevent hydrocarbons from contaminating your skin.

All Chapters

570) Air cylinders must be stamped or labeled with the date of manufacture and the date of the cylinder's last hydrostatic test. Fully wrapped fiberglass cylinders should be tested?

- A) Every year.
- B) Every 2 years.
- C) Every 3 years.
- D) Every 5 years.

Answer --> C

Notes) Page 307, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

These cylinders have a 15-year service life.

571) Air cylinders must be stamped or labeled with the date of manufacture and the date of the cylinder's last hydrostatic test. Steel and aluminum cylinders should be tested?

- A) Every year.
- B) Every 2 years.
- C) Every 3 years.
- D) Every 5 years.

Answer --> D

Notes) Page 307, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

These cylinders have an indefinite service life until they fail their hydrostatic test.

572) SCBA air cylinders are filled from compressor purification systems, or cascade systems of at least –

- A) One, 300 cubic-foot cylinder.
- B) Two, 300 cubic-foot cylinders.
- C) Three, 300 cubic-foot cylinders.
- D) Four, 300 cubic-foot cylinders.

Answer --> C

Notes) Page 307, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

573) There should be a fundamental rule in fire fighting, that no firefighter shall be permitted to enter any potentially toxic atmosphere, such as an interior or exterior fire attack, any below-grade rescue, or hazardous materials scene without –

- A) Full turnout gear.
- B) Self-contained breathing apparatus.
- C) A fire department radio.
- D) Another firefighter of equal or greater skill.

Answer --> B

Notes) Reference Missing In Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

574) Which of the following statements regarding emergency situations with SCBAs is NOT true?

- A) Don't panic, and try to control your breathing while crawling.
- B) Stop and think. How did you get to where you are now?
- C) Once you come in contact with a wall, crawl in one direction.
- D) Use the hoseline to help you get out. (Female coupling closest to the exit – Male coupling closest to the fire.

Answer --> D

Notes) Reference missing from Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This little tidbit of information can save your life someday.

The male coupling always points you away from the fire and back to the outside. The female coupling points to the fire.

The female coupling is smooth, and has no lugs on the shank, while the male has rocker lugs on the shank.

Remember the swivel has lugs and is connected to the female coupling, so don't get confused. Take your time and feel for the swivel then locate the male coupling and start in that direction.

575) Which statement is NOT true regarding the use of SCBAs?

- A) Use the bypass valve only for emergencies.
- B) Be sure that the mainline valve is opened and locked.
- C) If you have to use the bypass valve, be sure to keep it open between breaths.
- D) Always work in groups of two or more when wearing SCBAs.

Answer --> C

Notes) Page 291, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The bypass valve should be closed between breaths.

576) Fire shelters are constructed of which of the following materials?

- A) Mylar composite.
- B) Kevlar composite.
- C) Aluminized fabric.
- D) Magnetized fabric.

Answer --> C

Notes) Page 272, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

A fire shelter reflects the heat of the fire away from the firefighter while in use.

All Chapters

577) Which of the following statements regarding personal protective equipment is not true?

- A) Wildland personal protective clothing is designed, certified, and intended for interior structure firefighting.
- B) Emergency operations along roadways are extremely dangerous for firefighters and emergency responders.
- C) Utility gloves are not intended for patient care, but to provide a barrier against bodily fluids, disinfectants, and cleaning solutions.
- D) A single use item worn over footwear to provide a limited barrier against bodily fluids is called footwear covers.

Answer --> A

Notes) Pages 273–274, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
NTQ

578) The first step in donning personal protective equipment is to –

- A) Check the cylinder pressure. It should be at least 90% full.
- B) Position the SCBA in front of you ready for donning.
- C) Don gloves.
- D) Don protective coat, trousers, and boots.

Answer --> D

Notes) Page 317, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

579) The last step in donning personal protective equipment is to –

- A) Check the cylinder pressure. It should be at least 90% full.
- B) Position the SCBA in front of you ready for donning.
- C) Don helmet, with chin strap secured and adjusted, and finally gloves.
- D) Don protective coat, trousers, and boots.

Answer --> C

Notes) Page 319, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

580) The first step in filling a SCBA cylinder either from a cascade system or a Compressor/Purifier is to –

- A) Check the hydrostatic test date of the cylinder.
- B) Inspect the cylinder for damage such as nicks, cuts, gouges, or discoloration from heat.
- C) Place the cylinder in a fragment-proof fill station.
- D) Make sure that the hose bleed valve is closed.

Answer --> A

Notes) Page 328, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

581) The first step in performing a two person air cylinder change is to –

- A) Doff the unit.
- B) Obtain a full air cylinder and have it ready.
- C) Close the cylinder valve on the used bottle.
- D) Disconnect the regulator from the face piece, or disconnect the low-pressure hose from the regulator.

Answer --> D

Notes) Page 334, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

582) The last step in performing a two person air cylinder change is to –

- A) Open the cylinder valve.
- B) Check pressure reading on remote gauge and/or indicators and report reading.
- C) Connect the high-pressure hose to the cylinder.
- D) Check the condition of the O-ring.

Answer --> B

Notes) Page 334, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

583) One way a firefighter can conserve air during an emergency situation is to use the technique "Skip breathing." To accomplish this, the firefighter –

- A) Inhales and holds his breath for as long as it would take to exhale.
- B) Inhales and holds his breath for as long as he can, before taking another breath.
- C) Exhales and holds his breath for as long as he can, before taking another breath.
- D) Exhales and holds his breath for 10 seconds.

Answer --> A

Notes) No longer listed in Essentials but still a good technique.

584) Which of the following is the Standard on Protective Ensembles for Technical Rescue Incidents?

- A) NFPA 1951.
- B) NFPA 1961.
- C) NFPA 1601.
- D) NFPA 1500.

Answer --> A

Notes) Page 274, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

While structural personal protective clothing is sometimes worn for technical rescue operations, it is usually too bulky and heavy. Respiratory protection typically consists of air purifying respirators (APR), SCBAs, or supplied air respirators (SAR).

All Chapters

585) A full-body wet suit that is buoyant, thermally-insulated, and abrasion/puncture-resistant would be used for which of the following?

- A) Standing/Swift water rescue.
- B) Ice rescue.
- C) Hazardous materials incidents.
- D) Proximity firefighting on nautical vessels.

Answer --> A

Notes) Page 275, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

A rescue helmet is also part of the required ensemble. In addition, a U.S. Coast Guard (USCG) approved personal floatation device (PFD) also must be worn in rivers, streams, and lakes, and along shorelines and coastlines.

586) Only personnel trained in the care and cleaning of protective clothing should perform this type of cleaning –

- A) Routine cleaning.
- B) Advanced cleaning.
- C) Specialized cleaning.
- D) Contract cleaning.

Answer --> B

Notes) Page 279, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

587) Specialized cleaning performed by the manufacturer, its representative, or a certified vendor is called –

- A) Routine cleaning.
- B) Advanced cleaning.
- C) Specialized cleaning.
- D) Contract cleaning.

Answer --> D

Notes) Page 279, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

588) The type of cleaning required when clothing is contaminated with hazardous materials or body fluids that cannot be removed by routine or advanced cleaning is called –

- A) Target cleaning.
- B) Hazardous cleaning.
- C) Specialized cleaning.
- D) Contract cleaning.

Answer --> C

Notes) Page 279, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

589) A compressed substance with no specific volume, that will assume the shape of its container is commonly called a –

- A) Gas.
- B) Vapor.
- C) Fume.
- D) Volatile substance.

Answer --> A

Notes) Page 284, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

590) Gaseous form of a substance that is normally in a solid or liquid state at room temperature and pressure; formed by evaporation from a liquid or sublimation from a solid is known as a –

- A) Effluvium.
- B) Vapor.
- C) Fume.
- D) Volatile substance.

Answer --> B

Notes) Page 284, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

591) What is the lethal exposure time of hydrogen cyanide (HCN) in humans at a concentration of 20 to 40 ppm?

- A) 5 minutes.
- B) 10 minutes.
- C) 19 minutes.
- D) 30 minutes.

Answer --> D

Notes) Page 286, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

It would be very unlikely that you will ever be asked this question, however 20 to 40 ppm could be very likely during a structure fire, and a good reason to wear SCBA during salvage and overhaul operations.

592) Disease causing airborne pathogens include which of the following?

(1) Viruses. (2) Bacteria. (3) Fungi. (4) Algae.

- A) 1, 2.
- B) 2, 3.
- C) 1, 2, 3.
- D) 1, 2, 3, 4.

Answer --> C

Notes) Page 287, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

593) Disease causing microorganisms that are suspended in the air are called –

- A) Airborne pathogens.
- B) Suspended pathogens.
- C) Plumed pathogens.
- D) Volitant pathogens.

Answer --> A

Notes) Page 287, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

594) All of the following would be considered airborne pathogens except –

- A) Pneumonia and influenza.
- B) HIV and Hepatitis B.
- C) Tuberculosis (TB) and SARS,
- D) Measles, Chickenpox, and Smallpox.

Answer --> B

Notes) Page 287, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

HIV and Hepatitis B would be considered bloodborne pathogens.

595) The type of respiratory filter that is certified to remove at least 99.97% of monodisperse particles of 0.3 micrometers in diameter is called –

- A) HIPPA filters.
- B) HAPA filters.
- C) HEPA filters.
- D) HOPA filters.

Answer --> C

Notes) Page 287, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

HEPA stands for High-Efficiency Particulate Air filter.

596) The primary type of respiratory protection that you will use in the fire service is called –

- A) ARS.
- B) APR.
- C) ADR.
- D) ASR.

Answer --> D

Notes) Page 287, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

ASR stands for atmosphere-supplying respirators. APR stands for air-purifying respirator.

All Chapters

597) The respirator fit test that measures the firefighter's response to a test agent, such as irritant smoke or odorous vapor is called the –

- A) Quantitative Fit Test.
- B) Qualitative Fit Test.
- C) Static Fit Test.
- D) Dynamic Fit Test.

Answer --> B

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

If the firefighter detects the test agent, such as through smell or taste, the respirator fit is inadequate.

598) The respirator fit test in which instruments measure the amount of a test agent that has leaked into the respirator from the ambient atmosphere is called the –

- A) Quantitative Fit Test.
- B) Qualitative Fit Test.
- C) Static Fit Test.
- D) Dynamic Fit Test.

Answer --> A

Notes) Page 292, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

If the leakage measures above a pre-set amount, the respirator fit is inadequate.

599) Particulate filters are regulated by the Code of Federal Regulations, specifically Title 42: Public Health, Part 84: Approval of Respiratory Protective Devices. They are divided into nine classes, three levels of filtration (95, 99, and 99.97 percent), and three categories of filter degradation (N, R, and P) that indicate the filter's limitations. What does the 'P' stand for?

- A) Not resistant to oil.
- B) Resistant to oil.
- C) Used when oil or non-oil lubricants are present.
- D) Use only when oil is present.

Answer --> C

Notes) Page 294, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

600) Which of the following statements regarding donning SCBA facepieces is correct?

- A) All straps should be fully extended.
- B) No hair should come between the skin and the facepiece sealing surface.
- C) The chin should be centered in the chin cup and the harness centered at the rear of the head.
- D) All the above.

Answer --> D

Notes) Page 301, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

601) The testing method that uses water under pressure to check the integrity of pressure vessels is called –

- A) Hydrostatic test.
- B) Hydrophobic test.
- C) Hypodermic test.
- D) Hydrosopic test.

Answer --> A

Notes) Page 303, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

602) Many municipalities now require that all newly constructed buildings taller than ____ install Firefighter Breathing Air Replenishment Systems (FBARS).

- A) 50 feet.
- B) 75 feet.
- C) 100 feet.
- D) 125 feet.

Answer --> B

Notes) Page 310, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

603) After entering an IDLH atmosphere, firefighters should keep their SCBA on and activated until –

- A) Visibility improves.
- B) The incident commander says its safe enough to remove them.
- C) They leave the contaminated area.
- D) All the above.

Answer --> C

Notes) Page 310, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

604) The legal term for the maximum amount of a chemical substance or other hazard that an employee can be exposed to is known as the –

- A) Permissible exposure limit.
- B) Permissible exposure level.
- C) IDLH threshold.
- D) IDLH exposure limit.

Answer --> A

Notes) Page 314, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Abbreviated PEL.

All Chapters

605) What is the first step in the one-person method for changing an SCBA cylinder?

- A) Fully close the cylinder valve.
- B) Disconnect the high-pressure coupling from the cylinder.
- C) Place the SCBA unit on a firm, clean surface.
- D) Remove the empty cylinder from the harness assembly.

Answer --> C

Notes) Page 332, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

606) Nonload-bearing rope that is anchored to a safe, exterior location and attached to a firefighter during search operations to act as a safety line.

- A) Dynamic rope.
- B) Static rope.
- C) Rescue rope.
- D) Search line.

Answer --> D

Notes) Page 315, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

607) Portable fire extinguishers should be considered –

- A) As a primary means of extinguishing incipient fires.
- B) As a backup for hoselines.
- C) As an effective means of extinguishing structure fires, when no other means are available.
- D) As an effective means of preventing backdraft conditions.

Answer --> A

Notes) Page 339, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

608) According to NFPA 1001, those qualified at the Fire Fighter I level must know all, but which of the following, in regard to portable fire extinguishers?

- A) The chemical makeup of the compounds used within each type of extinguisher.
- B) The classifications of types of fires, and the risks associated with each class of fire.
- C) The operating methods of portable fire extinguishers.
- D) The limitations of portable fire extinguishers.

Answer --> A

Notes) Page 339, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

609) Those qualified at the Fire Fighter I level must be able to do all but which of the following?

- A) Select the appropriate extinguisher for size and type of fire, and safely carry it.
- B) Approach the fire with the portable fire extinguisher.
- C) Operate the portable fire extinguisher.
- D) Safely refill the fire extinguisher after it has been deployed.

Answer --> D

Notes) Page 340, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters don't usually refill fire extinguishers.

610) Which NFPA standard is the Standard for Portable Fire Extinguishers?

- A) NFPA 10.
- B) NFPA 11.
- C) NFPA 16.
- D) NFPA 18.

Answer --> A

Notes) Page 340, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

611) Backpack pump tank water extinguishers usually have a maximum capacity of –

- A) 2 gallons of water.
- B) 3 gallons of water.
- C) 4 gallons of water.
- D) 5 gallons of water.

Answer --> D

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

612) Every agent extinguishes fire by at least which one of the following?

(1) Smothering. (2) Cooling (3) Chain breaking (4) Polymerization (5) Saponification (6) Reduction.

- A) 1, 3, 4, 6.
- B) 1, 2, 4, 5.
- C) 1, 2, 3, 5.
- D) All the above.

Answer --> C

Notes) Page 242, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

613) What is the principle agent of a Wet Chemical fire extinguisher?

- A) Sodium bicarbonate.
- B) Potassium acetate.
- C) Monoammonium phosphate.
- D) Potassium chloride.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

614) The primary mode in which Water extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> B

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

615) What is meant by 'Saponification'?

- A) The fire is extinguished by oxygen exclusion.
- B) The fire is extinguished by reducing the burning material below its ignition temperature.
- C) The fire is extinguished by interrupting the chemical chain reaction.
- D) The fire is extinguished by forming an oxygen-excluding soapy foam surface.

Answer --> D

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

616) What is meant by 'smothering' a fire?

- A) The fire is extinguished by oxygen exclusion.
- B) The fire is extinguished by reducing the burning material below its ignition temperature.
- C) The fire is extinguished by interrupting the chemical chain reaction.
- D) The fire is extinguished by forming an oxygen-excluding soapy foam.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Oxygen is excluded from the burning process.

All Chapters

617) What is meant by cooling a fire?

- A) The fire is extinguished by oxygen exclusion.
- B) The fire is extinguished by reducing the burning material below its ignition temperature.
- C) The fire is extinguished by interrupting the chemical chain reaction.
- D) The fire is extinguished by forming an oxygen-excluding soapy foam.

Answer --> B

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

618) The primary mode in which Foam extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

619) The primary mode in which Dry Chemical extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> C

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

620) The primary mode in which Wet Chemical extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

621) The primary mode in which Dry Powder extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

622) The primary mode in which Carbon Dioxide extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

623) The primary mode in which Clean Agent extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> C

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

624) The secondary mode in which Foam extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> D

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

625) The secondary mode in which Water extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

626) The secondary mode in which Dry Chemical extinguishes a fire is through –

- A) Oxygen depletion.
- B) Cooling.
- C) Chain inhibition.
- D) Vapor suppression.

Answer --> A

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

627) Fires that involve flammable and combustible liquids are classified as –

- A) Class A.
- B) Class B.
- C) Class C.
- D) Class D.

Answer --> B

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

628) Fires that involve ordinary combustibles such as textiles, paper, plastic, rubber and wood are classified as –

- A) Class A.
- B) Class B.
- C) Class C.
- D) Class D.

Answer --> A

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

629) Fires that involve combustible cooking oils are classified as –

- A) Class O.
- B) Class G.
- C) Class K.
- D) Class D.

Answer --> C

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

630) Fires that involve combustible metals are classified as –

- A) Class O.
- B) Class G.
- C) Class M.
- D) Class D.

Answer --> D

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

631) __ fires are Class A or Class B fires created by electrical energy.

- A) Class C.
- B) Class E.
- C) Class EE.
- D) Class CE.

Answer --> A

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

632) The first step in extinguishing a Class C fire is to –

- A) Test fire the extinguisher before you approach the fire to make sure it is operational.
- B) Use a dry chemical extinguisher.
- C) Use a halon extinguisher.
- D) Disconnect the power to whatever is burning.

Answer --> D

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

633) Pump-Type water extinguishers are applicable to which class of fire?

- A) Class A.
- B) Class B.
- C) Class C.
- D) Class D.

Answer --> A

Notes) Page 345, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

634) Under normal conditions Stored-Pressure water extinguishers can obtain a fire stream of –

- A) 10 – 20 feet.
- B) 20 – 30 feet.
- C) 30 – 40 feet.
- D) 40– 50 feet.

Answer --> C

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

635) Wet Chemical fire extinguishers should only be use on which of the following classes of fire?

- A) Class C.
- B) Class B.
- C) Class K.
- D) Class D.

Answer --> C

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

636) Carbon dioxide fire extinguishers can be used on which of the following classes of fire?

(1) Class A (2) Class B (3) Class C (4) Class D (5) Class K

- A) 1, 2.
- B) 2, 3.
- C) 2, 4.
- D) 1, 2, 3, 4.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

637) Stored-pressure water extinguishers are normally compressed with which of the following gases?

(1) Air (2) Hydrogen (3) Nitrogen (4) Helium (5) Argon

- A) 1, 3.
- B) 1, 2, 4.
- C) 1, 3, 4.
- D) 1, 4, 5.

Answer --> A

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

638) What is the main purpose of adding Class A foam to water extinguishers?

- A) The foam helps extinguish the fire through vapor suppression.
- B) The foam helps extinguish the fire through oxygen depletion.
- C) The foam serves as a wetting agent for extinguishing deep-seated fires.
- D) All the above.

Answer --> C

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Foam enhances its effectiveness by reducing the surface tension to help the water penetrate deeper into the material that is on fire, such as upholstered furniture, vehicle seats, and wildland fires.

639) Dry Powder extinguishers are used to extinguish which types of fires?

- A) Combustible metal fires.
- B) Energized electrical fires.
- C) Super-heated grease fires.
- D) Uncontrollable hydrocarbon fires.

Answer --> A

Notes) Page 341, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

640) Which of the following types of water extinguishers are safe to use on energized electrical equipment?

- A) Pump type water extinguishers.
- B) Water-Mist Stored-Pressure extinguishers with deionized water.
- C) Indian-tank style extinguishers.
- D) No water extinguisher is safe to use on electrical fires.

Answer --> B

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Answer B may be true with IFSTA, but I would never trust that the water in the extinguisher is deionized. Impurities in water makes it electrically conductive.

All Chapters

641) You are responding to MCDONALDs where the deep frier oil cooking the french fries as burst into flames. Which of the following extinguishers would you use to extinguish this fire?

- A) Wet Chemical Stored-Pressure extinguisher.
- B) Dry Chemical extinguisher.
- C) Carbon Dioxide extinguisher.
- D) Water-Mist Stored-Pressure extinguisher.

Answer --> A

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

The oil burning in the deep frier makes this fire a Class K fire. Wet Chemical Stored-Pressure extinguishers are used to extinguish this type of fire.

642) Which of the following extinguishers is particularly useful in combating fires in or suppressing vapors from small liquid fuel spills?

- A) Clean Agent extinguishers.
- B) Dry Chemical extinguishers.
- C) Carbon Dioxide extinguishers.
- D) Aqueous Film Forming Foam (AFFF) extinguishers.

Answer --> D

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

643) Firefighter Jon says that when applying AFFF on to a liquid spill you should allow it to rain down on to the spill.

Firefighter Dave says that when applying AFFF on to a liquid spill you should deflect it off an object.

Who is correct?

- A) Jon.
- B) Dave.
- C) Both are correct.
- D) Neither are correct.

Answer --> C

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

644) When AFFF and water are mixed together, the resulting foam mixture –

- A) Has the specific gravity of 1.
- B) Has the specific gravity greater than 1.
- C) Is lighter than water.
- D) Is heavier than water,

Answer --> C

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

645) Water from which ionic salts, minerals, and impurities have been removed by ion-exchange is called –

- A) Distilled water.
- B) Polarized water.
- C) Deionized water.
- D) Ionized water.

Answer --> C

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

646) AFFF extinguishers are not effective on which of the following classes of fire?

(1) Class A (2) Class B (3) Class C (4) Class D (5) Class K.

- A) 1, 3, 4.
- B) 3, 4, 5.
- C) 1, 2, 5.
- D) 2, 3, 5.

Answer --> B

Notes) Page 347, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. CodeRQ

647) Which of the following extinguishers were designed specifically as replacements for Halon 1211?

- A) Clean Agent extinguishers.
- B) Dry Chemical extinguishers.
- C) Carbon Dioxide extinguishers.
- D) Water-Misted Stored-Pressure extinguishers.

Answer --> A

Notes) Page 347, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

648) Carbon Dioxide extinguishers are effective in extinguishing which of the following classes of fire?

- A) Class A only.
- B) Class A and B only.
- C) Class B and C only.
- D) Class D only.

Answer --> C

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

649) CO2 fire extinguishers should be protected from freezing if they are exposed to temperatures below –

- A) 45 degrees F.
- B) 40 degrees F.
- C) 32 degrees F.
- D) CO2 extinguishers do not require and special freeze protection.

Answer --> D

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

650) The reach of a Carbon Dioxide extinguisher is –

- A) 4 to 6 feet.
- B) 3 to 8 feet.
- C) 10 to 15 feet.
- D) 15 to 20 feet.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

651) One hazard in using CO2 extinguishers is –

- A) Contact with the discharge horn may cause electrical shock.
- B) Contact with the discharge gas may cause carbon dioxide poisoning.
- C) Contact with a Class C fire may cause electric shock.
- D) None of the above.

Answer --> A

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A static electrical charge builds up on the discharge horn. Touching the horn before this charge has dissipated can result in an electrical shock.

652) Which portable extinguisher is the most common portable fire extinguisher in use today?

- A) CO2 extinguishers.
- B) Dry chemical extinguishers.
- C) Dry powder extinguishers.
- D) Stored-Pressure Water Extinguishers.

Answer --> B

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

653) Multipurpose dried chemical extinguishers are rated for which class of fire?

- A) Class A only.
- B) Class B only.
- C) Class C only.
- D) Class A, B or C.

Answer --> D

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

654) Which type of portable fire extinguisher has the characteristic 'horn' nozzle?

- A) Dry chemical extinguishers.
- B) CO2 extinguishers.
- C) Halon extinguishers.
- D) Portable backpack pump tank water extinguishers.

Answer --> B

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

655) What is the effective reach of a Halon 1301 extinguisher?

- A) 4 to 6 feet
- B) 6 to 10 feet
- C) 10 to 15 feet
- D) 15 to 20 feet

Answer --> A

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

656) Class K fire extinguishers are tested to ensure an effectiveness against ____ square feet of light cooking oil in a deep fat fryer.

- A) 2.25.
- B) 5
- C) 7.5.
- D) 9.5.

Answer --> A

Notes) Page 351, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

657) The stream reach of a dry chemical extinguisher under normal conditions is –

- A) 4 to 6 feet.
- B) 6 – 12 feet.
- C) 5 – 10 feet.
- D) 5 to 20 feet.

Answer --> D

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

658) Normal discharge time for a hand-carried dry chemical extinguisher is –

- A) 5 to 10 seconds.
- B) 10 – 15 seconds.
- C) 8 – 25 seconds.
- D) 25 – 60 seconds.

Answer --> C

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

659) Halon 1211 extinguishers are primarily designed for which of the following class of fire?

- A) Class A only.
- B) Class B only.
- C) Class C only.
- D) Both Class B and C.

Answer --> D

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

660) Which compound would you NOT expect to find in dry chemical extinguishers?

- A) Potassium bicarbonate.
- B) Urea-potassium bicarbonate.
- C) Potassium chlorate.
- D) Monoammonium phosphate.

Answer --> C

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Potassium chlorate makes a better explosive than it does an extinguishing agent. Potassium chloride would be the compound for extinguishing fires.

All Chapters

661) Care against freezing should be given to dry chemical extinguishers if they are exposed to temperatures below –

- A) 45 degrees F.
- B) 40 degrees F.
- C) 32 degrees F.
- D) Because the material is dry chemical, no special care is needed.

Answer --> D

Notes) Page 349, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

During manufacture, dry chemical agents are mixed with small amounts of additives that make the agent moisture-resistant and prevent them from caking or hardening.

662) When using a dry chemical extinguisher, the best results are obtained by attacking the –

- A) Base of the fire.
- B) Far edge of the fire and progressing back
- C) Top-most part of the flames and progressing downward
- D) Lower part of the flames and progressing upward

Answer --> A

Notes) Page 349, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

On Class A fires, the discharge should be directed at whatever is burning in order to cover it with the chemical.

663) A Class D fire extinguisher is used to extinguish which type of fire?

- A) Paper and wood fires.
- B) Liquid fires.
- C) Electrical fires.
- D) Metal fires.

Answer --> D

Notes) Page 352, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

664) What is the average discharge time of the carbon dioxide fire extinguisher?

- A) 6 to 14 seconds.
- B) 8 to 30 seconds.
- C) 10 to 45 seconds.
- D) 30 seconds to one minute.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

665) Which of the following is NOT part of every fire extinguisher inspection?

- A) Check that the extinguisher is in its proper location and that it is accessible.
- B) Discharge a small amount of the extinguisher's contents to ensure that the unit is working properly.
- C) Check all lock pins and tamper seals.
- D) Check inspection tags for the date of the previous inspection.

Answer --> B

Notes) Page 357, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

666) When inspecting fire extinguishers, if an extinguisher is found to be deficient in weight by ___ it should be removed from service and replaced.

- A) 5%.
- B) 10%.
- C) 12%.
- D) 15%.

Answer --> B

Notes) Page 357, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

667) Underwriter's laboratories has assigned a numerical rating system for Class A water fire extinguishers based on the extinguisher's -

- A) Effectiveness.
- B) Potential effectiveness.
- C) Amount of extinguishing agent and the duration and range of the discharge.
- D) Shape.

Answer --> C

Notes) Page 351, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

668) Class A fire extinguishers have a UL numerical rating from 1 to -

- A) 10
- B) 20
- C) 30
- D) 40

Answer --> D

Notes) Page 351, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

669) What is the UL numerical rating for Class B fire extinguishers based on?

- A) The approximate square foot area of a flammable liquid fire that a nonexpert operator can extinguish.
- B) The approximate square foot area of a flammable liquid that an expert operator can extinguish.
- C) The size of the fire extinguisher.
- D) The flow rate of the extinguishing agent.

Answer --> A

Notes) Page 351, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

670) UL numerical ratings for Class B fire extinguishers run from 1-B to –

- A) 40–B.
- B) 60–B.
- C) 640–B.
- D) Class B fire extinguishers have no such ratings.

Answer --> C

Notes) Page 352, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

671) What is the UL numerical rating range for Class C fire extinguishers?

- A) 1–40.
- B) 1 – 60.
- C) 1 – 640.
- D) Class C fire extinguishers have no such ratings.

Answer --> D

Notes) Page 352, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This is because electricity does not burn.

672) Besides being assigned letters and an UL numerical ratings, portable extinguishers are labeled with colored symbols so the extinguisher type is easily recognized. Which of the following is not correct?

- A) Class A – Green triangle.
- B) Class B – Gray square.
- C) Class C – Blue circle.
- D) Class D – Yellow star.

Answer --> B

Notes) Page 353, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The Class B symbol is a red square.

All Chapters

673) Some extinguishers are suitable for more than one class of fire. These extinguishers are marked in which of the following manners?

- A) A green square with the word "All" surrounded by a blue circle.
- B) A red circle with the word "All" surrounded by a red circle.
- C) The extinguishers are identified by multiples of the symbols A, B, and or C.
- D) Portable extinguishers can only be identified with one symbol.

Answer --> C

Notes) Page 352, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

674) Selecting the proper portable fire extinguisher depends on which of the following factors?

- A) Hazards to be protected and the severity of the fire.
- B) Personnel available as well as atmospheric conditions.
- C) Ease of handling the extinguisher as well as consideration of any life hazard or operational concerns.
- D) All the above.

Answer --> D

Notes) Page 354, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also included would be:

- 1) Classification of the burning fuel.
- 2) Rating of the fire extinguisher.
- 3) Size and intensity of the fire.
- 4) Availability of trained personnel.

675) Multipurpose dry-chemical fire extinguishers are rated for which class a fire?

- A) Class A.
- B) Class B.
- C) Class C.
- D) All the above.

Answer --> D

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

676) The most effective way to extinguish a fire with a portable extinguisher is to direct the extinguishing agent –

- A) Back and forth at the base of the flames.
- B) Back and forth at the top of the flames.
- C) Up and down starting from the right hand side of the flames.
- D) Up and down starting from the left hand side of the flames.

Answer --> A

Notes) Page 355, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

677) A quick way to remember the steps in the operation of portable fire extinguishers is the –

- A) PREP method.
- B) PASS method.
- C) PRIME method.
- D) PIPE method.

Answer --> B

Notes) Page 355, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The PASS method is –

- P– Pull the pin.
- A– Aim the nozzle.
- S– Squeeze the handle.
- S– Sweep the nozzle back and forth.

678) When using a portable extinguisher on a fire, the firefighter should always __ before approaching the fire.

- A) Be dressed in full protective gear.
- B) Discharge a short test burst to ensure proper operation.
- C) Have at least a 1 1/2 inch backup line drawn from an engine.
- D) All the above.

Answer --> B

Notes) The reference has been dropped from this edition of Essentials. Knightlite has kept the question in because we believe that you should make sure the extinguisher is actually working before you face the fire. A quick test discharge will ensure that.

679) Backpack extinguishers are recommended in all of the following circumstances except –

- A) To extinguish small grass fires.
- B) To extinguish brush fires where fire apparatus can not reach.
- C) As a useful tool at structure fires for overhauling smoking debris.
- D) As an effective aid to extinguishing Class K fires.

Answer --> D

Notes) Page 345, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Obviously, it would not be wise to extinguish burning cooking oil with a water-based extinguisher.

All Chapters

680) NFPA 10 requires that Stored-Pressure water extinguishers should be protected against freezing if they are going to be exposed to temperatures less than –

- A) 45 degrees F.
- B) 40 degrees F.
- C) 32 degrees F.
- D) 0 degrees C.

Answer --> B

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

681) Which of the following statements regarding Dry Powder extinguishers is true?

- A) The terms "Dry Powder" and "Dry Chemical" can be used interchangeably.
- B) Dry Powder extinguishers are for Class D fires only.
- C) Dry powder extinguishers can be used for Class A, B, and C fires.
- D) Dry powder extinguishers are used for Class B and C fires only.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

682) A substance use for the purpose of controlling or extinguishing fire is called a –

- A) Oxidizing agent.
- B) Fire suppression agent.
- C) Wetting agent.
- D) Extinguishing agent.

Answer --> D

Notes) Page 342, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

683) Class A foam concentrate is sometimes added to a water extinguisher to increase effectiveness of extinguishing deep-seated fires, vehicle fires, and wildland fires. What is the main effect of the Class A foam.

- A) The foam serves as a wetting agent.
- B) The foam helps keep explosive vapors from being released into the air.
- C) The foam prevents the water from freezing when the ambient temperature falls below 32 degrees F.
- D) All the above.

Answer --> A

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

684) Which of the following extinguishers are capable of creating a blanket of foam?

- A) Dry chemical extinguishers.
- B) Class B extinguishers.
- C) AFFF extinguishers.
- D) Any stored pressure water extinguisher.

Answer --> C

Notes) Page 346, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

685) Which of the following are considered the two most common types of Halon?

(1) Halon 1601 (2) Halon 1211 (3) Halon 1019 (4) Halon 1301

- A) 1, 2.
- B) 2, 3.
- C) 2, 4.
- D) 3, 4.

Answer --> C

Notes) Page 347, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

686) One of the main fears in using a CO2 extinguisher on flammable liquids is that the –

- A) CO2 does not form any vapor-suppressing film, so reignition can pose a danger.
- B) CO2 will freeze the liquid causing the possibility that the liquid will be more unstable in the solid state.
- C) Pressure exerted on the liquid by the expelling gas will spread the fire.
- D) All the above pose an equal danger.

Answer --> A

Notes) Page 348, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

687) Which of the following statements regarding handheld fire extinguishers is NOT true?

- A) The designs for handheld dry extinguishers are either "stored-pressure" or "cartridge-operated."
- B) Stored pressure extinguishers have a constant pressure of about 200 psi.
- C) Handheld extinguishers use helium as the pressurizing gas.
- D) In cartridge-operated extinguishers, the agent tank is not pressurized while in storage.

Answer --> C

Notes) Page 349, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The gases used for these extinguishers are either, nitrogen or carbon dioxide.

All Chapters

688) Which of the following statements regarding the use of Class D extinguishing agents is true?

- A) The agent should be applied in sufficient depth so that it completely covers the area that is burning.
- B) If the combustible metal forms a crust, the crust must be broken to allow the extinguishing agent to reach the fire.
- C) Once the Class D extinguishing agent has been applied, the fire should be scattered to ensure that the fire has been extinguished.
- D) Once the agent has been applied to the combustible metal the entire area should be cooled down with water using a gentle fog.

Answer --> A

Notes) Page 350, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

689) Test fires for rating Class D fires vary with the type of combustible metal being tested. Which of the following is NOT considered during each test?

- A) Reactions between the metal and the agent, as well as the toxicity of the agent.
- B) Toxicity of the fumes produced and the products of combustion.
- C) Time to allow metal to burn out without fire suppression efforts versus the time to extinguish.
- D) The half-life of the agent as well as the half-life of the residual combustible metal.

Answer --> D

Notes) Page 352, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

690) A common-sized extinguisher, such as a multipurpose extinguisher rated 4-A, 20 B:C should be able to extinguish a Class A fire which is __ times larger than a 1-A fire, and also be able to extinguish approximately __ times as much Class B fire as a 1-B extinguisher.

- A) 2, 10.
- B) 4, 20.
- C) 6, 30.
- D) 8, 40.

Answer --> B

Notes) Page 353, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

691) The labeling system recommended by NFPA 10 is the use of –

- A) Pictographs representing Class A, Class B, and Class C fires to make the selection of the appropriate extinguisher.
- B) Alphabetical/geometric symbols for the four classes of fire.
- C) Color coordinated extinguisher canisters.
- D) All the above.

Answer --> A

Notes) Page 353, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

692) Firefighters using portable extinguishers should approach the fire from the –

- A) Leeward side of the fire.
- B) Windward side of the fire.
- C) Uphill side of the fire.
- D) Downhill side of the fire.

Answer --> B

Notes) Page 355, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

In other words, the wind should be at your back.

693) Portable extinguishers that have been used should –

- A) Be laid on their sides to signal that the extinguisher is empty.
- B) Be immediately refilled on-scene.
- C) Be disposed of properly.
- D) Have their nozzles removed to signal that the extinguisher is empty.

Answer --> A

Notes) Page 356, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

694) All portable fire extinguishers expel their contents by one of the following methods except –

- A) Manual pump.
- B) Electrostatic charge.
- C) Stored pressure.
- D) Pressure cartridge.

Answer --> B

Notes) Page 343, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

695) Dry chemical agents are –

- A) Toxic when heated.
- B) Toxic at any temperature.
- C) Nontoxic.
- D) Toxic in high concentrations.

Answer --> C

Notes) Page 349, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Although the chemicals themselves are nontoxic, they can create respiratory problems as with any airborne particulate.

All Chapters

696) Wheeled dry chemical extinguishers are rated for all but which class of fire?

- A) Class A.
- B) Class B.
- C) Class C.
- D) Class D.

Answer --> D

Notes) Page 350, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

697) All of the following are factors that determine the value of a fire extinguisher except –

- A) Its UL rating.
- B) Its serviceability.
- C) Its accessibility.
- D) Its simplicity of operation.

Answer --> A

Notes) Page 357, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

698) Any fire extinguisher that shows any sign of damage or corrosion should be –

- A) Taken out of service.
- B) Disposed of.
- C) Hydrostatically tested.
- D) Allowed to remain in service until its next inspection date.

Answer --> A

Notes) Page 357, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from old version. The old answer was C – hydrostatically tested.

699) In a dry chemical fire extinguisher, how often should the fire extinguishing agent be emptied and refilled with new material?

- A) 2 years.
- B) 3 years.
- C) 5 years.
- D) 6 years.

Answer --> D

Notes) Page 358, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

700) One of the oldest tools used by firefighters is a(an) –

- A) Halligan bar.
- B) Rope.
- C) Ax.
- D) Bucket

Answer --> B

Notes) Page 370, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

701) NFPA 1001, Standard for Fire Fighter Professional Qualifications, requires that those trained to the Fire Fighter I level know how to perform all but which of the following?

- A) Hoist tools and equipment with rope using the proper knot.
- B) Know how to select the proper rope for a specific task.
- C) Know how to properly maintain various types of ropes used in the fire service.
- D) Be able to throw a rope bag at least 55 feet.

Answer --> D

Notes) Page 370, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

702) Rope used for any purpose other than rescue is commonly called __ rope.

- A) Fire.
- B) Safety.
- C) Common.
- D) Utility.

Answer --> D

Notes) Page 370, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

703) Which of the following situations would not be a typical use for a utility rope?

- A) Hoisting up a pike pole to a second story window.
- B) Securing an overturned car to a tree.
- C) Lowering an injured patient in a stokes basket from a steep cliff.
- D) Cordoning off an accident scene.

Answer --> C

Notes) Page 372, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Lowering a patient would be a job for a Life Safety Rope.

All Chapters

704) Generally, how many twisted strands are used to construct a laid rope?

- A) 1.
- B) 2.
- C) 3.
- D) 4.

Answer --> C

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

705) Which of the following types of rope is design to stretch without breaking?

- A) Dynamic rope.
- B) Static rope.
- C) Rescue rope.
- D) Utility rope.

Answer --> A

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

706) Which of the following types of rope is used for most common rope-rescue incidents?

- A) Dynamic rope.
- B) Static rope.
- C) Escape rope.
- D) Utility rope.

Answer --> B

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

707) Which of the following types of rope is designed for low stretch without breaking?

- A) Dynamic rope.
- B) Static rope.
- C) Rescue rope.
- D) Utility rope.

Answer --> B

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

708) According to NFPA 1983, low-stretch rope must not elongate more than __ when tested under a load equal to __ of its breaking strength.

- A) 5%, 10.
- B) 10%, 5%.
- C) 10%, 10%.
- D) 5%, 5%.

Answer --> C

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

709) The method of manufacturing rope without any knots or splices; a continuous strand of fiber that runs the entire length of a rope's core is known as –

- A) Continuous strand construction.
- B) Continuous mantle construction.
- C) Synthetic braid core construction.
- D) Block creel construction

Answer --> D

Notes) Page 371, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

710) A dynamic and sudden load placed on a rope, typically during a fall is known as –

- A) Impact load.
- B) Dynamic load.
- C) Static load.
- D) Accelerated load.

Answer --> A

Notes) Page 371, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

711) NFPA 1983 requires manufacturers to provide which of the following information regarding proper use of a rope?

- A) Inspection procedures.
- B) Criteria for retiring life safety rope from service.
- C) Maintenance procedures
- D) All the above.

Answer --> D

Notes) Page 371, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

712) Which of the following statements regarding natural fiber ropes is not true?

- A) It is resistant to sunlight.
- B) It does not melt when exposed to heat.
- C) It holds a knot firmly.
- D) It is resistant to water damage.

Answer --> D

Notes) Page 373, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Natural fiber rope should not be allowed to become wet if it all possible because they are prone to mildew and mold.

713) All of the following statements are true in regard to synthetic fiber rope except –

- A) It does not melt when exposed to heat.
- B) It has a longer lifespan than natural fiber ropes.
- C) It is very strong yet lightweight.
- D) It is easy to maintain.

Answer --> A

Notes) Page 373, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The disadvantage of synthetic fibers is that they do melt when exposed to heat.

714) Which of the following types of rope is 19/64-inch in diameter and is intended to be used only once then destroyed?

- A) Light-use rope.
- B) General-use rope.
- C) Throwline.
- D) Escape rope.

Answer --> D

Notes) Page 371, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

715) Which type of rope would be the best choice for use in a rescue situation?

- A) Manila.
- B) Sisal.
- C) Cotton.
- D) Synthetic.

Answer --> D

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

716) Ropes that are constructed by twisting together yarns to form strands are known as –

- A) Laid rope.
- B) Braided rope.
- C) Braid-On-Braid rope.
- D) Kernmantle rope.

Answer --> A

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

717) Ropes composed of a braided covering or sheath over the main load bearing strands are known as –

- A) Laid rope.
- B) Braided rope.
- C) Braid-On-Braid rope.
- D) Kernmantle rope.

Answer --> D

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

718) Ropes that have both a braided sheath and a braided core are known as –

- A) Laid rope.
- B) Braided rope.
- C) Braid-On-Braid rope.
- D) Kernmantle rope.

Answer --> C

Notes) Page 375, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

719) Rope that is made by uniformly intertwining strands of rope together is known as –

- A) Laid rope.
- B) Braided rope.
- C) Braid-On-Braid rope.
- D) Kernmantle rope.

Answer --> B

Notes) Page 375, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

720) What percentage of strength is found in the sheath of a braid-on-braid rope?

- A) 25%.
- B) 50%.
- C) 75%.
- D) 100%.

Answer --> B

Notes) Page 376, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The other 50% of its strength is in the core of the rope.

721) Which of the following methods is NOT a recommended method for cleaning synthetic fiber ropes?

- A) Washing the rope by hand.
- B) Using a special rope washer.
- C) Brushing the rope with a brush or broom.
- D) Washing in a front-loading clothes washer.

Answer --> C

Notes) Page 379, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

722) Which of the following is NOT a recommended method for drying a synthetic fiber rope?

- A) Loosely coiled and dried in a hose dryer.
- B) Stretch out the rope on a clean dry surface and allow it to dry in direct sunlight.
- C) Strung and dried out of direct sunlight on a hose tower.
- D) All the above.

Answer --> B

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This rope should be dried out of direct sunlight.

723) Which rope should not be stored wet?

- A) Manila.
- B) Nylon.
- C) Kevlar Aramid.
- D) Polypropylene.

Answer --> A

Notes) Page 373, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It has the disadvantage of being prone to mildew and mold.

All Chapters

724) Fire service rope that has a high degree of stretch without breaking under a load is known as –

- A) Static rope.
- B) Dynamic rope.
- C) Bungee rope.
- D) Climbers rope.

Answer --> B

Notes) Page 374, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

725) Which of the following methods is the best way to clean a natural fiber rope?

- A) Cool water, and a mild soap.
- B) Warm water, and a mild soap.
- C) A diluted bleach solution in warm water.
- D) Natural fiber ropes should not be exposed to water. Wipe or gently brush the rope to remove as much dirt as possible.

Answer --> D

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

726) Which washing machine is the best choice for washing synthetic fiber ropes?

- A) Front-load or top-load washing machines without center agitators..
- B) Front-loading washing machines with plastic windows.
- C) Top-loading washing machines.
- D) Synthetic ropes should never be washed by any machine.

Answer --> A

Notes) Page 379, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

The rope should be placed in a mesh bag to protect the exterior from abrasion, then set the washer on the coolest wash and rinse temperature available and then use only a small amount of detergent.

727) The best method for storing kernmantle rope and other life-safety ropes is –

- A) To hang the rope from a hose tower out of direct sunlight.
- B) Piled on top of one another in apparatus storage compartments.
- C) To place it in a rope bag.
- D) All the above.

Answer --> C

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

728) Unused rope should be inspected –

- A) Weekly.
- B) Monthly.
- C) Annually.
- D) Before each use.

Answer --> C

Notes) Page 376, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

729) Life-safety rope that fails to pass inspection should be destroyed. In the fire service, what is meant by destroying a rope?

- A) Disposing of the rope completely.
- B) Removing the manufacturer's label.
- C) Marking the rope as utility rope.
- D) All the above.

Answer --> D

Notes) Page 376, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

730) When inspecting a kern mantle rope, firefighters look for lumps, depressions, or soft spots. What is the best course of action if any of these conditions are observed?

- A) The rope should be tested under load.
- B) The rope should be inspected by a NFPA trained examiner.
- C) An attempt should be made to fix the found defect.
- D) The rope should be downgraded to utility rope.

Answer --> D

Notes) Page 376, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

731) Most fire service rated webbing is made from –

- A) Cotton.
- B) Polyethylene.
- C) Manila.
- D) The same materials as synthetic rope.

Answer --> D

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

732) What size wedding is the most common in the fire service?

- A) 1-inch.
- B) 2-inches.
- C) 2 1/4-inches.
- D) 2 1/2-inches.

Answer --> A

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

733) Which would not be considered part of the two main types of webbing construction?

- A) Braided tubular weave.
- B) Solid, flat design.
- C) Spiral tubular weave.
- D) Edge-stitched tubular weave.

Answer --> A

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

734) Which of the following is NOT one of the bends in a rope, in the formation of a knot?

- A) The Twist.
- B) The Bight.
- C) The Loop.
- D) The Round Turn.

Answer --> A

Notes) Page 385, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

735) The end of the rope used to form the knot is commonly called all of the following except the –

- A) Loose end.
- B) Working end.
- C) Running end.
- D) Bitter end.

Answer --> C

Notes) Page 384, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

736) The part of a knot between the two ends is called the –

- A) Standing part.
- B) Working part.
- C) Flexing part.
- D) Base part.

Answer --> A

Notes) Page 384, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

737) The __ is a good knot for forming a loop that will not constrict the object it is placed around, when using natural fiber ropes.

- A) Bowline knot.
- B) Clove hitch.
- C) Half hitch.
- D) Sheet bend.

Answer --> A

Notes) Page 387, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

738) Which is the knot of choice for attaching a rope to an object such as a pole, post, or hoseline?

- A) Bowline knot.
- B) Clove hitch.
- C) Half hitch.
- D) Sheet bend.

Answer --> B

Notes) Page 388, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

739) Which knot is particularly useful for joining two ropes of different diameter?

- A) Bowline knot.
- B) Clove hitch.
- C) Half hitch.
- D) Becket bend.

Answer --> D

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Changed answer from the sheet bend to the becket bend. Also known as the sheet bend.

All Chapters

740) As a measure of safety, a firefighter should tie off any type of knot using –

- A) A square knot.
- B) A granny.
- C) An overhand safety knot.
- D) A figure-eight knot.

Answer --> C

Notes) Page 387, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

741) From the list of knots below, which knot would you choose to hoist a roof ladder from the ground to the roof?

- A) Becket bend.
- B) Bowline.
- C) Clove hitch.
- D) Half hitch.

Answer --> B

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

You could also use a figure-eight knot as well.

742) Which method would you use to hoist an axe using a rope to a second story window?

- A) Clove hitch on the head and a half hitch on the handle.
- B) Half hitch on the head and a clove hitch on the handle.
- C) A bowline on the head and a half hitch on the handle.
- D) A figure-eight knot on the head and a bowline on the handle.

Answer --> A

Notes) Page 411, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

743) Which knot is used to tie ropes of equal diameters together, or to tie a rope around an object when an end of the rope is not available?

- A) Figure-eight follow through.
- B) Sheet bend.
- C) Clove hitch.
- D) Figure-eight on a bight.

Answer --> A

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

744) Which is the best knot to use to hoist SCBA bottles, fire extinguishers, and other pressurized cylinders?

- A) Figure-eight.
- B) Sheet bend.
- C) Clove hitch.
- D) None of the above.

Answer --> D

Notes) Page 390, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hoisting pressurized cylinders with ropes is not recommended and is unsafe.

745) Which of the following procedures is the correct way to hoist a pike pole?

- A) Raise the pike pole head down, with a figure-eight knot around the handle, followed by a half hitch in the center, and another half hitch around the head.
- B) Raise the pike pole head up, with a clove hitch tied toward the end of the handle, followed by a half hitch in the center of the handle, and another half hitch around the head.
- C) Raise the pike pole horizontally with two clove hitches; one tie to the end of the handle and the second tied around the head.
- D) Raise the pike pole head up, with a bowline around the head, followed by a figure-eight around the center of the handle, and a sheet bend tied near the end of the handle.

Answer --> B

Notes) Page 393, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

746) Which of the following knots is ideal for hoisting portable ventilation fans?

(1) Bowline (2) Figure-eight on a bight (3) Clove hitch (4) Becket Bend (5) Half hitch

- A) 1
- B) 1, 2.
- C) 3, 4.
- D) Any of the above.

Answer --> B

Notes) Page 393, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

747) The overhand safety-knot is often called the –

- A) Safety.
- B) Finish.
- C) Finished end.
- D) All the above.

Answer --> A

Notes) Page 387, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

748) Which knot essentially consists of two half-hitches?

- A) Bowline.
- B) Sheet Bend.
- C) Clove Hitch.
- D) Figure 8.

Answer --> C

Notes) Page 388, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

749) Which knot is also known as the Flemish Bend, and is used to tie ropes of equal diameters together?

- A) Figure eight.
- B) Figure-eight bend.
- C) Figure-eight on a bight.
- D) Figure-eight follow-through.

Answer --> B

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

750) __ is a good way to tie a closed loop in the end of a rope.

- A) Figure eight.
- B) Figure-eight bend.
- C) Figure-eight on a bight.
- D) Figure-eight follow-through.

Answer --> C

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

751) Which knot is the preferred knot for joining two pieces of webbing or the end of the same piece when a loop is needed.

- A) Figure-eight on a bight.
- B) Sheet bend.
- C) Figure-eight follow-through.
- D) Water knot.

Answer --> D

Notes) Page 389, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

752) A metal snap link used to connect elements of a rescue system together is called a –

- A) Brake bar rack.
- B) Plate.
- C) Carabiner.
- D) Ascender.

Answer --> C

Notes) Page 390, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

753) Uncharged hoselines should be hoisted –

- A) With the nozzle facing down utilizing a clove hitch around the nozzle, and a half hitch around the doubled hose.
- B) With the nozzle facing up utilizing a clove hitch around the nozzle and half hitch around the doubled hose.
- C) With the nozzle facing down utilizing a half hitch around the nozzle and a clove hitch around the doubled hose.
- D) With the nozzle facing up utilizing a half hitch around the nozzle and a clove hitch around the doubled hose.

Answer --> A

Notes) Page 414, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

754) Which of the following knots is ideal for hoisting a power saw?

(1) Bowline (2) Figure-eight on a bight (3) Clove hitch (4) Becket Bend (5) Half hitch

- A) 1
- B) 1, 2.
- C) 3, 4.
- D) 4, 5.

Answer --> B

Notes) Page 394, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Shameless plug... For more about fire fighter knots, purchase Knightlite's Fire Fighter 1 Knots DVD. It will help you learn the 8 basic fire fighter 1 knots. Visit Knightlite.com for more information.

755) All of the following rescue harnesses are recognized by NFPA 1983 except for –

- A) Class I Harness.
- B) Class II Harness.
- C) Class III Harness.
- D) Ladder belt.

Answer --> D

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

The ladder belt can only be used as positioning devices on ladders and for emergency escape.

All Chapters

756) Which of the following rescue harnesses is also known as a 'seat harness' ?

- A) Class I Harness.
- B) Class II Harness.
- C) Class III Harness.
- D) Ladder belt.

Answer --> A

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

757) Which of the following rescue harnesses is also known as a 'full body harness'?

- A) Class I Harness.
- B) Class II Harness.
- C) Class III Harness.
- D) Ladder belt.

Answer --> C

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

758) Which of the following harnesses is rated to support a 600-pound load?

- A) Class I Harness.
- B) Class II Harness.
- C) Class III Harness.
- D) B and C

Answer --> D

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

759) Which of the following harnesses is rated to support a 300-pound load?

- A) Class I Harness.
- B) Class II Harness.
- C) Class III Harness.
- D) All the above.

Answer --> D

Notes) Page 382, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Kind of a trick question. The Class I harness is rated to support a 300-pound load, but all the rest can support the same load.

All Chapters

760) When using rope you should avoid sharp angles and bends. Sharp angles, bends, and knots can reduce the strength of a rope by as much as –

- A) 5%.
- B) 10%.
- C) 25%.
- D) 50%.

Answer --> D

Notes) Page 378, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

761) Keep all synthetic or natural fiber ropes away from rust, which can weaken a rope in as little as –

- A) 1 to 2 weeks.
- B) 1 month.
- C) 6 weeks.
- D) 6 months.

Answer --> A

Notes) Page 378, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

762) The record of all use, maintenance, and inspection throughout a rope's working life is known as the –

- A) Rope record.
- B) Rope history.
- C) Rope log.
- D) All the above.

Answer --> C

Notes) Page 381, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

763) According to NFPA how many people were killed in structure fires in 2009?

- A) 1260.
- B) 1625.
- C) 2100.
- D) 2700.

Answer --> D

Notes) Page 422, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Structure fires injured 14,800 more.

All Chapters

764) An assessment of a facility or location made before an emergency occurs in order to prepare for an appropriate emergency response is called a –

- A) Preincident survey.
- B) Incident action plan.
- C) Preincident action plan.
- D) All the above.

Answer --> A

Notes) Page 422, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

765) Which of the following statements is not true?

- A) Do not enter a building where there is little chance of finding and rescuing any viable victims.
- B) If backdraft conditions are apparent, firefighters should hasten search and rescue efforts despite waiting for other fire fighting operations to commence.
- C) Maintain radio contact with your supervisor.
- D) Stay low and move cautiously while searching with limited visibility.

Answer --> B

Notes) Pages 426–427, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should only enter a building showing signs of backdraft after the building has been properly ventilated.

766) When a firefighter encounters a door during a search and rescue operation, the firefighter should do all but which of the following?

- A) Feel the door with the back of his hand.
- B) Apply water to the door and look for steam.
- C) Use a thermal imaging camera to access the conditions behind the door.
- D) Open the door.

Answer --> D

Notes) Reference missing from this version – Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Left in for reference.

767) In fire fighting, what is meant by the term egress.

- A) The point in which firefighters enter a structure.
- B) The point at which firefighters exit a structure.
- C) The main ventilation hole in the roof.
- D) The main entrance and exit to the structure.

Answer --> B

Notes) Page 426 – Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The point of entry into a building will not always be the way you will get out. Firefighters should always have a secondary means of egress when entering any building.

All Chapters

768) Any facility in which a fire, accident, or natural disaster could cause substantial casualties or significant economic harm, through either property or infrastructure damage is known as –

- A) Catastrophic target.
- B) Catastrophic hazard.
- C) Dynamic hazard.
- D) Target hazard.

Answer --> D

Notes) Page 423, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

769) Sizing-up a building fire upon approach, is the responsibility of which of the following?

- A) The first arriving officer.
- B) The Chief.
- C) The Incident commander.
- D) All firefighters should observe the entire building and its surroundings upon approach.

Answer --> D

Notes) Page 425, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is the initial responsibility of the first arriving officer, but all firefighters should also participate in the size-up of the building.

770) Observation of a building which is on fire, can give firefighters all the following information except –

- A) How many occupants are in the building.
- B) An idea of how much time it will take to effectively search the building.
- C) The size of the fire.
- D) The probable structural integrity of the building.

Answer --> A

Notes) Pages 425–426, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

771) Firefighters who have obtained information from occupants or neighbors, regarding the number and location of victims within a building, should be relayed to the –

- A) First search team within the building.
- B) Second search team within the building.
- C) Dispatch center.
- D) Incident Commander and all incoming units.

Answer --> D

Notes) Page 428, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

772) When should firefighters identify their possible alternative escape routes at a structure fire?

- A) As they enter the building.
- B) When they arrive at the fire floor.
- C) When they locate the seat of the fire.
- D) Before they enter the building.

Answer --> D

Notes) Page 428, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Look for means of egress before you enter a building. Reassessing areas of egress is a continuous process throughout the incident. The behavior of the fire can quickly change original egress strategies.

773) The two objectives of a building search include which of the following?

- A) Searching for life, and obtaining information about the location and extent of the fire.
- B) Searching for life, and attacking the seat of the fire.
- C) Searching for fire extension, and attacking the seat of the fire.
- D) Searching for life, and searching for evidence of arson.

Answer --> A

Notes) Page 430, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

774) A rapid, but thorough search that is performed either before or during fire suppression operations is called the –

- A) Initial search.
- B) Primary search.
- C) Secondary search.
- D) Rapid search.

Answer --> B

Notes) Page 430, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

775) The search that is conducted after the fire has been placed under control, and the hazards are somewhat lessened is called the –

- A) Final search.
- B) Primary search.
- C) Secondary search.
- D) Tertiary search.

Answer --> C

Notes) Page 430, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

776) What is the first thing firefighters should consider when entering a burning building in a search and rescue operation?

- A) The location of the victim(s).
- B) The location of the fire.
- C) The exact time they connected to SCBA.
- D) Their own safety.

Answer --> D

Notes) Page 431, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should always use the buddy system and work in teams of two or more.

777) Primary search personnel should carry which of the following articles with them as they enter a building and throughout a search?

- A) Forcible entry tools.
- B) A charged hoseline.
- C) An attic ladder.
- D) A Stokes basket.

Answer --> A

Notes) Page 429, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

778) Which of the following statements regarding a firefighter's movements while searching a structure is NOT true?

- A) Firefighters may perform a search walking in a upright position if there is light smoke, and little or no heat.
- B) Firefighters should ascend stairs on their hands and knees.
- C) Firefighters should descend stairs feet first with their body's facing away from the stairs .
- D) Firefighters who perform searches on their hands and knees often have more visibility and are exposed to less heat.

Answer --> C

Notes) Pages 432–433, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

However, IFSTA shows on page 433, firefighters descending a staircase during extreme fire conditions keeping their hands and feet close to the edge of the stairs and proceeding with the front of their bodies away from the stairs. When searching a building in the standing position, if you can't see your feet through the smoke, you should not be standing.

All Chapters

779) When searching the fire floor of a structure fire, firefighters should –

- A) Start the search at the entrance door and move as close as possible to the region of the fire.
- B) Start the search as close to the fire as possible and move back toward the entrance.
- C) Not search the fire floor until hoseline crews have knocked down the fire.
- D) Search other floors first before attempting to search the fire floor.

Answer --> B

Notes) Page 432, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

780) Firefighters should search for victims in which of the following locations, during structure fires?

(1) Under beds (2) Bathtubs (3) Closets (4) Shower stalls (5) Behind furniture (6) Attics

- A) 1, 2, 4.
- B) 1, 5, 6.
- C) 1, 3.
- D) All the above.

Answer --> D

Notes) Pages 432–434, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

781) Which is the correct method for searching a room during the course of a structure fire?

- A) The perimeter of the room is searched first, followed by a search of the middle of the room.
- B) The middle of the room is searched first, followed by a search of the perimeter.
- C) Rooms should be searched using a zigzag pattern.
- D) There are no recommended methods for firefighters to follow in order to search a room for victims.

Answer --> A

Notes) Page 434, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

782) All of the following statements regarding the secondary search of a building during a structure fire are false except –

- A) The secondary search is performed prior to fire suppression and ventilation operations.
- B) When performing a secondary search speed is more critical than thoroughness.
- C) During the secondary search, only positive information should be relayed to the IC.
- D) Firefighters other than those who performed the primary search should be assigned to the secondary search.

Answer --> D

Notes) Pages 431, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Using different personnel to conduct the secondary search has the advantage of allowing the search team to use "fresh eyes" and get an unbiased view of the scene.

All Chapters

783) When using a search line system, 2-inch steel rings are tied into the rope along with the correct number of knots every –

- A) 10 ft.
- B) 20 ft.
- C) 30 ft.
- D) 50 ft.

Answer --> B

Notes) Page 436, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

784) Which of the following would represent the typical tether used in search and rescue operations?

- A) 1/4-inch Kevlar sheathed rope, 20 feet long with a knot in the midpoint of the rope, and a 3/4-inch steel ring tied on one end, with a carabiner tied to the other.
- B) 3/4-inch Kevlar sheathed rope, 10 feet long with a knot tied every 3 feet in the rope, and a 1/2-inch steel ring tied on one end, with a carabiner tied to the other.
- C) 1/2-inch Kevlar sheathed rope, 20 feet long with a knot in the midpoint of the rope, and a 1/2-inch steel ring tied on one end, with a carabiner tied to the
- D) 1/2-inch Kevlar sheathed rope, 10 feet long with a knot in the midpoint of the rope, and two 3/4-inch steel rings tied to each end.

Answer --> A

Notes) Page 436, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Some tethers have snap hooks instead of carabiners.

785) Implementing a search line system requires a minimum team of at least –

- A) 2 members.
- B) 3 members.
- C) 4 members.
- D) 5 members.

Answer --> B

Notes) Page 435, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

786) When implementing a search line system the first firefighter who picks up the rope bag and enters the search area is called the –

- A) Navigator.
- B) Leader.
- C) Lead.
- D) Primary rescuer.

Answer --> C

Notes) Page 435, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

787) The second firefighter in a search line system that enters shoulder-to-shoulder behind the first firefighter is called the –

- A) Navigator.
- B) Secondary rescuer.
- C) Backup.
- D) Tail.

Answer --> A

Notes) Page 435, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The Navigator should be equipped with a hand light and TI (Thermal Imager) if available.

788) Who directs the search during a search line system operation?

- A) The Lead.
- B) The Navigator.
- C) The IC.
- D) All the above.

Answer --> B

Notes) Page 435, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

789) You are at the scene of a four story structure fire, in which the fire has developed on the ground floor. In which order should the floors of this multistory building be searched?

- A) 1st, 2nd, 3rd, and 4th.
- B) 4th, 1st, 2nd, and 3rd.
- C) 1st, 2nd, 4th, and 3rd.
- D) 2nd, 1st, 4th, and 3rd.

Answer --> C

Notes) Reference Missing In Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

The fire floor should always be searched first, followed by the floor just above the fire floor, followed by the top floor, and then followed by all subsequent floors.

790) In most cases, which of the following is the best way for a team of firefighters to search a small room for victims?

- A) The firefighters enter the room and search the perimeter, then the center of the room, with the firefighter in the back keeping in constant physical contact with the firefighter in front.
- B) The firefighters enter the room, with one firefighter going left and the others going right, and eventually meeting somewhere in between.
- C) One firefighter remains at the door, while the others search the room, with all in constant voice contact with each other.
- D) Firefighters each search a room by themselves and meet up at a predetermined location upon completing the search.

Answer --> C

Notes) Page 435, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

~~Knightlite Software~~ This is call the oriented-search method. Small rooms can also be searched with the use of a

All Chapters

791) After searching a room, which of the following marking systems are not recommended?

- A) Fold a mattress sideways on the bed.
- B) Using chalk, masking tape, or crayons to mark doors.
- C) Latch straps or hang tags on the doorknob.
- D) Use the two part marking system on the door.

Answer --> A

Notes) Page 438, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This method is no longer recommended because it requires rescuers to enter the room in order to discover the marking system. The rescuer should not have to enter the room in order to discover that the room has already been searched.

792) All of the following statements regarding search and rescue operations are true except –

- A) A firefighter should feel the bottom of a door before opening it.
- B) If a door is excessively hot, it should not be opened until a charged hoseline is in place.
- C) When opening doors, firefighters should not remain in front of the door as it is being opened.
- D) Apply a short burst of water fog above the door to cool the gases at the ceiling before opening the door.

Answer --> A

Notes) Reference Dropped In This Version – Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

Firefighters should always check for heat at the top of the door. They should also check the doorknob as well.

793) Firefighters who are injured, trapped or disoriented should –

- A) Remain calm and stay in one place until they are found.
- B) Locate a hoseline and follow the female coupling out of the building.
- C) Activate their PASS devices.
- D) All of the above.

Answer --> C

Notes) Page 450, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

If you are unsure of your location, you can momentarily turn off your PASS device and listen for sounds that provide clues of your location, such as traffic, crews working with tools, or the sound of a pumper.

Also be aware that you should follow the male coupling out of the building and not the female coupling. Last, try to remain calm.

All Chapters

794) Firefighters who have become disoriented and can not find their way out of the building should do all of the following except –

- A) Try to position themselves in the center of the room.
- B) Tap the floor with a tool or find another way of making noise.
- C) Attempt to position their flash light so that it shines towards the ceiling.
- D) Activate their pass device.

Answer --> A

Notes) Page 450, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Firefighters searching for you will most likely search the periphery of the room first before the center.

795) All the following statements regarding the removal of a downed firefighter are FALSE except –

- A) Search teams looking for lost firefighters should stop often and remain perfectly quiet so they may hear calls for help or PASS devices from injured or disoriented firefighters.
- B) If an injured firefighter is discovered, injuries should be stabilized before the firefighter is removed, no matter how hostile the environment is.
- C) If the downed firefighter's SCBA is not functioning, rescue firefighters should remove their masks and assist in buddy breathing.
- D) Firefighters should always make an attempt to locate downed victims no matter if the fire has progressed to a point where viable victims are unlikely to be found.

Answer --> A

Notes) Page 455, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

796) When a victim is lying unconscious in a life threatening environment the rescuer should –

- A) Think first about moving the victim to a safe haven before tending to any injuries.
- B) Not move the victim until a cervical collar is placed around the victim's neck.
- C) Not move the victim until he/she is placed on a long backboard.
- D) Control any perfuse bleeding before moving the patient.

Answer --> A

Notes) Page 456, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

797) Which NFPA standard requires a rapid intervention crew (RIC) be standing by whenever firefighters are in the hazard zone?

- A) NFPA 1001.
- B) NFPA 1609.
- C) NFPA 1500.
- D) NFPA 1990.

Answer --> C

Notes) Page 454, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

798) The hazard zone is defined as –

- A) Any area where firefighters are engaged in working to mitigate a problem.
- B) Any portion of a building that contains an IDLH atmosphere.
- C) The red zone.
- D) Any hazardous area that could prove dangerous to firefighters working.

Answer --> B

Notes) Page 454, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

799) A RIC is composed of at least __ who are suitably equipped to enter the hazard zone to locate and rescue firefighters in distress.

- A) 2
- B) 3
- C) 4
- D) 5

Answer --> A

Notes) Page 454, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

800) Some fire departments use digital radio tracking devices to help locate firefighters in distress. These tracking devices normally will have a range of –

- A) 100 feet.
- B) 250 feet.
- C) 500 feet.
- D) 1000 feet.

Answer --> A

Notes) Page 455, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

801) Which of the following statements in regard to locating and rescuing a downed firefighter is not true?

- A) Request assistance if the firefighter is trapped or injured.
- B) Continually call out the victim's name, so the victim can respond, thus hastening the rescue effort.
- C) Notify Command of the firefighter's location and status.
- D) Check vital signs if the firefighter is unconscious.

Answer --> B

Notes) Page 455, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Rescuers should proceed as quietly as possible and listen for PASS devices or faint cries for help.

802) Emergency moves are essential under all of the following situations except –

- A) There is fire or the danger of fire in the immediate area.
- B) It is impossible to protect the accident scene.
- C) It is impossible to gain access to other victims who need immediate medical care.
- D) The patient has possible spinal cord injuries.

Answer --> D

Notes) Page 440, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

803) When it is necessary to perform an emergency move, which method should firefighters employ to remove a victim from a hazardous environment?

- A) The victim should be pulled in the direction of the short axis of the body.
- B) The victim should be pulled in the direction of the long axis of the body.
- C) The victim should always be pulled on a blanket.
- D) It does not matter how the victim is removed during an emergency move.

Answer --> B

Notes) Page 440, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

804) One rescuer can safely carry a –

- A) Child.
- B) Child, or Adult Woman.
- C) Child, Adult Woman, or Adult Male.
- D) None of the above. Two rescuers are always required to carry any victim.

Answer --> A

Notes) Page 441, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

805) The __ is the type of carry in which, a lone firefighter places one arm under the victim's arms and across the back, and places the other arm under the victims knees. Keeping his back straight, the victim is lifted to waist height.

- A) The Fireman's Carry.
- B) Extremities Lift/Carry.
- C) Chair Lift/Carry.
- D) Cradle-In-Arms Lift/Carry.

Answer --> D

Notes) Page 442, 463, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This care is not practical for unconscious adults because of the victim's weight and relaxed body, and the difficulty in supporting the head and neck.

806) The victim is raised to a sitting position. The two rescuers link arms across the victim's back. With their other arms they reach under the victim's knees to form a seat. Which of the following lifts and carries does this best describe?

- A) Two Person Lift/Carry.
- B) Two Rescuer Seat/Lift Carry.
- C) Incline Drag.
- D) Two Rescuer Extremities Lift/Carry.

Answer --> B

Notes) Page 442, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

807) Which of the following lifts/drag would you use to move a victim up or down a stairway?

- A) The Two Rescuer Extremities Lift/Carry.
- B) The Cradle-In-Arms Lift/Carry.
- C) The Incline Drag.
- D) The Blanket Drag.

Answer --> C

Notes) Page 441, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

808) The victim is placed in a supine position. The rescuer kneels by the victim's head and supports the head and neck. The rescuer lifts the victim's upper body into a sitting position, and reaches under the victim's arms to grasp her wrists. The rescuer then stands and is now able to ease the victim down a stairway or ramp to safety. This best describes which of the following?

- A) The Two Rescuer Extremities Life/Carry.
- B) The Cradle-In-Arms Lift/Carry.
- C) The Incline Drag.
- D) The Blanket Drag.

Answer --> C

Notes) Page 461, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

809) Which of the following lifts/drags would you use webbing that has been wrapped around the victim's body?

- A) The Two Rescuer Extremities Life/Carry.
- B) The Cradle-In-Arms Lift/Carry.
- C) The Incline Drag.
- D) The Webbing Drag.

Answer --> D

Notes) Page 441, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

810) One of the most common types of litters used by fire service personnel are –

- A) Ambulance cots.
- B) Scoop stretchers.
- C) Long backboards.
- D) Basket litters.

Answer --> C

Notes) Page 442, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

811) The ongoing evaluation of influential factors at the scene of an incident is commonly called –

- A) Size-up.
- B) On-scene evaluation.
- C) Situational size-up.
- D) Incident evaluation.

Answer --> A

Notes) Page 425, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

812) Size-up involves observing the scene of an incident in order to answer which of the following questions?

- A) What has happened?
- B) What is happening?
- C) What is going to happen?
- D) All of the above.

Answer --> D

Notes) Page 425, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

813) Striking the surface of a roof or floor to determine its structural integrity or locate underlying support members with the blunt end of a hand tool is normally called –

- A) Probing.
- B) Testing.
- C) Resonating.
- D) Sounding.

Answer --> D

Notes) Page 426, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

814) To operate independently of the incident commanders command and control is called –

- A) Moonlighting.
- B) Freelancing.
- C) Self-commanding.
- D) Self-guidance.

Answer --> B

Notes) Page 426, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

815) To reignite because of latent heat sparks or smoldering embers defines which of the following?

- A) Spontaneous combustion.
- B) Spontaneous reignition.
- C) Rekindle.
- D) Latent combustion.

Answer --> C

Notes) Page 431, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

816) Which of the following statements in regard to thermal imagers is correct?

- A) Thermal imagers cannot detect a person under or behind furniture.
- B) Thermal imagers cannot detect a person standing on the opposite side of a wall.
- C) Thermal imagers cannot see through water or glass.
- D) All the above.

Answer --> D

Notes) Page 437, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The term Thermal Imagers has replaced Thermal Imaging Cameras.

817) Sheltering-in-place involves moving victims to a protected location within the structure. It is used in all the following situations except –

- A) It is safer to keep victims inside the structure.
- B) There is a major hazard present.
- C) The victims are incapacitated and cannot be moved.
- D) There is limited staffing to assist with evacuation.

Answer --> B

Notes) Page 440, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Sheltering-in-place should be used when the hazard is minor.

Also, the structure can provide a protective barrier between the victim and the hazard.

818) What is the first step firefighters should take after a Mayday communication has been broadcast?

- A) All radio traffic ceases and only traffic relating to the Mayday is allowed.
- B) The communication center allocates an available radio channel specifically for the Mayday communications.
- C) Nonessential activity ceases and units are directed to assist was searching for the firefighter who has broadcast the Mayday.
- D) The Rapid Intervention Team (RIT) is dispatched to locate the downed firefighter.

Answer --> A

Notes) Page 447, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

819) What is the acronym firefighters who broadcast a MAYDAY distress message use to help them remember what information to provide the IC?

- A) HOPE.
- B) SCOPE.
- C) LUNARS.
- D) HELP.

Answer --> C

Notes) Page 447, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

L – Location

U – Unit

N – Name

A – Assignment

All Chapters

820) The point at which air in the SCBA will last only long enough to exit a hazardous atmosphere is known as –

- A) Fail-safe.
- B) The acute state.
- C) The emergency range.
- D) The point of no return.

Answer --> D

Notes) Page 448, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

821) During a MAYDAY situation, what is a leading contributor to firefighter death?

- A) Panic.
- B) Disorientation.
- C) Fire intensity.
- D) Inexperience.

Answer --> A

Notes) Page 449, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

822) Never underestimate the time and personnel required to rescue a downed firefighter. Carrying one unconscious firefighter can require four rescuers, and fully removing the firefighter from the hazard zone may require as many as ___ rescuers.

- A) 4
- B) 6
- C) 8
- D) 12

Answer --> D

Notes) Page 454, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This entire process can take as long as 20 minutes to complete.

823) Emergency scene lighting is required at which of the following incidents?

- A) All incidents that occur at night.
- B) All incidents that occur in low-light conditions.
- C) Inside structures where normal lighting is not available.
- D) All the above.

Answer --> D

Notes) Page 479, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

824) A portable device for generating auxiliary electrical power is called a –

- A) Powerplant.
- B) Generator.
- C) Alternator.
- D) Dynamo.

Answer --> B

Notes) Page 480, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Generators are typically powered by diesel or gasoline engines and usually have 110 or 220 volt capacity outlets.

825) A mechanism that allows the vehicle engine to power equipment such as a pump, winch, or portable tool is known as –

- A) Power takeoff (PTO).
- B) Alternator.
- C) Inverter.
- D) Generator.

Answer --> A

Notes) Page 480 – Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

826) A step-up transformer that converts a vehicle's 12 or 24 volt DC current into 110 or 220 volt AC current is called –

- A) Alternator.
- B) Inverter.
- C) Auxiliary transformer.
- D) Powerplant.

Answer --> B

Notes) Page 481 – Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

827) All of the following would be considered auxiliary electrical equipment except –

- A) Electrical cables, connectors, and extension cords.
- B) Receptacles and connectors.
- C) GFCI devices and junction boxes.
- D) Auxiliary lighting devices and generators.

Answer --> D

Notes) Pages 482–483, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

828) The term that describes equipment that is approved for use in flammable atmospheres and is incapable of releasing enough electrical energy to ignite the flammable atmosphere is called –

- A) Intrinsically safe.
- B) UL approved.
- C) Flash proof.
- D) All the above.

Answer --> A

Notes) Page 483, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Auxiliary equipment at the fire scene must be waterproof, intrinsically safe, and designed for the amount of electrical power its intended to carry.

829) A device designed to protect against electrical shock is known as a –

- A) Ground fault circuit interrupter (GFCI).
- B) Surge protector.
- C) Power strip.
- D) All the above.

Answer --> A

Notes) Page 484, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

830) Vehicle-mounted generators normally have output capabilities of 110 and 220 volts, with capacities up to __ kilowatts.

- A) 15
- B) 25
- C) 35
- D) 50

Answer --> D

Notes) Page 480, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Vehicle-mounted generators with a separate engine can be noisy, making communication near them difficult. Hearing protection is required when using generators. Also, the exhaust fumes from the generator can contaminate the scene if the vehicle is not positioned downwind.

831) All of the following would be considered cutting tools except –

- A) Claw tool.
- B) Flat-head axe.
- C) Reciprocating saw.
- D) Chain saw.

Answer --> A

Notes) Page 582, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A claw tool is a prying tool.

All Chapters

832) Handsaws commonly used by firefighters include all of the following except –

- A) Drywall saws.
- B) Keyhole saws.
- C) Dovetail saws.
- D) Hacksaws.

Answer --> C

Notes) Page 584, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

833) Which power saw best describes a saw with a short straight blade, which moves forward and backward with an action similar to that of a handsaw?

- A) Chain saw.
- B) Ventilation saw.
- C) Rotary saw.
- D) Reciprocating saw.

Answer --> D

Notes) Page 586, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

834) Both pick-head and flat head axes normally come in which of the following head weights?

(1) 4 lb. (2) 6 lb. (3) 8 lb. (4) 10 lb.

- A) 1, 2.
- B) 2, 3.
- C) 3, 4.
- D) All the above.

Answer --> B

Notes) Page 582, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

835) A gasoline powered saw with changeable blades available for cutting wood, metal, and masonry, best describes which of the following saws?

- A) Chain saw.
- B) Ventilation saw.
- C) Rotary saw.
- D) Reciprocating saw.

Answer --> C

Notes) Page 586, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

836) Firefighters should use bolt cutters for all the following purposes except –

- A) Cutting iron bars.
- B) Cutting cables.
- C) Cutting chains.
- D) Cutting case-hardened materials found in locks and other security devices.

Answer --> D

Notes) Page 583, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

837) In instances where firefighters must cut through high-security devices, the tool of choice would be which of the following?

- A) Bolt cutters.
- B) Cutting torches.
- C) Hacksaws.
- D) Chisels.

Answer --> B

Notes) Page 584, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

These cutting torches have diminished use in the fire service because of safety concerns.

838) All of the following are examples of prying tools with the exception of –

- A) Halligan tool.
- B) Claw tool.
- C) Kelly tool.
- D) Center punch.

Answer --> D

Notes) Page 587, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

The center punch is a striking tool.

839) Which hydraulic rescue tool is effective in spreading a door frame far enough apart, to allow the door to swing open?

- A) Spreaders.
- B) Hydraulic door opener.
- C) Shears.
- D) Combination tool.

Answer --> B

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was – Ram.

All Chapters

840) All of the following tools would be considered Pushing/Pulling tools except –

- A) San Francisco hook.
- B) Pike pole.
- C) Pick.
- D) Clemens hook.

Answer --> C

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A pick is a striking tool.

841) The tool which has two knife-like wings that depress as the head is driven through an obstruction and reopened or spread outward under the pressure of self-contained springs is called a(an) –

- A) Plaster hook.
- B) Pike pole.
- C) Clemens hook.
- D) Drywall hook.

Answer --> A

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

842) Pushing/Pulling tools are intended for just that, and are not normally used for prying. Which of the following can be thought of as an exception to this rule.

- A) San Francisco hook.
- B) Drywall hook.
- C) Roofman's hook.
- D) Multipurpose hook.

Answer --> C

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

843) Which of the following forcible entry tools would be classified as a "Striking Tool?"

- A) Halligan tool.
- B) Rabbit tool.
- C) Center punch.
- D) Pike pole.

Answer --> C

Notes) Page 590, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

844) Which of the following statements regarding forcible entry tools is true?

- A) More leverage can be safely obtained on pry bars, if assisted with a "cheater bar."
- B) To protect axe heads from rusting, they should be painted with a quality antirust paint.
- C) In order to be kept in peak condition axe heads should be kept extremely sharp.
- D) None of the above.

Answer --> D

Notes) Pages 591–595, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Painting metal surfaces hides cracks and other defects. Using a cheater bar puts forces on the tool greater than it was designed to withstand. Over sharpening an axe will make it prone to chipping as well as be difficult to remove from the surface it was swung into.

845) Which of the following statements regarding circular saws is NOT true?

- A) Do not use one manufacturer's sawblade with another manufacturer's saw.
- B) Keep equipment together. Spare saw blades, the saw, and gasoline should be stored in the same compartment.
- C) Do not use any power saw when working in a flammable atmosphere or near flammable liquids.
- D) Store blades in a clean dry environment.

Answer --> B

Notes) Pages 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Storing blades in the same compartment as the fuel will cause damage to the blades, because hydrocarbons will attack the bonding material in the blades and make them vulnerable to sudden and violent disintegration during use.

846) Which is the proper method for carrying a fire axe?

- A) Carried over the firefighter's shoulder.
- B) Hand shielding point and blade facing toward the firefighter's body.
- C) Hand shielding point and blade facing away from the firefighter's body.
- D) Any of the above.

Answer --> C

Notes) Pages 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

847) One of the best tools for breaking a window would be a –

- A) Pick-head axe.
- B) Halligan.
- C) Pike pole.
- D) Battering ram.

Answer --> C

Notes) Pages 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

848) All of the following statements are true regarding the care of fire axes except –

- A) Always file an axe blade by hand, grinding will take the temper out of the metal.
- B) Paint or varnish axe handles to protect against roughness and warping.
- C) Do not paint the axe head.
- D) Sand handles to eliminate splinters, and applied a coat of boiled linseed oil to preserve the handle.

Answer --> B

Notes) Pages 594–595, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Actually tung oil would be a better choice than linseed oil. Tung oil is more water resistant, and linseed oil can break down.

849) Which of the following is the safest method of carrying a pike pole OUTSIDE a structure?

- A) Vertically with the head upright and close to the body.
- B) Over the firefighter's shoulder.
- C) Sharp end in front of the firefighter and lowered.
- D) Sharp end in front of the firefighter and raised.

Answer --> C

Notes) Page 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

850) What is the most important factor a firefighter should consider, when carrying small hand tools from the apparatus to the scene?

- A) The firefighter should move the tools from apparatus to the scene as quickly as possible.
- B) The firefighter should never overload himself with tools which can cause fatigue.
- C) The firefighter should carry as many tools as possible to save time and man power.
- D) The firefighter should carry tools as safely as possible, without injuring himself(herself) or other firefighters.

Answer --> D

Notes) Page 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

851) The safest method of carrying a pike pole INSIDE a structure is carry it –

- A) Vertically with the head upright and close to the body.
- B) Over the firefighter's shoulder.
- C) Sharp end in front of the firefighter and lowered.
- D) Sharp end in front of the firefighter and raised.

Answer --> A

Notes) Page 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

852) Before attempting to force a door open, the firefighter should always check –

- A) If he has the correct tool for the specific locking mechanism.
- B) If the door opens inward or outward.
- C) If the door is locked.
- D) The type of construction materials the door is made from.

Answer --> C

Notes) Page 597, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Try before you pry!

853) Firefighters should remember which of the following when passing through an opening protected by a fire door?

- A) The fire door should be closed as soon as you pass through it.
- B) The firefighter should have an adequate water and air supply, before passing through and closing a fire door.
- C) The fire door should be blocked to prevent closing, thus trapping the firefighter or cutting off the water supply in the hoseline.
- D) Fire doors should be removed from their frames before passing through them.

Answer --> C

Notes) Page 608, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

854) The lock mechanism designed to fit into a cavity in a door, which consists of a latch mechanism and an opening device, describes which of the following types of locks?

- A) Mortise lock.
- B) Bored lock.
- C) Rim lock.
- D) Padlock.

Answer --> A

Notes) Page 576, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

855) Which of the following would be considered a portable or detachable locking device?

- A) Mortise lock.
- B) Bored lock.
- C) Rim lock.
- D) Padlock.

Answer --> D

Notes) Page 580, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

856) One of the most common locks in use today, is a surface mounted lock with an interlocking dead bolt. Which of the following locks does this best describe?

- A) Mortise lock.
- B) Bored lock.
- C) Rim lock.
- D) Padlock.

Answer --> C

Notes) Page 578, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

857) A key-in-knob lock best describes which of the following types of locks?

- A) Mortise lock.
- B) Cylindrical lock.
- C) Rim lock.
- D) Padlock.

Answer --> B

Notes) Page 576, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer changed from Bored Lock to Cylindrical Lock. Cylindrical locks are the most common type of locksets found in residential applications.

858) In conventional forcible entry, which of the following offers the best tool combination, to use for a large variety of forcible entry situations?

(1) 8 lb. flat-head axe (2) Halligan bar (3) Center punch (4) Battering Ram (5) Hammerheaded Pick

- A) 1, 2.
- B) 1 , 3.
- C) 3, 5.
- D) 2, 3.

Answer --> A

Notes) Page 591, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Often called a set of irons.

All Chapters

859) One of the fastest and least destructive ways to force locked doors in order to gain access to a structure is to attempt to –

- A) Break the glass near the door or in the door.
- B) Break the glass in the window you feel is closest to the fire.
- C) Force the door jamb to obtain entry.
- D) Pull the lock cylinder.

Answer --> A

Notes) Page 598, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

860) Which side of a window should a firefighter stand before attempting to break it?

- A) Leeward side.
- B) Windward side.
- C) Directly in front of the window.
- D) Downwind.

Answer --> B

Notes) Page 609, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Windward is the direction upwind from the point of reference. Leeward is the direction downwind from the point of reference.

861) If the door opens towards a firefighter, which side of the door do the hinges lie?

- A) On the same side of the door as the firefighter.
- B) On the opposite side of the door as the firefighter.
- C) The hinges are not visible from either side.
- D) The hinges could be mounted on either side.

Answer --> A

Notes) Page 597, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

862) If it becomes necessary to break through a tempered glass door, the best technique is which of the following?

- A) Shatter the glass using the pick end of a pick-head axe, with the point of impact at the bottom corner of the glass panel.
- B) Shatter the glass with a spring-loaded punch, with the point of impact in the center of the glass panel.
- C) Shatter the glass with a battering ram, with the point of impact in the center of the glass panel.
- D) Shatter the glass using a closet hook, with the point of impact at the bottom corner of the glass panel.

Answer --> A

Notes) Page 601, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Suitable face and eye protection should be used. Some firefighters use a salvage cover to shield the door which protects them from injury.

All Chapters

863) A tool designed for pulling lock cylinders, that has a sharp notch with cutting edges machined into the tool, and is designed to cut behind the protective collar of a lock cylinder, thus maintaining a hold so the lock can be pried out, best describes which of the following forcible entry tools?

- A) K-Tool.
- B) A-Tool.
- C) J-Tool.
- D) Shove Knife.

Answer --> B

Notes) Page 604, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

864) Which forcible entry tool is useful in pulling all types of lock cylinders including, rim, mortise and tubular?

- A) K-Tool.
- B) A-Tool.
- C) J-Tool.
- D) Shove Knife.

Answer --> A

Notes) Page 603, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

865) Resembling a wide-bladed putty knife with a notch cut in one edge of the blade, this forcible entry tool provides firefighters rapid access to outward swinging latch-type doors. Which of the following tools does this best describe?

- A) K-Tool.
- B) A-Tool.
- C) J-Tool.
- D) Shove Knife.

Answer --> D

Notes) Page 604, Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

866) The forcible entry tool designed to fit through the space between double swing doors, allowing the firefighter to operate doors equipped with panic hardware best describes which of the following forcible entry tools?

- A) K-Tool.
- B) A-Tool.
- C) J-Tool.
- D) Shove Knife.

Answer --> C

Notes) Page 604, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

867) All of the following would be considered good tools for forcing entry through padlocks except –

- A) Duck-Billed Lock Breaker.
- B) Locking Pliers and Chain.
- C) Bam-Bam Tool.
- D) A-Tool.

Answer --> D

Notes) Page 605, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The A-Tool is for pulling door locks.

868) A wedged shape tool that will widen and break the shackles of padlocks is called –

- A) Duck-billed lock breaker.
- B) Bam-Bam tool.
- C) Hockey puck lock breaker.
- D) Locking pliers and chain.

Answer --> A

Notes) Page 605, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

869) Bam-bam tools are effective on all padlocks with the exception of –

- A) Master locks.
- B) American locks.
- C) Locks with case-hardened retaining rings.
- D) All the above.

Answer --> D

Notes) Page 606, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

870) The tool that uses case-hardened screws, which are driven into the actual keyway lock mechanism of a padlock, that with assistance of the sliding hammer will pull the lock tumbler out of the padlock body is called –

- A) Duck-billed lock breaker.
- B) Bam-Bam tool.
- C) Hockey puck lock breaker.
- D) Hammerheaded pick.

Answer --> B

Notes) Page 606, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This technique will not work with Master Locks, American Locks and other high quality locks.

All Chapters

871) Cutting a padlock using a power rotary saw or cutting torch requires two firefighters. While one firefighter is doing the cutting, what should the other firefighter be doing?

- A) Preventing other firefighters from entering the immediate area where the cutting is taking place.
- B) Assisting the first firefighter in steadying the cutting tool.
- C) Should hold tension on the padlock using locking pliers and chain.
- D) Readies potential backup tools in case the cutting tool fails to cut through the padlock.

Answer --> C

Notes) Page 606, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

872) The best tool for cutting through barbed wire fences is by using –

- A) Wire cutters.
- B) Bolt cutters.
- C) Composite metal cutting rotary saw.
- D) Cutting torch.

Answer --> B

Notes) Page 621, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

873) The best tool for cutting through chain-link fences is –

- A) Wire cutters.
- B) Bolt cutters.
- C) Composite metal cutting rotary saw.
- D) Cutting torch.

Answer --> C

Notes) Page 621, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

874) Firefighters attempting to cut through wire fences should cut the fence –

- A) Close to the posts.
- B) In the center of the fence.
- C) Diagonally from left to right.
- D) Does not matter.

Answer --> A

Notes) Pages 621–622, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Cutting near the posts lessens the danger of injury from the whip coil of loosened wires. It also facilitates repair after the incident.

All Chapters

875) __ windows are windows that usually consist of two sashes that meet in the center that are locked together with a latch or a bolt on the inside.

- A) Checkrail.
- B) Casement.
- C) Projected.
- D) Jalousie.

Answer --> A

Notes) Page 610, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also known as Double-Hung windows.

876) The type of window often called "crank out window" best describes which of the following?

- A) Awning windows.
- B) Jalousie windows.
- C) Checkrail windows.
- D) Casement windows.

Answer --> D

Notes) Page 611, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

877) Which window is usually associated with factories, warehouses, and other commercial or industrial locations?

- A) Casement windows.
- B) Projecting windows.
- C) Awning windows.
- D) Jalousie windows.

Answer --> B

Notes) Page 612, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

878) The best method of forcible entry for a projecting window is which of the following?

- A) Use hydraulic power tools.
- B) Break the glass in the window or by cutting the window panel out of the frame.
- C) Force the window open using standard forcible entry hand tools.
- D) Seek another way to enter the building.

Answer --> B

Notes) Page 612, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. D was the old answer.

All Chapters

879) __ consists of large sections of glass usually about 1 foot in width, and are as long as the width of the opening of the window.

- A) Awning windows.
- B) Jalousie windows.
- C) Projected windows.
- D) Casement windows.

Answer --> A

Notes) Page 612, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

880) __ have small 4 inch wide sections that run as long as the window's width, and normally constructed without frames.

- A) Awning windows.
- B) Jalousie windows.
- C) Projected windows.
- D) Casement windows.

Answer --> B

Notes) Page 612, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called louvered windows.

881) The most effective method to gain entry through a Lexan plastic window is –

- A) With a rotary saw mounted with a carbide tip.
- B) Discharging a CO2 extinguisher onto the window and striking it with a pick-head axe.
- C) Melting the window with a propane torch.
- D) Using a center-punch on a lower corner of the window.

Answer --> A

Notes) Page 614, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Testing by an independent engineering company proved that cooling Lexan windows with carbon dioxide before striking them does not make them easier to break.

882) Lexan windows are __ times stronger than safety glass.

- A) 10.
- B) 30.
- C) 100.
- D) 250.

Answer --> D

Notes) Page 614, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They are also 30 times stronger than acrylic.

All Chapters

883) All of the following would be classified as the best way to breach masonry or concrete walls except –

- A) Electric jackhammers.
- B) Pneumatic jackhammers.
- C) Rotary rescue saws with masonry blades.
- D) Battering rams.

Answer --> D

Notes) Page 617, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

884) A firefighter who is attempting to open up a floor should keep in mind that floor joists are spaced __ apart.

- A) 14 inches.
- B) 16 inches.
- C) 18 inches.
- D) 12 to 24 inches.

Answer --> D

Notes) Page 620, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

885) When attempting to force an inward swinging door using conventional forcible entry tools, firefighters should place the fork of the Halligan tool in which of the following locations?

- (1) Just above the lock (2) Just below the lock (3) Even with the lock (4) At the top of the door
- A) 1 or 2.
 - B) 3.
 - C) 4.
 - D) 3 or 4.

Answer --> A

Notes) Page 627, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

886) All of the following statements regarding cutting through metal walls is true except –

- A) Cutting through a metal wall should be done only after careful size-up.
- B) Be sure there are no building utilities in the area to be cut.
- C) Conventional forcible entry tools cannot cut the metal panels.
- D) The opening should be cut to at least 6 feet tall.

Answer --> C

Notes) Page 618, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Conventional forcible entry tools such as an axe, rotary saw, or air chisel can cut through the thin metal panels with relative ease.

All Chapters

887) When attempting to breach a metal wall, if a firefighter can not locate any studs, he/she should assume that the wall bears the full load of the structure. In order to reduce the chance of collapse the firefighter should cut an inspection hole in the wall in the shape of a –

- A) Square.
- B) Triangle.
- C) Circle.
- D) Rectangle.

Answer --> B

Notes) Page 646, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

888) When breaking a window, the firefighter should strike the pane at the –

- A) Top of the pane.
- B) Bottom of the pane.
- C) Center of the pane.
- D) Any of the above.

Answer --> A

Notes) Page 637, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

889) Which is considered the most common types of cutting tools used by firefighters?

- A) Axes.
- B) Pike poles.
- C) Power saws.
- D) Reciprocating saws.

Answer --> A

Notes) Page 582, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Pike poles are Pushing/Pulling tools.

890) A prying tool with a claw at one end and a spike or point at a right angle to a wedge at the other end describes which of the following?

- A) Crowbar.
- B) Halligan tool.
- C) Hux bar.
- D) Rambar.

Answer --> B

Notes) Page 587, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

891) Which device is a relatively new cutting system, fueled by a mixture of gasoline and oxygen, and is being used by a growing number of fire/rescue departments in North America.

- A) Oxyacetylene cutting torches.
- B) Oxyoctane cutters.
- C) Oxycarbonate cutters.
- D) Oxygasoline cutting torches.

Answer --> D

Notes) Page 584, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

892) Which manual prying tool requires only one operator and is most effective for opening locked doors?

- A) Ram.
- B) Halligan bar.
- C) Rambar.
- D) Claw tool.

Answer --> C

Notes) Page 588, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

893) I am a manually-operated spreader. I am relatively lightweight and consist of a hand pump and spreader device. What am I?

- A) Hydraulic prying tool.
- B) Hydraulic door opener.
- C) Hand-pump door opener.
- D) Hand spreader tool.

Answer --> B

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

894) Which Pushing/Pulling tool is used for moving loose material that contains hidden fires, such as hay and burning debris?

- A) Clemens hook.
- B) Multipurpose hook.
- C) Roofman's hook.
- D) Rubbish hook.

Answer --> D

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

As the name implies, it can also be used to move around loose trash to find hidden fire.

All Chapters

895) The tool of choice for pulling down ceilings and opening interior walls is a –

- A) Pike pole.
- B) Drywall hook.
- C) San Francisco hook.
- D) Clemens hook.

Answer --> A

Notes) Page 589, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

896) The typical set of "irons" is made up of –

- A) Halligan bar and pike pole.
- B) Halligan bar and pick-head axe.
- C) Halligan bar and flat-head axe.
- D) Halligan bar and rambar.

Answer --> C

Notes) Page 591, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

897) Never carry a running power tool more than –

- A) 5 feet.
- B) 10 feet.
- C) 15 feet.
- D) 20 feet.

Answer --> B

Notes) Page 593, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

898) A hydraulic spreading tool that is specially designed to open doors that swing inward is called a –

- A) Rabbit tool.
- B) Rabbit ram.
- C) Hydraulic door opener.
- D) Hinge ram.

Answer --> A

Notes) Page 599, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

899) A horizontal wooden or steel security bar held in place across a door by wooden or metal stirrups attached to the inside of the door are called –

- A) Block-bars.
- B) Lock-bars.
- C) Drop bars.
- D) Door bars.

Answer --> C

Notes) Page 580, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

900) The type of window made from two separate sashes – one is fixed and the other slides on a track similar to a glass patio door is called a –

- A) Hopper window.
- B) Tilt-turn window.
- C) Slider.
- D) Fixed window.

Answer --> C

Notes) Page 601, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is also called a glider window.

901) Which window is also known as a picture window, in which it is composed of a solid glass unit that does not open?

- A) Hopper window.
- B) Tilt-turn window.
- C) Glider.
- D) Fixed window.

Answer --> D

Notes) Page 610, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Breaking picture windows can let a great deal of air into a building that may seriously affect ventilation efforts.

902) Opening a hole in a wall is known as –

- A) Rupture.
- B) Infringement.
- C) Break.
- D) Breaching.

Answer --> D

Notes) Page 616, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

903) Where forcible entry will occur is determined by your supervisor or incident commander, and is based on which of the following factors?

- A) Tactics that must be fulfilled.
- B) The stage and location of the fire or hazard.
- C) Effective ventilation and the amount of effort required to force entry.
- D) All the above.

Answer --> D

Notes) Page 574, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

904) Door locks can be divided and all but which of the following basic types?

- A) Mortise lock.
- B) Cylindrical lock.
- C) Rim lock.
- D) Combination lock.

Answer --> D

Notes) Page 575, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

905) The easiest way to breach modern deadbolts in wooden residential doors is to –

- A) Force the door itself.
- B) Remove any windows that may be present.
- C) Cutting into the door to remove the locking mechanism.
- D) Pulling the lock cylinder from the door.

Answer --> A

Notes) Page 577, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

906) The type of rim lock that has a spring-loaded bolt with a beveled edge facing the door frame is known as a –

- A) Dead bolt.
- B) Night latch.
- C) Vertical dead bolt.
- D) Horizontal dead bolt.

Answer --> B

Notes) Page 578, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This feature allows the door to lock when it is closed.

All Chapters

907) The type of rim lock that has a bolt that slides vertically into the receiver and does not cross the door opening is known as –

- A) Dead bolt.
- B) Night latch.
- C) Vertical dead bolt.
- D) Horizontal dead bolt.

Answer --> C

Notes) Page 578, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

This feature makes it impossible to open the door by spreading the door from the doorjamb.

908) The type of rim lock that has a rectangular bolt that must be manually retracted before the door can be closed and the bolt engaged with the receiver is known as –

- A) Dead bolt.
- B) Night latch.
- C) Vertical dead bolt.
- D) Horizontal dead bolt.

Answer --> A

Notes) Page 578, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

If the bolt is extended, the door cannot be closed.

909) The multiple bolt or multi lock is a dead bolt lock that, when engaged, projects ___ into two or more points on the edge of the door.

- A) 3/4 inches.
- B) 1 inch
- C) 1 1/4 inches.
- D) 1 1/2 inches.

Answer --> B

Notes) Page 579, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

910) This type a lot consists of an electromagnet attached to the door frame and an armature plate mounted on the door.

- A) Electromagnetic lock.
- B) Magnetic lock.
- C) Electronic keyless lock.
- D) A and B.

Answer --> D

Notes) Page 580, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

911) Often seen in hotel rooms, this security device consists of a frame-mounted plate with a shaft and knob and a hinged U-shaped shackle that mounts on the door.

- A) Door chain.
- B) Surface bolt.
- C) Door limiter.
- D) Drop bar.

Answer --> C

Notes) Page 581, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

912) This is a classic supplemental locking device for residential doors that permits the door to be open wide enough to see and speak to a visitor, but still restrict access.

- A) Door chain.
- B) Surface bolt.
- C) Door limiter.
- D) Drop bar.

Answer --> A

Notes) Page 580, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

913) This is a manually operated supplemental locking device that can be mounted on most stores and some windows.

- A) Door chain.
- B) Surface bolt.
- C) Door limiter.
- D) Drop bar.

Answer --> B

Notes) Page 581, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

914) This security device consists of brackets that are mounted or welded to the door and a wooden or metal bar that rests in the brackets and extends across the door frame.

- A) Door chain.
- B) Surface bolt.
- C) Door limiter.
- D) Drop bar.

Answer --> D

Notes) Page 580, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

915) In this security device, flush bolts are installed in the edge of one side of a set of double doors. This permits one side to remain locked while the other door is use for entry and exit.

- A) Internal-mounted bolt.
- B) Surface bolt.
- C) Recessed surface bolt.
- D) Sliding surface bolt.

Answer --> A

Notes) Page 581, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

916) With the exception of ____, the remaining locking devices may be easily force depending on the tool used.

- A) Door chain.
- B) Surface bolt.
- C) Door limiter.
- D) Drop bar.

Answer --> D

Notes) Page 581, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

917) A device consisting of a bar turning about a fixed point, using power or force applied at a second point to lift or sustain an object at a third point is called a -

- A) Fulcrum.
- B) Pulley.
- C) Billet.
- D) Lever.

Answer --> D

Notes) Page 587, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

918) A support or point of support on which a lever turns in raising or moving something is called a -

- A) Fulcrum.
- B) Pulley.
- C) Billet.
- D) Cradle.

Answer --> A

Notes) Page 587, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

919) A wedge-shaped blade attached at right angles to the handle of a tool is called a –

- A) Chopper.
- B) Right-angle cutter.
- C) Adz.
- D) Point.

Answer --> C

Notes) Page 588, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

920) Which of the following statements are true?

- A) How well an ax head is maintained directly affects how well it will perform.
- B) If an ax blade is extremely sharp and the ground is too thin, pieces of the blade will break off when cutting into material.
- C) If the ax blade is too thick, regardless of its sharpness, it will be difficult to drive the ax head through ordinary objects.
- D) All the above.

Answer --> D

Notes) Page 595, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

921) When attempting to breach a Housing and Urban Development (HUD) window, what would be your first step?

- A) Use a rotary saw to cut off the heads of the carriage bolts.
- B) Swing a pick ax at the carriage bolts to push them through the plywood.
- C) Pry the plywood away from the window frame using a Halligan bar.
- D) Force the window using a hydraulic ram.

Answer --> A

Notes) Page 615, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

922) The lowest, widest section of an extension ladder is called the –

- A) Beam section.
- B) Bed section.
- C) Butt section.
- D) Guide section.

Answer --> B

Notes) Page 655, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called the base section.

All Chapters

923) The main structural member of a ladder supporting the rungs or rung blocks is known as the –

- A) Base.
- B) Beam.
- C) Butt.
- D) Dog.

Answer --> B

Notes) Page 655, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

924) Roof ladders have a pair of sharp curved devices, that help prevent the ladder from slipping from a roof. These are known as –

- A) Dogs.
- B) Flies.
- C) Pawls.
- D) Hooks.

Answer --> D

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

925) The rope or cable used to hoist a section of a ground ladder is known as the –

- A) Fly.
- B) Guides.
- C) Halyard.
- D) Pawls.

Answer --> C

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

926) The bottom end of the ladder is known as the heel or –

- A) Bottom.
- B) Butt.
- C) Beam.
- D) Spurs.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also known as the base.

All Chapters

927) The upper most section of a ground or aerial ladder is known as the –

- A) Fly Section.
- B) Beam.
- C) Pawls.
- D) Halyard.

Answer --> A

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

928) The safety plates or spikes attached to the butt end of ground ladders are known as –

- A) Dogs.
- B) Pawls.
- C) Butt Spurs.
- D) Hooks.

Answer --> C

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

929) The cross members of a ladder in which the firefighter stands are known as –

- A) Rails.
- B) Plates.
- C) Beams.
- D) Rungs.

Answer --> D

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

930) Devices attached to the inside of the ladder beams, which hold fly sections in place are known as –

- A) Pawls.
- B) Dogs.
- C) Ladder Locks.
- D) All the above.

Answer --> D

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

931) The small grooved wheel, that the halyard is pulled through, to raise extension ladders is referred to as the –

- A) Guide.
- B) Pulley.
- C) Toggle.
- D) Truss.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

932) Ladders that are not adjustable and have no flies are called –

- A) Aerial ladders.
- B) Extension ladders.
- C) Fixed ladders.
- D) Single ladders.

Answer --> D

Notes) Page 660, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

They are also sometimes called wall ladders or straight ladders.

933) Wood or metal strips, in the form of slots or channels on extension ladders, that assist in guiding the fly as it is being raised and lowered are called –

- A) Channel slots.
- B) Guides.
- C) Fly supports.
- D) Protection plates.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

934) The special label affixed to the inside of each beam of each ladder serves what purpose?

- A) Indicates the last inspection date.
- B) Changes color when the ladder is exposed to sufficient heat, justifying the need for the ladder to be tested, before it can be used again.
- C) Shows manufacture date.
- D) Indicates what materials the ladder is constructed of.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

935) Strips of metal attached to ground ladders at chafing points, in areas such as the tip, or other locations where the ladder comes in contact with the apparatus mounting brackets are called –

- A) Protective plates.
- B) Guides.
- C) Footpads.
- D) Protection plates.

Answer --> D

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

936) Roof ladders differ from Single ladders in which of the following ways?

- A) Roof ladders do not possess a fly.
- B) Roof ladders are normally longer than Single ladders.
- C) Roof ladders can support more weight than Single ladders.
- D) Roof ladders have folding hooks that provide a means by which the ladder may be anchored to the peak of the roof.

Answer --> D

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

937) What NFPA Standard contains the requirements for the design and manufacturer's testing of ground ladders?

- A) NFPA 1931.
- B) NFPA 1001.
- C) NFPA 1901.
- D) NFPA 1500.

Answer --> A

Notes) Page 654, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

938) The label affixed to the inside of each beam of each ladder section that changes color indicating that the ladder has been exposed to a high degree of heat is known as a –

- A) High-heat marker.
- B) High-heat stamp.
- C) Heat-sensor label.
- D) Heat-sensor sticker.

Answer --> C

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

939) Heat sensor labels are preset to what temperature?

- A) 200 degrees F.
- B) 300 degrees F.
- C) 350 degrees F.
- D) 400 degrees F.

Answer --> B

Notes) Page 659, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

940) Which ladder components would you not expect to see on extension ladders.

- A) Fly.
- B) Pawls.
- C) Hooks.
- D) Halyard.

Answer --> C

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

You would see hooks on roof ladders.

941) Which ladder can be used as an A-frame ladder?

- A) Roof ladder.
- B) Pompier ladder.
- C) Combination ladder.
- D) Single ladder.

Answer --> C

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

942) Which ladder would be considered a "Wall Ladder" ?

- A) Single ladder.
- B) Extension ladder.
- C) Pompier ladder.
- D) Folding ladder.

Answer --> A

Notes) Page 660, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also known as straight ladders.

All Chapters

943) Normally extension ladders range between __ feet in length.

- A) 10 – 24.
- B) 15 – 35.
- C) 12 – 39.
- D) 20 – 45.

Answer --> C

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

944) Which of the NFPA standards serves as a guideline for the service testing of all ground ladders?

- A) NFPA 1932.
- B) NFPA 1931.
- C) NFPA 1984.
- D) NFPA 1905.

Answer --> A

Notes) Page 663, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

945) What are the most effective tools for cleaning ladders?

- A) Power washers with industrial strength grease cutters
- B) Wire brush and 10% nitric acid solution
- C) Soft-bristle brush and running water
- D) Soaking in a bath of Clorox and water for at least 30 minutes

Answer --> C

Notes) Page 666, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

946) According to NFPA 1932, how often should ladders be inspected?

(1) After each use (2) Daily (3) Weekly (4) Monthly (5) Yearly

- A) 1
- B) 1, 2.
- C) 1, 5.
- D) 1, 4.

Answer --> D

Notes) Page 663, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

947) Which statement regarding inspecting ladders is NOT true?

- A) Firefighters should check heat sensor labels on metal and fiberglass ladders.
- B) Rungs should be checked for snugness and tightness.
- C) Welds should be inspected for any cracks or other defects.
- D) Wooden ladder bolts should be tightened until the heads of the bolts are pulled into the wood.

Answer --> D

Notes) Page 663, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Over tightening the bolts can crush the wood.

948) Firefighters should use __ to preserve wooden ladders.

- A) Paint.
- B) Shellac.
- C) Varnish.
- D) Polyurethane.

Answer --> C

Notes) Page 664, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

949) According to IFSTA, which of the following would be a proper definition of "Ladder Maintenance?"

- A) Restore or replace that which has become inoperable.
- B) Keeping ladders in a state of usefulness or readiness.
- C) Adhering to a strict regiment of ladder inspections.
- D) Being vigilant in periodic cleaning and proper storage of ladders.

Answer --> B

Notes) Page 666, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

950) Which statement regarding the maintenance of ground ladders is NOT true?

- A) Ground ladders should be kept free from moisture.
- B) Ladders should not be stored where they will be exposed to exhaust or engine heat.
- C) Ladders should not be stored where they will be exposed to the elements.
- D) Ladders should be periodically painted to prevent rust from forming.

Answer --> D

Notes) Page 666, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Ladders should not be painted except for the top and bottom 18 inches of the beams for purposes of identification or visibility.

All Chapters

951) If the varnish of a wooden ladder shows any sign of darkening or blistering this may indicate that the ladder has been exposed to –

- A) Excessive ultraviolet light.
- B) Strong oxidizing agents.
- C) Excessive heat.
- D) The corrosive effects of protein foams.

Answer --> C

Notes) Page 664, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

952) One sign that a wooden ladder should be taken out of service and tested, is the appearance of dark streaks in the wood. What does this indicate?

- A) Natural oxidation of photosensitive resins in the grain.
- B) Evidence that the varnish is breaking down and should be reapplied.
- C) Bacterial action on the wood (weathering).
- D) Deterioration of the wood itself.

Answer --> D

Notes) Page 664, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

953) Which ladder would be used in attic scuttle holes, small rooms, or closets?

- A) Single ladder.
- B) Combination ladder.
- C) Folding ladder.
- D) Pompier ladder.

Answer --> C

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called attic ladders.

954) According to NFPA 1901 which ladder is not required to be carried aboard all pumper and engine companies?

- A) 10 foot folding ladder.
- B) 10 foot combination ladder.
- C) 14 foot roof ladder.
- D) 24 foot or larger extension ladder.

Answer --> B

Notes) Page 661, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

955) Ladders should be placed against building so they are at a safe angle to climb. The optimum ladder angle should be approximately –

- A) 55 degrees.
- B) 65 degrees.
- C) 75 degrees.
- D) 85 degrees.

Answer --> C

Notes) Page 677, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

To approximate this angle firefighters should do the following:

- 1) Stand on the first run of the ladder.
- 2) Stand erect.
- 3) Extend arms straight out.
- 4) The palms of the hands should touch the top of the rung at shoulder level.

956) What is the average distance of a 'Commercial Story'?

- A) 8 feet.
- B) 10 feet.
- C) 12 feet.
- D) 14 feet.

Answer --> C

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

957) When deploying firefighters to the roof of a building, the ladder should be extended __ beyond the roof edge.

- A) 2 rungs.
- B) 3 rungs.
- C) 4 rungs.
- D) 3 to 5 rungs.

Answer --> D

Notes) Page 669, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

958) In order to reach a third story window or roof, a ladder should be at least __ feet long.

- A) 28
- B) 35
- C) 40
- D) 45

Answer --> C

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

959) In order to reach a second story window a ladder should be at least __ feet long.

- A) 20
- B) 25
- C) 28
- D) 30

Answer --> A

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

960) To reach a second story roof a firefighter should select a ladder which is at least __ feet long.

- A) 20
- B) 25
- C) 28
- D) 35

Answer --> C

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

961) When using a ladder to rescue persons from a window, the ladder should be placed –

- A) With the tip of the ladder just below the windowsill.
- B) With the tip of the ladder just above the windowsill.
- C) Two to three rungs above the windowsill.
- D) To the side of the window, extending two to three rungs above the windowsill.

Answer --> A

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

962) When using a ladder for access from the side of the window or for ventilation, the ladder should be placed against the building –

- A) With the tip of the ladder just below the windowsill.
- B) With the tip of the ladder just above the windowsill.
- C) With the tip of the ladder even with the top of the window.
- D) To the side of the window, extending two to three rungs above the windowsill.

Answer --> C

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The ladder should be placed on the windward side of the window.

All Chapters

963) According to NFPA 1931, all of the following ladders are required to have a measured length equal to the designated length except –

- A) Single ladders.
- B) Roof ladders.
- C) Folding ladders.
- D) Extension ladders.

Answer --> D

Notes) Page 669, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

In the case of extension ladders, the maximum extended length may be as much as 6 inches less than the designated length.

964) Ladders are mounted on the __side of the apparatus with the heel plates facing the __ of the apparatus.

- A) Left, Front.
- B) Right, Front.
- C) Right, Rear.
- D) Any of the above.

Answer --> D

Notes) Page 670, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

965) Assuming that a ladder has been set at the proper angle, what is the maximum working height for an extension ladder which has a designated length of 24 feet?

- A) 22 feet.
- B) 23 feet.
- C) 24 feet.
- D) 25 feet.

Answer --> B

Notes) Page 669, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Ladders of 35 feet in length or less, reach is approximately 1 foot less than the designated length.

966) Which statement regarding fiberglass ladders is correct?

- A) Fiberglass ladders resist chipping and cracking.
- B) Fiberglass ladders are poor conductors of electricity when they are dry.
- C) Fiberglass ladders tend to be lighter than other types.
- D) Fiberglass ladders resist burning when exposed to flames.

Answer --> B

Notes) Page 658, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

967) A firefighter removing a ladder from the side of the apparatus, and carrying it using the low-shoulder method, should position himself with the beam of the ladder over his shoulder, and the __ facing –

- A) Butt, downward.
- B) Butt, upward.
- C) Tip, downward.
- D) Tip, upward.

Answer --> A

Notes) Page 660, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

968) While preparing to lift a ladder off the ground utilizing the low-shoulder carry, the firefighter should __ facing the __ of the ladder before lifting.

- A) Stand, butt.
- B) Kneel, butt.
- C) Stand, tip.
- D) Kneel, tip.

Answer --> D

Notes) Page 693, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

969) The Two-Firefighter Low-Shoulder Carry is most commonly used for all the following ladders except –

- A) 14 foot extension ladder.
- B) 24 foot extension ladder.
- C) 28 foot extension ladder.
- D) 35 foot extension ladder.

Answer --> A

Notes) Page 672, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

970) In performing a Two-Firefighter Low-Shoulder Carry, which of the following best describes the hand positioning of the forward firefighter?

- A) Both hands secured around the last rung.
- B) One hand supporting the lower beam, and the free hand holding the last rung.
- C) One hand supporting the second to last rung, and the free hand covers the upper butt spur.
- D) One hand supporting the upper beam, and the free hand covers the lower butt spur.

Answer --> C

Notes) Page 672, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The images in the IFSTA text do not show the firefighters carrying the ladder in the fashion described here. We have no explanation for why Essentials describes one method and shows another.

All Chapters

971) Which ladder carry is typically used on extension ladders up to 35 feet?

- A) One-Firefighter Low-Shoulder carry.
- B) Two-Firefighter Arm's Length On-Edge carry.
- C) One-Firefighter Arms's Length On-Edge carry.
- D) Three-Firefighter Flat-Shoulder carry.

Answer --> D

Notes) Page 673, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

972) Which of the following statements regarding procedures in carrying ground ladders is NOT true?

- A) The method in carrying a ladder using the Four-Firefighter Flat-Shoulder carry is identical to that of the Three-Firefighter Flat-Shoulder carry, except that the firefighters are positioned at each end of the ladder, opposite to each other.
- B) Roof ladders should always be carried with the hooks facing the rear.
- C) If personnel are limited, the hooks of a roof ladder may be opened at the apparatus before the carry begins.
- D) The hooks of a roof ladder should be opened before the firefighter ascends.

Answer --> B

Notes) Page 674 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. IFSTA now says you can carry a roof ladder with either hooks in front or hooks in back. Previous answer indicated that hooks should always be carried in front.

973) Normally, an officer will make the determination as to where a ladder is to be positioned. However, firefighters carrying the ladder often decide the exact location as to where the butt of the ladder should be placed. In view of this, who would give the command as to where the butt of an extension ladder is to be placed using the Four-Firefighter Flat-Shoulder carry?

- A) The firefighter on the left side of the butt of the ladder.
- B) The firefighter on the right side of the butt of the ladder.
- C) The firefighter on the left side of the tip of the ladder.
- D) The firefighter on the right side of the tip of the ladder.

Answer --> B

Notes) Page 675 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

974) When lifting a ladder from the ground with a group of firefighters, which firefighter gives the command to lift?

- A) The firefighter positioned at the butt.
- B) The firefighter positioned in the middle.
- C) The firefighter positioned at the rear.
- D) The ranking firefighter gives the command.

Answer --> A

Notes) Page 680 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

975) Where should a firefighter position a ladder at a window if it is to be used as a vantage point from which to break a window for ventilation?

- A) On the windward side of the window with the tip of the ladder even with the top of the window.
- B) On the leeward side of the window with the tip of the ladder even with the top of the window.
- C) Directly in front of the window with the tip of the ladder on the wall directly above the window.
- D) In front of the window with the tip of the ladder even with the window sill.

Answer --> A

Notes) Page 669 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

976) Where should a firefighter position a ladder at a window, if it is to be used as a vantage point from which to direct a hose stream?

- A) On the windward side of the window with the tip of the ladder even with the top of the window.
- B) On the leeward side of the window with the tip of the ladder even with the top of the window.
- C) Directly in front of the window with the tip of the ladder on the wall directly above the window.
- D) In front of the window with the tip of the ladder even with the window sill.

Answer --> A

Notes) Page 668 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

977) If 20 feet of a 25 foot ladder will be used, how far away from the building should the butt of the ladder be placed?

- A) 2 feet.
- B) 3 feet.
- C) 4 feet.
- D) 5 feet.

Answer --> D

Notes) Page 677, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Formula for ladder angle

$$A = LU/4$$

A= Angle (ladder angle)
LU = Length Used

All Chapters

978) Which ladder will conduct electricity when wet?

- A) Wooden ladders.
- B) Metal ladders.
- C) Fiberglass ladders.
- D) All ladders will conduct electricity when wet.

Answer --> D

Notes) Page 679, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

979) Which ladders must be placed on the ground prior to being raised?

- A) Single ladders.
- B) Combination ladders.
- C) Extension ladders.
- D) None of the above.

Answer --> D

Notes) Page 678, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was Pole Ladders. This reference has been dropped in this edition.

980) According to IFSTA, all ladders should maintain a distance of at least __ from all energized electrical lines or equipment.

- A) 10 feet.
- B) 15 feet.
- C) 20 feet.
- D) 25 feet.

Answer --> A

Notes) Page 678, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

981) Which statement regarding the position of the fly section while raising extension ladders is true?

- A) Wooden extension ladders normally are designed so that the fly faces into the building while it is being raised.
- B) Metal and fiberglass extension ladders normally are designed to be raised with the fly facing out away from the building.
- C) Each ladder manufacture specifies which position the fly should be raised in. Firefighters should follow these recommendations.
- D) All the above.

Answer --> D

Notes) Page 679, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

982) The halyard should be tied off using a –

- A) Bowline.
- B) Clove hitch.
- C) Square knot.
- D) Sheet bend.

Answer --> B

Notes) Page 679, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Don't forget the overhand safety knot.

983) Normally, ladders 35 feet or longer should be raised by at least __ firefighters.

- A) 2
- B) 3
- C) 4
- D) 5

Answer --> B

Notes) Page 681, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

984) The firefighter positioned at the butt end of the ladder during a ladder raising is referred to as the –

- A) Butt-man.
- B) Heeler.
- C) Anchor-man.
- D) Spotter.

Answer --> B

Notes) Page 680, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

985) All of the following statements regarding the raising of ladders is true except –

- A) Single and roof ladders of 14 feet or less can usually be raised by a single firefighter.
- B) It is preferred that a ladder is raised parallel to a building rather than perpendicular.
- C) Buildings can be used to heel a ladder during a One-Firefighter Single Ladder Raise.
- D) The firefighter at the butt end of the ladder, is responsible for positioning it at a desired distance from the building, and also determines if the ladder is to be raised parallel or perpendicular to the building.

Answer --> B

Notes) Page 680, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It makes little difference if a ladder is raised parallel or perpendicular to a building.

All Chapters

986) Which of the following represents the two basic ways for two firefighters to raise a ladder?

(1) Angle raise (2) Flat raise (3) Halyard raised (4) Beam raise

- A) 1, 2.
- B) 2, 3.
- C) 3, 4.
- D) 2, 4.

Answer --> D

Notes) Page 680, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

987) When raising a large ladder with 4 firefighters, firefighters normally will raise the ladder using which of the following ladder raises?

- A) Flat raise.
- B) Angle raise.
- C) Beam raise.
- D) Halyard raise.

Answer --> A

Notes) Page 682, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

988) When properly heeling a ladder from behind the ladder, firefighters should do all of the following except –

- A) The firefighter must securely grasp the beams of the ladder and not the rungs.
- B) The firefighter must wear head and eye protection.
- C) The firefighter stands behind the ladder and pulls the ladder towards the building.
- D) The firefighter must constantly look up and monitor other firefighters who may be ascending or descending the ladder.

Answer --> D

Notes) Page 684, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

989) What is the average distance of a 'Residential Story'?

- A) 8 feet.
- B) 10 feet.
- C) 12 feet.
- D) 13 feet.

Answer --> B

Notes) Page 668, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

990) When ascending a ladder the firefighter should do all of the following except –

- A) Climb with his/her leg muscles instead of arm muscles.
- B) Keep eyes straight forward occasionally glancing at the tip of the ladder.
- C) The firefighter's arms and hands should reach upward during the climb.
- D) The hands should grasp the rungs palm down and the thumb place beneath the rung.

Answer --> C

Notes) Page 685, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Your arms and hands should not reach above your head while climbing the ladder, because that action will bring your body too close to the ladder. Keep your arms straight during your climb.

991) 0To safely work on a ladder, firefighters should secure themselves to the ladder using which of the following?

(1) Leg Lock (2) Ladder Belt(Class I Safety Harness) (3) Class II Safety Harness (4) Class III Safety Herness

- A) 1
- B) 1, or 2.
- C) 3, or 4.
- D) 4

Answer --> B

Notes) Page 686, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Class I Safety Harness is a ladder belt.

992) All safety harnesses used by firefighters must meet the requirements set forth in –

- A) NFPA 1901.
- B) NFPA 1932.
- C) NFPA 1931.
- D) NFPA 1983.

Answer --> D

Notes) Page 687, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

993) How many firefighters is required in order to bring a victim safely down a ladder?

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> D

Notes) Page 687, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Two inside the building, 1 on the ladder, and 1 heeling the ladder.

All Chapters

994) Which methods can be used to bring an unconscious victim down a ladder?

- A) Victim faces towards the firefighter, and is supported by the firefighter's knee. The victim's feet are placed outside the rails to prevent them from becoming entangled in the rungs.
- B) Victim faces away from firefighter, and is supported by the firefighter's knee. The victim's feet are placed outside the rails to prevent them from becoming entangled in the rungs.
- C) The firefighter supports the victim with one arm at the crotch and the other supporting the chest.
- D) All the above can be used to safely bring an unconscious victim down a ladder.

Answer --> D

Notes) Page 687, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

995) Small children should be brought down ladders using which of the following methods?

- A) Cradled in the firefighter's arms.
- B) Cradled between the firefighter and the ladder.
- C) Over the firefighter's shoulders.
- D) All of the above can be used to bring a small child down a ladder.

Answer --> A

Notes) Page 688, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

996) How often should ground ladders be cleaned?

- A) Once a week.
- B) Once a month.
- C) Annually.
- D) After each use.

Answer --> D

Notes) Page 665, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

997) Firefighters should utilize a leg lock to secure themselves to a ladder on all but which of the following types of ladder?

- A) Single ladder.
- B) Extension ground ladder.
- C) Pole ladder.
- D) Aerial ladder.

Answer --> D

Notes) Page 667, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Extension or retraction of the aerial ladder could result in serious injury to the locked-in firefighter.

All Chapters

998) Metal rods of a wooden ladder extending from one beam to the other are called –

- A) Tie rods.
- B) Rung rods.
- C) Stretchers.
- D) Supports.

Answer --> A

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

999) Spacers set between the rails of a trussed ladder, that are sometimes used to support rungs are called –

- A) Rung blocks.
- B) Rail blocks.
- C) Truss blocks.
- D) Ladder blocks.

Answer --> C

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1000) The two lengthwise members of a trussed ladder beam that are separated by truss or separate blocks are called –

- A) Blocks.
- B) Rails.
- C) Beams.
- D) Truss beams.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1001) Wooden or metal pieces that prevent the fly of a ladder section from being extended too far are called –

- A) Limiters.
- B) Stops.
- C) Blocks.
- D) Tip blocks.

Answer --> B

Notes) Page 657, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1002) Which ladder will retain its strength when exposed to heat or flame?

- A) Metal.
- B) Fiberglass.
- C) Wood.
- D) None of the above.

Answer --> C

Notes) Page 658, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Metal ladders can suddenly fail when exposed to heat or flame. Fiberglass ladders can burn when exposed to flame. Wooden ladders retain their strength when exposed to heat or flame.

1003) To restore or put together that which has become inoperable or out of place best describes –

- A) Maintenance.
- B) Preventative maintenance.
- C) Recover.
- D) Repair.

Answer --> D

Notes) Page 666, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1004) What action should you take if you discover that a heat sensor label on a ladder has changed color?

- A) Schedule a ladder test.
- B) Perform a visual examination of the ladder for possible heat damage.
- C) Remove the old sticker and replace it with a new one.
- D) Take the ladder out of service until a ladder test is performed.

Answer --> D

Notes) Page 663, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1005) NFPA 1901 specifies that aerial ladders should carry all but which of the following?

- A) One straight ladder.
- B) Two roof ladders equipped with hooks.
- C) One folding ladder.
- D) Two extension ladders.

Answer --> A

Notes) Page 663, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Aerial apparatus must carry a minimum of 115 feet of ground ladders.

All Chapters

1006) For ladders over 35 feet, the reach is approximately __ less than the designated height.

- A) 1 foot.
- B) 16 inches.
- C) 2 feet.
- D) 30 inches.

Answer --> C

Notes) Page 669, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1007) When two or more firefighters are lifting a ladder off apparatus, who gives the command to lift.

- A) The firefighter at the tip.
- B) The firefighter at the butt.
- C) The company officer.
- D) The firefighter who can see the other members of the team.

Answer --> D

Notes) Page 669, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. In the 5th edition, the firefighter at the butt of the ladder would be the one to give the command to lift.

1008) A piece of rope spliced to form a loop through the eye of a metal hook, that is used to secure a hoseline to ladders or other objects is called a –

- A) Hose tool.
- B) Ladder tool.
- C) Ladder hose tool.
- D) Rope hose tool.

Answer --> D

Notes) Page 685, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1009) How many firefighters can safely stand on a 4 section extension ladder at one time.

- A) 2
- B) 4
- C) 5
- D) 6

Answer --> B

Notes) Page 687, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

One firefighter for each section.

All Chapters

1010) Properly performed, ventilation operations accomplishes all of the following except –

- A) Channels toxic gases and heated air away from trapped occupants.
- B) Decreases the chances of flashover or backdraft.
- C) Decreases fire flare up.
- D) Allows cool air into the building, which facilitates entry by firefighters, and facilitates rescue efforts to find unconscious victims.

Answer --> C

Notes) Pages 732–733, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

When air enters the building the fire will increase in intensity.

1011) The plan, systematic, and coordinated removal of heated air, smoke, gases or other airborne contaminants from a structure, replacing them with cooler fresh air, to meet incident priorities of life safety, incident stabilization and property conservation is known as –

- A) Ventilation.
- B) Negative pressure ventilation.
- C) Positive pressure ventilation.
- D) Tactical ventilation.

Answer --> D

Notes) Page 732, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1012) When should tactical ventilation be performed?

- A) Immediately upon arrival at the scene.
- B) Only after the seat of the fire has been located.
- C) Only after fire attack hoselines in teams are in place and ready to advance towards the fire.
- D) All of the above.

Answer --> C

Notes) Page 732, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1013) Successful tactical ventilation depends on which of the following?

- A) Careful planning and the knowledge of building construction.
- B) Knowledge of fire behavior.
- C) Systematic application of procedures for removing the contaminants from a building, and the coordination with other fireground activities.
- D) All the above.

Answer --> D

Notes) Page 732, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1014) Proper ventilation reduces the chances of flashover by removing __ from the structure.

- A) Heat.
- B) Smoke.
- C) Toxic gases.
- D) Water vapor.

Answer --> A

Notes) Page 733, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1015) All of the following are signs of potential backdraft except –

- A) Pressurized smoke appearing from small cracks.
- B) Puffing of smoke at intervals from the building.
- C) Visible flame inside the structure.
- D) Smoke-stained windows.

Answer --> C

Notes) Missing reference from this chapter in Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

During a backdraft situation there will be very little if any visible flame from the exterior of the structure. It is imperative that firefighters constantly look for signs of backdraft before ventilating or entering a building.

1016) If the possibility of backdraft exists firefighters should –

- A) Open the entrance door slowly, and stay low while entering the burning structure.
- B) Ventilate all lower windows before attempting to enter the structure.
- C) Ventilate all upper windows before attempting to enter the structure.
- D) Vertically ventilate at the highest point before attempting to enter the structure.

Answer --> D

Notes) Page 731 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1017) Who makes the ultimate decision on whether to ventilate a structure?

- A) The first arriving truck company.
- B) The incident commander.
- C) The first arriving engine company.
- D) The first arriving fire officer.

Answer --> B

Notes) Page 734, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1018) What color would you expect the smoke to be that may indicate the potential of a backdraft situation?

- A) Blue-White.
- B) Gray-Yellow.
- C) Black.
- D) Brown.

Answer --> B

Notes) Page 737, Reference missing from this chapter in Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Knightlite kept question in because we thought it was important.

1019) You arrive at the scene of a two story wood frame house on fire. You conjecture that the fire is in its early stages by the presence of __ smoke bellowing from the structure.

- A) Gray-White.
- B) Gray-Yellow.
- C) Black.
- D) Brown.

Answer --> A

Notes) Missing reference in this chapter of Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Kept question in for reference. SCQ

1020) In high-rise buildings fire and smoke may spread rapidly via stairways, elevator shafts, pipe shafts, air-handling systems, and any other vertical openings. This causes an upward draft known as the –

- A) Stack effect.
- B) High-rise effect.
- C) Updraft effect.
- D) Convection effect.

Answer --> A

Notes) Page 762, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1021) Smoke and other fire gases will travel through a high building until –

- A) Their temperatures come to equilibrium with ambient air.
- B) Their temperatures fall below that of ambient air.
- C) Until mushrooming occurs.
- D) None of the above.

Answer --> A

Notes) Page 761, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1022) In a high-rise building, before doors leading to the involved fire floors are opened, the door to the roof must –

- A) Be blocked open.
- B) Be removed.
- C) Be tied close.
- D) A and B.

Answer --> D

Notes) Page 762, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1023) A fire breaks out on the second floor of an eight story high-rise building. Hot fire gases have traveled through the stairwell and gas temperatures reach equilibrium with ambient air on the 6th floor. On which floor would you expect to find the maximum amount of smoke?

- A) 1st floor.
- B) 2nd floor.
- C) 6th floor.
- D) 8th floor.

Answer --> C

Notes) Page 761, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

Since the temperature of the smoke reached equilibrium on the 6th floor it will stop rising on that floor, so the majority of the accumulated smoke will be on the 6th floor.

1024) Which statement is NOT true?

- A) Ventilation of a building should be performed as soon as possible, regardless whether or not the seat of the fire has been located.
- B) Ventilation should be performed only after the seat of the fire has been located.
- C) Basement fires are some of the most challenging fires for firefighters, because they are forced to descend through the worst heat and smoke to reach the seat of the fire.
- D) Windowless buildings create an adverse effect on firefighters and ventilation operations.

Answer --> A

Notes) Page 759, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Ventilating a building in a location other than over the seat of the fire will cause the fire to spread to uninvolved areas.

All Chapters

1025) What causes heat, smoke, and fire gases to travel upward to the highest point in an area, until they are trapped by a roof or a ceiling?

- A) Conduction.
- B) Convection.
- C) Radiation.
- D) Diffusion.

Answer --> B

Notes) Page 761, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1026) Firefighter Jean says that in windowless buildings, mechanical ventilation equipment can sometimes be effective in clearing an area of smoke.

Firefighter Dennis says that in windowless buildings, mechanical ventilation equipment can cause the spread of heat and fire. Who is correct?

- A) Firefighter Jean.
- B) Firefighter Dennis.
- C) Both are correct.
- D) Both are incorrect.

Answer --> C

Notes) Page 761, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1027) Incident stabilization means controlling and extinguishing a fire in a progression of stages. In order to accomplish this, what would you consider to be the first stage?

- A) Locating the fire.
- B) Confining the fire to the room, area, or structure of origin.
- C) Extinguishing the fire.
- D) Ventilating the fire floor.

Answer --> A

Notes) Page 733, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1028) All of the following are factors having a bearing on where firefighters should ventilate a building except –

- A) The type of building construction.
- B) Wind direction.
- C) Ambient air temperature.
- D) Effect that ventilation will have on exposures.

Answer --> C

Notes) Page 740, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1029) When firefighters commence ventilation operations they should expect the fire to –

- A) Decrease in intensity.
- B) Increase in intensity.
- C) Change little from prior ventilation procedures.
- D) Produce more smoke.

Answer --> B

Notes) Page 733, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1030) Top ventilation in high-rise buildings must be considered –

- A) During scene size-up.
- B) Upon arrival of the first ladder company.
- C) Upon arrival of the first apparatus.
- D) During pre-incident planning.

Answer --> D

Notes) Page 762, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1031) When working on a roof for ventilation purposes, how many means of escape should be in place to help insure firefighter safety?

- A) 1.
- B) 2.
- C) 3.
- D) 4.

Answer --> B

Notes) Page 755, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1032) Which would be good indicators that an unsafe roof condition exists?

(1) Melting Asphalt (2) "Spongy Roof" (3) Smoke Coming From Roof (4) Fire Coming From Roof

- A) (1) and (2).
- B) (2) and (4).
- C) (2) and (4).
- D) All the above.

Answer --> D

Notes) Page 754, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1033) All of the following statements regarding ventilation are true except –

- A) It is better to make several small ventilation holes rather than one large hole.
- B) Always cut ventilation holes with the wind at your back.
- C) Always cut roof material diagonally, along side the joists.
- D) The last step in roof ventilation is to open up the ceiling below the ventilation hole, with a pike pole or plaster hook.

Answer --> A

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is much better to have one large ventilation hole than several smaller ones.

1034) The best tool for opening up a slate or tile roof is a –

- A) Rotary rescue saw.
- B) Axe.
- C) Sledgehammer.
- D) Carbide-tipped chain saw.

Answer --> C

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1035) Trench ventilation cuts –

- A) Should extend from one exterior wall to the midpoint or peak of the roof.
- B) Should extend the entire width of the roof.
- C) Should never be used in low expansive structures such as schools, motels or shopping malls.
- D) Should be cut well in back of the advancing fire.

Answer --> B

Notes) Page 758, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Trench ventilation should be strictly used as a defensive operation and should not be confused with or used as offensive vertical ventilation.

1036) When performing a trench cut in a roof, the hole or trench should be at least –

- A) 1 foot wide.
- B) 2 feet wide.
- C) 3 to 4 feet wide.
- D) More than 4 feet wide.

Answer --> C

Notes) Page 759, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was at least 4 feet wide.

All Chapters

1037) Vertical ventilation can be undertaken after the fire officer has completed all of the following except –

- A) Considered the age and type of building involved.
- B) Identified escape routes.
- C) Considered the location, duration, an extent of the fire.
- D) All assigned engine companies have arrived at the scene.

Answer --> D

Notes) Page 751, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1038) In regard to ventilation safety, which of the following statements is not true?

- A) When making a ventilation cut on a rooftop, make sure the angle of the cut is directed toward your body.
- B) Beware of overhead obstructions when working with an axe.
- C) Check the roof for structural integrity before stepping upon it.
- D) Make sure that a roof ladder is secured over the peak of the roof before using it.

Answer --> A

Notes) Page 752, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Make sure the angle of the cut is away from your body.

1039) Why is pre-incident planning and surveys necessary as it pertains to ventilation procedures?

- A) Pre-incident planning helps to determine where ventilation holes will be placed.
- B) Pre-incident planning helps to identify buildings that have roofs supported by lightweight or wooden trusses, which may fail early in a fire.
- C) Pre-incident planning helps to identify the locations of potential water sources.
- D) Pre-incident planning helps to identify fire department resources that may be needed in the event of a fire.

Answer --> B

Notes) Page 754, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1040) Why should existing roof openings be used whenever possible to ventilate a structure, rather than cutting a hole in the roof?

- A) Existing roof openings are generally larger than holes cut by firefighters.
- B) Existing roof openings are typically located directly over the fire.
- C) Existing roof openings are generally faster to open rather than cutting a hole in the roof.
- D) Existing roof openings typically create a greater draft than openings cut by firefighters.

Answer --> C

Notes) Page 743, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1041) Why should firefighters make an effort to cut rectangular or square openings?

- A) They are easier to cut.
- B) They provide a better draft.
- C) They help to facilitate repairs to the roof.
- D) All the above.

Answer --> D

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1042) When cutting a large ventilation hole in a roof, the opening should be at least –

- A) 2 x 2 feet.
- B) 3 x 3 feet.
- C) 4 x 4 feet.
- D) 4 x 8 feet.

Answer --> D

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was 4 x 4 feet.

1043) Which of the following provides a means by which ventilation procedures may be accelerated?

- A) Rotary saws.
- B) Carbide-tipped chain saws.
- C) Chain saw with adapted features.
- D) All the above.

Answer --> D

Notes) Page 755, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1044) Which roof cut utilized during ventilation operations, consists of a small cut, normally the width of the cutting blade, that is used to determine the direction of fire spread?

- A) Kerf cut.
- B) Inspection cut.
- C) Louvered cut.
- D) Trench cut.

Answer --> A

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1045) Pertaining to ventilation, which of the following consists of three cuts that form a small triangle?

- A) Kerf cut.
- B) Inspection hole.
- C) Louvered cut.
- D) Trench cut.

Answer --> B

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1046) __ are made in between the rafters rather than beside them, causing the panels to be hinged on the rafters.

- A) Kerf cuts.
- B) Inspection cuts.
- C) Louvered cuts.
- D) Trench cuts.

Answer --> C

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1047) __ roofs are most commonly found on commercial, industrial, and apartment buildings.

- A) Flat.
- B) Pitched.
- C) Arched.
- D) Sloped.

Answer --> A

Notes) Page 756, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1048) On which type of roof would you expect to find a bowstring truss?

- A) Flat roofs.
- B) Pitched roofs.
- C) Arched roofs.
- D) Gambrel roofs.

Answer --> C

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1049) How should metal roofs be opened?

- A) They should be pried up from the edges.
- B) They should be cut at the rafters using a ventilation saw.
- C) They should be sliced open with an axe or rotary saw and peeled back.
- D) They should be cut at the rafters using a sharp axe.

Answer --> C

Notes) Page 758, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1050) Why can some arched roofs be difficult to ventilate?

- A) The lower chord of the truss may be covered with a ceiling to form an enclosed roof space.
- B) They are difficult to stand on.
- C) Lacking a sharp peak, it is difficult to secure a roof ladder upon it.
- D) They are practically impenetrable to common ventilation tools.

Answer --> A

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Reference in this edition is incomplete. From a safety standpoint B and C could have been the correct answer, but from a ventilation standpoint, the correct answer should be A.

1051) The space between an arched roof and the ceiling is sometimes called the –

- A) Winter porch.
- B) Cockloft.
- C) Truss area.
- D) Tie.

Answer --> B

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Again, reference missing from this edition, but should be included here.

1052) When attempting to ventilate an arched roof, firefighters should work –

- A) On the edges of the roof.
- B) In the center of the roof.
- C) From a well-secured roof ladder.
- D) Only on the trusses themselves or other strong points when possible

Answer --> D

Notes) Page 757, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

When walking on truss roofs you should stay right on the trusses themselves and avoid areas between the trusses.

All Chapters

1053) What is the chief purpose of trench ventilation?

- A) To increase visibility.
- B) To remove heated smoke and gases.
- C) To stop the spread of fire in a long, narrow structure.
- D) To aid in the recovery of trapped victims.

Answer --> C

Notes) Page 758 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1054) Firefighter Suzi says that trench ventilation holes should be cut right over the fire. Firefighter Liza says that trench ventilation holes should be cut well ahead of the advancing fire. Who is correct?

- A) Firefighter Suzi.
- B) Firefighter Liza.
- C) Both are correct.
- D) Both are incorrect.

Answer --> B

Notes) Page 758, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1055) Trench ventilation is sometimes called –

- A) Vertical ventilation.
- B) Horizontal ventilation.
- C) Radical ventilation.
- D) Strip ventilation.

Answer --> D

Notes) Page 758, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1056) Firefighters should cut trench cuts at least ____ ahead of the advancing fire and only after offensive vertical ventilation openings have been made.

- A) 15 feet.
- B) 20 feet.
- C) 25 feet.
- D) 30 feet.

Answer --> D

Notes) Page 758, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1057) In a building with balloon construction, typically where is the first area of fire extension most commonly found from a fire originating in the basement?

- A) The first floor.
- B) The second floor.
- C) The attic.
- D) All of the above.

Answer --> C

Notes) Page 760, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1058) In a basement fire, to reduce the likelihood of vertical extension, what is a firefighter's last resort in ventilating the structure?

- A) Venting through ground height basement windows.
- B) Venting through wells and other subterranean windows.
- C) Cutting a hole in the floor near ground level windows or doors and venting from the first floor.
- D) Venting at the highest point in the structure.

Answer --> C

Notes) Page 760, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1059) Which location would you consider your first choice for ventilating a basement fire?

- A) The basement windows.
- B) The attic windows.
- C) Natural paths such as stairwells.
- D) The windows directly over the basement.

Answer --> A

Notes) Page 760, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1060) If an attack crew is working inside a building, when can hoselines be directed downward through ventilation holes?

- A) If there is no fire emerging from the ventilation hole.
- B) When the attack crew radios the incident commander that the fire has been knocked down.
- C) When ordered to do so by any fire officer.
- D) You should never, ever discharge hoselines through ventilation holes while an attack team is working inside a building.

Answer --> D

Notes) Page 759, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Never, ever, never, ever!

All Chapters

1061) Fire streams directed above ventilation holes, which help to cool the thermal column and lessen sparks and flying brands, from a burning building are called –

- A) Ventilation streams.
- B) Water curtains.
- C) Elevated streams.
- D) Hydraulic ventilation.

Answer --> C

Notes) Reference dropped in, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Question left in for reference.

1062) Ventilating smoke and other fire gases through openings such as windows and doors is known as –

- A) Vertical ventilation.
- B) Horizontal ventilation.
- C) Residential ventilation.
- D) Forced ventilation.

Answer --> B

Notes) Page 744, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1063) What do the following statements all have in common? 1) Excessive breakage of glass. 2) Breakage of skylights. 3) Explosions. 4) Additional openings between the attack team and the upper opening. 5) Improper use of mechanical ventilation 6) Burn-through of the roof, a floor or a wall.

- A) They all will assist in the effectiveness of vertical ventilation.
- B) They all will assist in the effectiveness of horizontal ventilation.
- C) They can all destroy the effectiveness of vertical ventilation.
- D) They can all destroy the effectiveness of horizontal ventilation.

Answer --> C

Notes) Page 759, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1064) All of the following would be situations where firefighters would use horizontal ventilation except –

- A) Residential structures in which the fire has not yet involved the attic area.
- B) The involved floors of multistory structures below the top floor.
- C) Fires involving one-story structures.
- D) Buildings with daylight basements.

Answer --> C

Notes) Pages 744–745, Essentials Of Fire Fighting And Fire Department Operations, 5th Edition.

Also included is – Buildings so weaken by fire that vertical ventilation is unsafe. And – Buildings in which vertical ventilation is ineffective (cold smoke fire.)

All Chapters

1065) All of the following would be considered ways by which horizontal extension occurs except –

- A) Through stairwells and elevator shafts.
- B) Through wall openings by direct flame contact or by convection.
- C) Through open space by radiation or convected air currents.
- D) Through walls by conduction of heat from beams, or pipes.

Answer --> A

Notes) Page 762, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Fire spread through stairways and elevator shafts would be considered vertical ventilation.

1066) You are standing in a burning bedroom facing north. The wind is blowing from west to east. You open all the windows on the east and west sides of the bedroom for ventilation. The windows on the west side of the bedroom would be considered on the __ of the fire.

- A) Leeward side.
- B) Downwind side.
- C) Windward side.
- D) Right side.

Answer --> C

Notes) Page 745, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1067) Firefighter George says that opening a door or window on the windward side of a structure prior to first creating an opening on the leeward side of the structure, may pressurize the building and cause the fire to spread to uninvolved areas.

Firefighter Fred says opening doors and windows between the advancing fire fighting crews, and the established ventilation exit point, reduces intake of fresh air from the opening behind the firefighters.

- A) Firefighter George is correct.
- B) Firefighter Fred is correct.
- C) Both are correct.
- D) Both are incorrect.

Answer --> C

Notes) Pages 750–751, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1068) Ventilation when accomplished mechanically or hydraulically is called –

- A) Vertical ventilation.
- B) Horizontal ventilation.
- C) Pressurized ventilation.
- D) Mechanical ventilation.

Answer --> D

Notes) Page 743, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was Forced Ventilation.

All Chapters

1069) Which would NOT be an advantage of forced ventilation?

- A) May cause the fire to intensify.
- B) Supplements natural ventilation.
- C) Speeds up the removal of contaminants, and assists in creating a safer environment for rescue efforts.
- D) Promotes good public relations.

Answer --> A

Notes) Page 751, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1070) An example of __ is when a smoke ejector is placed in a window so that the smoke and other gases are discharged to the outside of a building.

- A) Negative-pressure ventilation.
- B) Positive-pressure ventilation.
- C) Vertical-pressure ventilation.
- D) Horizontal-pressure ventilation.

Answer --> A

Notes) Page 745, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1071) An extinguished fire in a 6 room ranch has created evenly distributed smoke conditions throughout the structure. The wind is blowing strong out of the west at 25 miles per hour. In which window would you place a smoke ejecting fan in?

- A) In the window on the North side of the structure blowing out.
- B) In the window on the East side of the structure blowing out.
- C) In the window on the West side of the structure blowing out.
- D) In the window on the South side of the structure blowing out.

Answer --> B

Notes) Page 745, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1072) What will correct the effect of churning around an exhaust fan hanging in a doorway?

- A) Placing two fans in the same doorway both facing out.
- B) Placing two fans in the same doorway both facing in.
- C) Placing two fans in a doorway, one facing in, the other facing out.
- D) Covering the area around the fan with a salvage tarp.

Answer --> D

Notes) Page 746, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1073) To speed up the process of positive-pressure ventilation firefighters should do which of the following?

- A) Provide additional exit openings to allow the smoke to ventilate faster.
- B) Decrease the size of the exit opening so that ejection pressure will increase.
- C) Reduce the size of the area being ventilated by systematically opening and closing doors.
- D) Open second floor windows and doors to initiate natural convection air flows.

Answer --> C

Notes) Page 747, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1074) When positive pressure ventilation is being utilized to remove smoke from multiple floors of a building, where should the point of entry be placed?

- A) At the highest point of the structure.
- B) At the lowest point of the structure.
- C) At the fire level.
- D) At the level just below the fire level.

Answer --> B

Notes) Page 747, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1075) Using a charged hoseline to ventilate smoke and other fire gases from a burning building is known as __ ventilation.

- A) Positive-Pressure.
- B) Negative-Pressure.
- C) Hydraulic.
- D) Horizontal.

Answer --> C

Notes) Page 743, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1076) When utilizing hydraulic ventilation, the firefighter should position the nozzle so that it is at least __ from the opening of a window or door.

- A) 6 inches.
- B) 1 foot.
- C) 1 1/2 feet.
- D) 2 feet.

Answer --> D

Notes) Page 750, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The larger the opening, the faster ventilation will occur.

All Chapters

1077) You are called to the scene of an office building on fire. The building has a complicated HVAC system in place. In order to control ventilation of the structure you should do which of the following?

- A) Operate the system to try to close ducts down which may cause the fire to spread.
- B) Call for a complete schematics of the buildings HVAC system.
- C) Call a building engineer to the scene.
- D) Ignore the HVAC system and use standard ventilation procedures.

Answer --> C

Notes) Page 763, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1078) You are on the interior attack hoseline for a fire in a second story bedroom. You have found the seat of the fire and have performed the initial knock down. What should you do next.

- A) Back the hoseline out of the building and wait for a secondary attack crew.
- B) Commence salvage and overhaul operations.
- C) Look for extension.
- D) Attempt to clear the room of smoke, heat, steam, and gases via hydraulic ventilation.

Answer --> D

Notes) Page 750, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1079) When performing a hydraulic ventilation operation, what percentage of the fog pattern should cover the window or door opening?

- A) 75% – 80%.
- B) 80% – 85%.
- C) 85% – 90%.
- D) 90% – 95%.

Answer --> C

Notes) Page 750, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1080) __ is the transition between the growth state of a fire and the fully-involved state.

- A) Rollover.
- B) Mushrooming.
- C) Flashover.
- D) Backdraft.

Answer --> C

Notes) Page 739, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Just a review question.

All Chapters

1081) Ventilation should only occur –

- A) After hoseline crews are ready to move in and attack the fire.
- B) Only if the fire is in the free-burning stage.
- C) Only if there is a danger of flashover.
- D) Only if there is a danger of backdraft.

Answer --> A

Notes) Page 739, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1082) Techniques that use the wind, convection currents, and other natural phenomena to ventilate a structure without the use of fans, blowers and other mechanical devices is called –

- A) Forced ventilation.
- B) Natural ventilation.
- C) Passive ventilation.
- D) Basic ventilation.

Answer --> B

Notes) Page 743, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1083) Any means of ventilation other than that of natural forces, which may involve the use of fans, blowers, smoke ejectors, and fire streams is called –

- A) Basic ventilation.
- B) Active ventilation.
- C) Positive pressure ventilation.
- D) Mechanical ventilation.

Answer --> D

Notes) Page 743, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was Forced Ventilation.

1084) Which may be one of the most important properties of smoke?

- A) During the incipient stage of the fire, smoke is white in color.
- B) Smoke is the product of incomplete combustion.
- C) The burning process many times exceeds the ventilation process, thus producing large amounts of smoke.
- D) Smoke is fuel that has not ignited.

Answer --> D

Notes) Page 737, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

No direct reference in this chapter but important to know. All the other statements are true, but firefighters should not look at smoke as a product of combustion, but rather as a potential fuel that threatens life safety. It is important to vent this potential fuel off as soon as possible.

All Chapters

1085) Why are basement fires among the most challenging situations firefighters will face?

- A) Basements without proper access mean that firefighters must descend through some of the worse heat and smoke in order to reach the seat of the fire.
- B) Basements are not well lighted, making visibility difficult.
- C) Basements are not easily vented.
- D) Basements have limited paths of egress.

Answer --> A

Notes) Page 760, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1086) Ventilating a structure from the highest point of the building through existing or created openings and channeling the contaminated atmosphere vertically within the structure and out the top is called –

- A) Channeling ventilation.
- B) Vertical ventilation.
- C) Horizontal ventilation.
- D) Rooftop ventilation.

Answer --> B

Notes) Page 742, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1087) The leeward side is the –

- A) Protected side.
- B) Direction opposite the way the wind is blowing.
- C) Downwind.
- D) All the above.

Answer --> D

Notes) Page 745, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The windward side is the side or direction from which the wind is blowing.

1088) The movement of smoke from smoke ejectors out of a building and then being immediately drawn back into the building by negative pressure is an example of –

- A) Recirculation.
- B) Back-pressure.
- C) Negative ventilation.
- D) All the above.

Answer --> A

Notes) Page 746, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. The only answer was Churning.
Recirculation can be prevented by sealing the open area around the smoke ejector with a tarp.

All Chapters

1089) The location where positive pressure ventilation is set up is called the –

- A) In-point.
- B) Windward point.
- C) Entry point.
- D) Origin.

Answer --> C

Notes) Page 746, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called the entry opening or inlet opening.

1090) During positive pressure ventilation, the blower fan should be positioned __ from the entry point.

- A) 2 to 4 feet.
- B) 4 to 6 feet.
- C) 6 to 12 feet.
- D) 10 to 20 feet.

Answer --> B

Notes) Page 746, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was 4 to 10 feet.

1091) In a positive pressure ventilation operation, the exit point should be __ than the entry opening.

- A) Slightly smaller.
- B) The same size.
- C) Larger.
- D) Varies with the size of the entry opening and the capacity of the blower used.

Answer --> D

Notes) Page 746, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. This version has no definitive answer. Old answer was slightly smaller or the same size as the entry point.

All Chapters

1092) When considering the ventilation of a burning structure, which of the following should you consider first?

- A) Decide if there is a need to ventilate at this time.
- B) Where is ventilation needed.
- C) The safety of the occupants and your firefighters.
- D) What type of ventilation should be used.

Answer --> C

Notes) Page 751 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1093) The responsibilities of the leader of the roof team when ventilating a structure, should include all of the following except -

- A) Making sure that only the required ventilation openings are made.
- B) Directing the attack hoselines involved with fire suppression inside the building.
- C) Directing efforts to minimize secondary damage caused by firefighters ventilating.
- D) Ensuring the safety of all personnel who are working on the roof.

Answer --> B

Notes) Page 755, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1094) In North America, the footprint of a single-family residential structure has increased over ____ between the years 1973 and 2008.

- A) 50%.
- B) 75%.
- C) 100%.
- D) 150%.

Answer --> D

Notes) Page 735, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1095) In North America, the size of a building lot for a single-family residential structure has decreased ____ between the years 1973 and 2008.

- A) 25%
- B) 40%
- C) 65%
- D) 80%

Answer --> A

Notes) Page 735, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1096) During a fire, the knowledge of the building involved can be a great asset when decisions concerning tactical ventilation are made. This information can normally be obtained from –

- A) Preincident plans.
- B) Inspection reports.
- C) Observation of similar structures.
- D) All the above.

Answer --> D

Notes) Page 736, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1097) The movement of air toward burning fuel and the movement of smoke out of a compartment or structure is known as –

- A) Convection.
- B) Air flow.
- C) Conduction.
- D) Radiation.

Answer --> B

Notes) Page 737, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1098) Firefighter Jim says that airflow is caused by pressure differentials inside and outside the compartment. Firefighter John says that air flow is caused by differences in density between the hot smoke in the cooler air. Who is correct?

- A) Firefighter Jim.
- B) Firefighter John.
- C) Both are correct.
- D) Neither are correct.

Answer --> C

Notes) Page 737, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1099) Which of the following resources must be in place before tactical ventilation begins?

- A) Fire attack crews with a charged hoseline.
- B) Search and rescue teams.
- C) Exposure protection.
- D) All the above.

Answer --> D

Notes) Page 739, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1100) Whenever a building is opened the surrounding atmosphere can affect what is happening inside. Which of the following has the most weather-related influence on tactical ventilation?

- A) Relative humidity.
- B) Temperature.
- C) Atmospheric pressure.
- D) Wind.

Answer --> D

Notes) Page 740, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1101) Which of the following our devices intended to be used by firefighters to push fresh air into a structure and by nature are not intrinsically safe?

- A) Blowers.
- B) Smoke ejectors.
- C) Skylight fans.
- D) Smoke scrubbers.

Answer --> A

Notes) Page 742, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

In contrast, smoke ejectors have intrinsically safe motors that are placed in smoke-filled atmospheres to push smoke out.

1102) The amount of water needed for fire protection in small towns is __ than the amount of water needed for industrial and domestic use.

- A) Greater.
- B) Less than.
- C) Equal.
- D) Slightly less than.

Answer --> A

Notes) Page 786, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1103) Which of the following would be considered an example of groundwater supply?

- A) Springs.
- B) Lakes.
- C) Ponds.
- D) Rivers.

Answer --> A

Notes) Page 784, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All the rest would be considered surface water supplies.

All Chapters

1104) Which of the following would not be considered one of the three methods of moving water in a system?

- A) Vacuum pumping system.
- B) Gravity system.
- C) Direct pumping system.
- D) Combination system.

Answer --> A

Notes) Page 786, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1105) Which method of moving water uses a primary water source located at a higher elevation than the distribution system?

- A) Vacuum pumping system.
- B) Gravity system.
- C) Direct pumping system.
- D) Combination system.

Answer --> B

Notes) Page 787, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1106) Which water pumping system uses one or more pumps to take water from a primary source, and discharge it through a filtration and treatment process?

- A) Vacuum pumping system.
- B) Gravity system.
- C) Direct pumping system.
- D) Combination system.

Answer --> C

Notes) Page 787, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1107) Most communities will use which of the following methods for moving water from a primary water source to a distribution system?

- A) Vacuum pumping system.
- B) Gravity system.
- C) Direct pumping system.
- D) Combination system.

Answer --> D

Notes) Page 788, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1108) What is a fire department's main concern regarding water treatment facilities?

- A) The amount of water that is held by the primary water source.
- B) The general water quality including levels of contaminants and bacteria contained in the treated water.
- C) The fear that a maintenance error, natural disaster, loss of power supply, or fire could disable the pumping stations or severely hamper the purification process.
- D) The rate of water flow between the primary source and the distribution system.

Answer --> C

Notes) Page 786, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1109) A fire hydrant that receives water in only one direction is called a –

- A) Circulating-feed hydrant.
- B) Dead-end hydrant.
- C) Uni-flow hydrant.
- D) Grid-end hydrant.

Answer --> B

Notes) Page 793, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1110) A fire hydrant that receives water in more than one direction is called a(an) –

- A) Circulating-feed hydrant.
- B) Dead-end hydrant.
- C) Di-flow hydrant.
- D) Grid-end hydrant.

Answer --> A

Notes) Page 793, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called a looped system.

1111) Large pipes, with relatively widespread spacing, that convey large quantities of water to many locations of a system, that are locally distributed to smaller mains are called –

- A) Primary feeders.
- B) Secondary feeders.
- C) Tertiary feeders.
- D) Distributors.

Answer --> A

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also called arterial mains.

All Chapters

1112) A grid arrangement of smaller water mains that serve individual fire hydrants and blocks of consumers are called?

- A) Primary feeders.
- B) Secondary feeders.
- C) Hydrant feeders.
- D) Distributors.

Answer --> D

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1113) To insure a sufficient water supply to a community, how many primary feeders should run from the source of supply to high-risk industrial districts of the community?

- A) One or more.
- B) Two or more.
- C) Three or more.
- D) Four or more.

Answer --> B

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1114) Fire hydrant supply mains in residential areas should be at least __ in diameter.

- A) 4 inches.
- B) 6 inches.
- C) 8 inches.
- D) 10 inches.

Answer --> B

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

These small water mains are usually 6 to 8 inches in diameter and serve fire hydrants and commercial and residential consumers.

1115) Fire hydrant supply mains in business and industrial areas should be at least __ in diameter.

- A) 4 inches.
- B) 6 inches.
- C) 8 inches.
- D) 10 inches.

Answer --> C

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1116) Isolation valves should be operated ____ to keep them in good working order.

- A) Every six months.
- B) At least once a year.
- C) Every two years.
- D) Every three years.

Answer --> B

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1117) In general, fire hydrants should not be spaced more than apart ____ in high-value districts.

- A) 300 feet.
- B) 500 feet.
- C) 600 feet.
- D) 1000 feet.

Answer --> A

Notes) Page 792, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was 600 feet.

1118) An indicating-type water valve –

- A) Visually shows whether or not a gate or valve seat is open, closed or partially opened.
- B) Is threaded so it opens clockwise.
- C) Is normally buried.
- D) Is usually found in manholes.

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1119) The water main valve that has the words Open or Shut, indicating the valves present position is called –

- A) A Nonindicating valve.
- B) An OS&Y valve.
- C) A Post Indicator valve (PIV).
- D) All of the above.

Answer --> C

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1120) Which water main valve is normally buried or installed in manholes, and operated above ground through a valve box?

- A) A Nonindicating valve.
- B) An OS&Y valve.
- C) A Post Indicator valve (PIV).
- D) All of the above.

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1121) Isolation valves in water distribution systems are –

- A) Gate valves and butterfly valves.
- B) Clapper valves.
- C) Ball Valves.
- D) Clapper valves and butterfly valves.

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Question change from last version. Old question listed Control Valves instead of Isolation Valves.

1122) Gate valves are normally marked with a number. What does this number indicate?

- A) The diameter of the pipe.
- B) The distance (in feet) to the next valve.
- C) The number of turns necessary to completely close the valve.
- D) The date the valve was last inspected.

Answer --> C

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1123) Which water main valve rotates 90 degrees from the fully opened position to tightly shut?

- A) Butterfly valve.
- B) Gate valve.
- C) Clapper valve.
- D) PIV valve.

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1124) Which water main valve has a yoke on the outside with a threaded stem that controls the gate's opening or closing?

- A) OS&Y valve.
- B) PVC valve.
- C) Butterfly valve.
- D) Gate valve.

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1125) Water pipes are usually made from which of the following materials?

(1) Cast Iron (2) Ductile Iron (3) Asbestos Cement (4) Steel (5) Plastic (6) Concrete

- A) 1, 2, 4, 6.
- B) 1, 4, 5, 6.
- C) 2, 3, 5.
- D) All the above.

Answer --> D

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1126) Which type of fire hydrant would you expect in climates where the ground freezes during the year?

- A) Wet-barrel.
- B) Dry-barrel.
- C) Combination hydrant.
- D) Nordic hydrant.

Answer --> B

Notes) Page 794, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1127) The drain in a dry barrel fire hydrant –

- A) Is open when the hydrant is flowing.
- B) Is closed when the hydrant is flowing.
- C) Must be opened manually by the firefighter.
- D) Is closed when the hydrant is partially open.

Answer --> B

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1128) While your engine company is in the process of refilling its tank at a hydrant, you begin to notice the ground around the hydrant becoming saturated with water. What is the probable cause of this?

- A) The main valve is defective.
- B) There is a leak in the hydrant main.
- C) The stem nut is jammed.
- D) The hydrant is not fully opened.

Answer --> D

Notes) Page 798, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

The hydrant must be fully opened for full closure of the drain.

1129) In the winter time, what is the procedure used to ensure that a dry hydrant drain is functioning correctly?

- A) Cap all discharges except one. Cover the remaining discharge with your palm and feel for a slight suction.
- B) Use a hydraulic pressure meter to measure backflow pressure.
- C) Cap all discharges tightly immediately after closing hydrant valves.
- D) Cap all discharges except one, Insert a pitot tube and gauge into the remaining discharge and measure the backflow pressure.

Answer --> A

Notes) Page 798, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1130) Although the main components of a fire hydrant are made of cast iron, the important internal working parts are made from –

- A) Stainless steel.
- B) Copper.
- C) Bronze.
- D) Aluminum.

Answer --> C

Notes) Page 794, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1131) Hydrants are opened by rotating the __ with a hydrant wrench.

- A) Operating stem.
- B) Stem nut.
- C) Check valve.
- D) Flow nut.

Answer --> B

Notes) Page 794, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1132) Fire hydrant valve facings are normally made from which of the following materials?

(1) Teflon (2) Leather (3) Brass (4) Bronze (5) Rubber (6) Plastic (7) Composite Material

- A) 3 or 4.
- B) 1 or 6.
- C) 2, 5, or 7.
- D) 1 or 4.

Answer --> C

Notes) Page 794, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Composite materials added to new answer.

1133) Which type of fire hydrant would you expect to find in warm climates where the ground does not freeze?

- A) Dry Barrel hydrant.
- B) Wet Barrel hydrant.
- C) Bonnetless hydrant.
- D) Drainless hydrant.

Answer --> B

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1134) Which of the following can affect the flow of a hydrant?

- A) Proximity of a feeder.
- B) The size of the mains in which the hydrant is connected to.
- C) The amount of sedimentation which has built up in the main.
- D) All the above.

Answer --> D

Notes) Page 798, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1135) A green hydrant is capable of delivering __ of water.

- A) Less than 500 gpm.
- B) 500 – 999 gpm.
- C) 1000 – 1499 gpm.
- D) 1500 or greater.

Answer --> C

Notes) Page 796, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1136) A light blue hydrant is capable of delivering __ of water.

- A) Less than 500 gpm.
- B) 500 – 999 gpm.
- C) 1000 – 1499 gpm.
- D) 1500 or more gpm.

Answer --> D

Notes) Page 796, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1137) A red hydrant is capable of delivering __ of water.

- A) 500 gpm or less.
- B) 500 – 999 gpm.
- C) 1000 – 1499 gpm.
- D) 1500 or more gpm.

Answer --> A

Notes) Page 796, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1138) An orange hydrant is capable of delivering __ of water.

- A) Less than 500 gpm.
- B) 500 – 999 gpm.
- C) 1000 – 1499 gpm.
- D) 1500 or more gpm.

Answer --> B

Notes) Page 796, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1139) The general rule in locating fire hydrants in high value areas, is to place a hydrant at each intersection and to space intermediate hydrants not more than –

- A) 200 feet.
- B) 300 feet.
- C) 500 feet.
- D) 600 feet.

Answer --> B

Notes) Page 792, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1140) What type of valve would you expect to find in a wet-barrel hydrant?

- A) Horizontal compression-type valve.
- B) Butterfly valve.
- C) Gate valve.
- D) Check valve.

Answer --> A

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1141) When drafting from a static water source, how much water should there be above and below the hard suction line strainer?

- A) 12 inches.
- B) 24 inches.
- C) 36 inches.
- D) 48 inches.

Answer --> B

Notes) Page 800, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1142) When is it necessary to use a strainer at the end of a hard suction line?

- A) When drafting from a swimming pool.
- B) When drafting from an industrial water source.
- C) When drafting from a natural water source.
- D) Always.

Answer --> C

Notes) Page 799, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Kind of a trick question. Essentials states you need a strainer when drafting from a natural water source, however many departments SOPs require a strainer at all times. Better to be safe than sorry.

1143) Floating strainers can draft water from levels as little as –

- A) 1 – 2 inches.
- B) 3 – 6 inches.
- C) 6 – 12 inches.
- D) 24 inches.

Answer --> D

Notes) Page 799, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

We think this is a misprint in the text, as it was in the last version. There are a lot of floating strainers on the market that can draft from much shallower depths than 24 inches.

All Chapters

1144) The actual valve in a dry barrel fire hydrant that allows water into the hydrant is located –

- A) In the bonnet.
- B) In the stem.
- C) Under the barrel below the frost line.
- D) At each discharge.

Answer --> C

Notes) Page 794, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1145) When should alternative water supply sources be identified which can be utilized in fire ground operations?

- A) Upon arrival of the fire apparatus.
- B) Upon arrival of the fire officer.
- C) Upon arrival of the first pumper.
- D) During preincident surveys.

Answer --> D

Notes) Page 799, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1146) Which NFPA Standard provides information on water supplies for suburban and rural fire fighting?

- A) NFPA 1142.
- B) NFPA 472.
- C) NFPA 1403.
- D) NFPA 1021.

Answer --> A

Notes) Page 800, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1147) Hauling water from a water supply source to a portable container from which the water may be used to fight a fire is referred to as –

- A) Water porting.
- B) Water channeling.
- C) Water shuttling.
- D) RWA (Remote Water Acquisition).

Answer --> C

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1148) Water shuttles are recommended for distances greater than __, or greater than your fire department capacity for laying supply hoselines.

- A) 1/4 mile or greater.
- B) 1/2 mile or greater.
- C) 3/4 mile or greater.
- D) 1 mile or greater.

Answer --> B

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1149) Normally, a portable water tank capacity ranges from __ and upward.

- A) 5000 gallons of water.
- B) 2500 gallons of water.
- C) 1000 gallons of water.
- D) 500 gallons of water.

Answer --> C

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1150) According to NFPA 1901, Standard for Mobile Water Supply Fire Apparatus, a mobile water supply apparatus must be able to dump at a rate of –

- A) 250 gpm.
- B) 500 gpm.
- C) 750 gpm.
- D) 1000 gpm.

Answer --> D

Notes) Page 802, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1151) In relay pumping, the apparatus with the greatest pumping capacity should be located at –

- A) The fire.
- B) The water source.
- C) Right in the center between the fire and the water source.
- D) Any point along the line.

Answer --> B

Notes) Page 803, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1152) Which of the following factors has the greatest impact on the success of a shuttle operation?

- A) The distance between the fill and dump sites.
- B) The capacity of the tanks that are being use for the operation.
- C) The sizes of the source and dump sites.
- D) The fast-fill and fast-dump capabilities.

Answer --> D

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1153) Which of the following would NOT be considered one of the three key components of a water-shuttle operation?

- A) Dump site at the fire.
- B) Auxiliary apparatus at the fire scene.
- C) Fill site at the water source.
- D) Mobile water supply apparatus to haul water from the fill site to the dump site.

Answer --> B

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1154) When multiple portable tanks are used in water-shuttle operations a __ is used to effectively maintain the water level in one tank for the pumper, while water tankers/tenders dump into the others.

- A) Low-level Siphon.
- B) PTS (Portable Tank Siphon).
- C) Jet-assisted Siphon.
- D) Shuttle Siphon.

Answer --> C

Notes) Page 802, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1155) What is the first step firefighters should take before opening a portable tank?

- A) Inspect the portable tank for leaks.
- B) Ensure that the mobile water supply apparatus is on-scene.
- C) Inspect the portable tank frame for structural integrity.
- D) Spread a heavy tarp on the ground to help protect the liner once water is dumped into it.

Answer --> D

Notes) Page 802, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1156) Which of the following methods is normally used to unload water into portable tanks?

- A) Gravity dumping through large dump valves.
- B) Jet-assist dumps that create a venturi effect which increases the flow rate.
- C) Through apparatus mounted pumps that off-load the water into the portable tank.
- D) All the above.

Answer --> D

Notes) Page 802, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Sometimes it is a combination of all these methods together.

1157) Whose responsibility is it to determine the distance between pumpers in a water-shuttle operation?

- A) The Incident Commander
- B) The Chief
- C) The drivers of the apparatus
- D) The Water Supply officer

Answer --> D

Notes) Page 804, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1158) The network of intermediate-sized mains that subdivide the grid within the various loops of primary feeders and supply of distributors is known as –

- A) Branch distributors.
- B) Secondary feeders.
- C) Branch feeders.
- D) Intermediate feeders.

Answer --> B

Notes) Page 789, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1159) What is the NFPA Standard for Fire Hose Connections?

- A) NFPA 1960.
- B) NFPA 1961.
- C) NFPA 1962.
- D) NFPA 1963.

Answer --> D

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1160) A storage tank used during a relay or shuttle operation to hold water from water tanks or hydrants is called a –

- A) Portable tank.
- B) Portable pond.
- C) Fold-a-tank.
- D) All the above.

Answer --> D

Notes) Page 801, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called Catch Basin, Portable Basin, or Porta-Tank.

1161) Seawater is ____ times saltier than freshwater.

- A) 56.
- B) 96.
- C) 145.
- D) 220.

Answer --> D

Notes) Page 784, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1162) A control valve with a solid plate operated by a handle and screw mechanism is known as a –

- A) Gate valve.
- B) Post-indicator valve.
- C) Butterfly valve.
- D) Outside stem and yoke valve

Answer --> A

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1163) The control valve that uses a flat circular plate in a pipe that rotates 90° across the cross section of the pipe to control the flow of water is known as a –

- A) Gate valve.
- B) Post-indicator valve.
- C) Butterfly valve.
- D) Outside stem and yoke valve

Answer --> C

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1164) A type of valve used to control underground water mains that provides a visual means for indicating whether the valve is in the open or shut position is called a –

- A) Gate valve.
- B) Post-indicator valve.
- C) Butterfly valve.
- D) Outside stem and yoke valve

Answer --> B

Notes) Page 791, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1165) A mechanical device installed in a discharge line that senses the amount of water flowing and provides a readout in units of gallons per minute is called a –

- A) Backflow preventer.
- B) Flowmeter.
- C) Flow monitor.
- D) Control gate.

Answer --> B

Notes) Page 792, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1166) A check valve that prevents water from flowing back into a system and contaminating it is called a –

- A) Backflow preventer.
- B) Flow restrictor.
- C) Flow monitor.
- D) Control gate.

Answer --> A

Notes) Page 792, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1167) Who normally determines the location, spacing, and distribution of fire hydrants?

- A) The fire marshal.
- B) The Fire Chief.
- C) Water supply officer.
- D) Water department personnel.

Answer --> D

Notes) Page 792, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1168) Water mains arranged in a complete circuit so that water will be supplied to a given point from more than one direction or called –

- A) Loop system.
- B) Circle system.
- C) Belt system.
- D) All the above.

Answer --> D

Notes) Page 793, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Also called circulating system.

1169) A fire hydrant that receives water from two or more directions is called a –

- A) Circulating feed.
- B) Circulating hydrant.
- C) Dead-end hydrant.
- D) A and B.

Answer --> A

Notes) Page 793, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

A circulating hydrant is a fire hydrant that is located on a secondary feeder or distributor main and receives water from two directions.

1170) What is the usual size of the steamer connection on a fire hydrant?

- A) 3 inches.
- B) 3 1/2 inches.
- C) 4 inches.
- D) 4 1/2 inches.

Answer --> D

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1171) Pumper outlet nozzles are fire hydrant outlets that are ____ in diameter or larger.

- A) 3 inches.
- B) 3 1/2 inches.
- C) 4 inches.
- D) 4 1/2 inches.

Answer --> C

Notes) Page 795, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1172) The process of acquiring water from a static source and transferring it into a pump that is above the source's level is called –

- A) Drafting.
- B) Shuttling.
- C) Static pumping.
- D) All the above.

Answer --> A

Notes) Page 799, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1173) A method of water supply by which mobile water supply apparatus continuously transports water between a fill site and a dump site located near the emergency scene is called a –

- A) Static shuttle operation.
- B) Static transport operation.
- C) Water shuttle operation.
- D) Water interchange operation.

Answer --> C

Notes) Page 800, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1174) The use of two or more pumpers to move water over a long distance by operating them in a series is call –

- A) Water shuttling.
- B) Broadcast Pumping.
- C) Transport pumping.
- D) Relay pumping.

Answer --> D

Notes) Page 803, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1175) The point at which the fire department can connect into a sprinkler or standpipe system to boost the water flow in the system is called –

- A) Fire department junction.
- B) Fire department connection.
- C) Fire department hookup.
- D) Fire department juncture.

Answer --> B

Notes) Page 816, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called FDC.

All Chapters

1176) References made to the diameter of fire hose refers to the –

- A) Inside diameter.
- B) Outside diameter.
- C) Radius.
- D) Circumference.

Answer --> A

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1177) Lengths of hose are commonly referred to as –

- A) Blocks.
- B) Sections.
- C) Groups.
- D) Couples.

Answer --> B

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also known as lengths of hose.

1178) NFPA 1901, Standard for Pumper Fire Apparatus requires pumpers to carry at least __ of large soft sleeve intake hose.

- A) 10 feet.
- B) 15 feet.
- C) 20 feet.
- D) 25 feet.

Answer --> B

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1179) The end of a charged hoseline that is flowing water without a nozzle or valve to control its flow is called a –

- A) Open line.
- B) Open butt.
- C) Loose flow.
- D) Open current.

Answer --> B

Notes) Page 871, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1180) Fire hose is manufactured in which of the following configurations?

(1) Double-jacket (2) Single-jacket (3) Rubber single-jacket (4) Hard-rubber or plastic noncollapsing

- A) 1, 2 .
- B) 3, 4.
- C) 1, 2, 4.
- D) 1, 2, 3, 4.

Answer --> D

Notes) Page 816, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1181) Most fire hose is cut and coupled into lengths of –

- A) 25 or 75 feet.
- B) 25 or 50 feet.
- C) 50 or 75 feet.
- D) 50 or 100 feet.

Answer --> D

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1182) Intake hose used to connect fire apparatus to a near by water source, is characterized by which of the following groups of hose?

(1) Soft sleeve hose (2) Hard-suction hose (3) Hard-rubber noncollapsing hose (4) Plastic Composite hose

- A) 1, 2.
- B) 2, 3.
- C) 3, 4.
- D) 1, 2, 3, 4.

Answer --> A

Notes) Pages 818–819, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also called intake hose.

1183) Which type of hose is normally used to draft water from an open water source?

- A) Soft sleeve hose.
- B) Soft intake hose.
- C) Hard suction hose.
- D) All the above.

Answer --> C

Notes) Page 820, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

1184) Hard intake hose normally is manufactured in which of the following sizes?

- A) 1 1/2 – 2 1/2 inches.
- B) 2 1/2 – 4 inches.
- C) 2 1/2 – 6 inches.
- D) 6 – 8 inches.

Answer --> C

Notes) Page 820, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1185) Which NFPA standard lists specifications for fire hose?

- A) NFPA 1961.
- B) NFPA 1963.
- C) NFPA 1901.
- D) NFPA 1001.

Answer --> A

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1186) Which NFPA standard is the Standard for Automotive Fire Apparatus?

- A) NFPA 1961.
- B) NFPA 1963.
- C) NFPA 1901.
- D) NFPA 1001.

Answer --> C

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1187) NFPA 1901, Standard for Pumper Fire Apparatus requires pumpers to carry at least ___ of hard suction hose.

- A) 10 feet.
- B) 15 feet.
- C) 20 feet.
- D) 25 feet.

Answer --> C

Notes) Page 820, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Pumpers carry two 10 foot sections of hard-suction hose.

All Chapters

1188) According to NFPA 1901, what is the minimum amount of supply hose that must be carried by a pumper fire apparatus?

- A) 800 feet.
- B) 1000 feet.
- C) 1200 feet.
- D) 1500 feet.

Answer --> A

Notes) Page 846, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1189) According to NFPA 1901, how much attack hose must be carried on a pumper fire apparatus?

- A) 200 feet.
- B) 300 feet.
- C) 400 feet.
- D) 500 feet.

Answer --> C

Notes) Page 846, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1190) Which is NOT a method for avoiding damaging fire hose?

- A) Do not allow vehicles to run over hose.
- B) Avoid exerting excess pump pressure on the hose.
- C) Always keep the same position of bends when reloading the hose.
- D) Avoid rough handling of hose.

Answer --> C

Notes) Pages 825–826, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

You should change the position of folds when reloading it on the apparatus.

1191) To avoid damage from an automobile running over a hose, firefighters should employ the use of –

- A) Hose rollers.
- B) Hose jackets.
- C) Chafing blocks.
- D) Hose bridges.

Answer --> D

Notes) Page 825, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1192) To help prevent a hose from suffering thermal damage, firefighters should do all of the following except –

- A) Avoid drying hose on hot pavement.
- B) Keep the outside woven jacket of the hose wet.
- C) Run water through a seldom used hose from time to time.
- D) Cover the hose bed to prevent the hose from being exposed to the sun.

Answer --> B

Notes) Page 826, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Keep the outside of a woven-jacket fire hose dry when not in use.

1193) Abrasion damages caused by vibration from the apparatus can be avoided by using –

- A) Hose jackets.
- B) Hose rollers.
- C) Chafing blocks.
- D) Hose bridges.

Answer --> C

Notes) Page 826, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1194) Firefighters should prevent hose from coming in close proximity of vehicle apparatus exhaust, to prevent __ from occurring?

- A) Chemical damage.
- B) Thermal damage.
- C) Mildew damage.
- D) Mechanical damage.

Answer --> B

Notes) Page 826, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1195) All of the following can cause chemical damage to a hose except –

- A) Ultraviolet radiation.
- B) Paints.
- C) Acids.
- D) Petroleum products.

Answer --> A

Notes) Page 828, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1196) You return from a fire in the chemistry department of the local community college. The hoselines have been exposed to a 10% solution of nitric acid. What is the best way to clean this hose?

- A) Thoroughly scrub the hose with a brush and a solution of sodium bicarbonate and water.
- B) Thoroughly scrub the hose with a brush and a solution of white wine vinegar and water.
- C) Thoroughly scrub the hose with a brush and a solution of sodium nitrate and water.
- D) The hose cannot be cleaned and should be removed from service.

Answer --> A

Notes) Page 829, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

You should also remove the hose from service and contact the manufacturer for further maintenance procedures.

1197) Which type of hose must be thoroughly dried before reloading on the apparatus?

- A) Hard-rubber booster hose.
- B) Hard intake hose.
- C) Rubber-jacket collapsible hose.
- D) Woven-jacket hose.

Answer --> D

Notes) Page 832, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1198) Woven-jacket hose should be removed, inspected, swept, and reloaded back on apparatus if it has not been used within –

- A) 1 week.
- B) 30 days.
- C) 6 months.
- D) 1 year.

Answer --> C

Notes) Page 828, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1199) Normally, most fire hose is cleaned simply by brushing it off or washing it with clear water. How would you wash fire hose if it were exposed to oil?

- A) Clear water.
- B) Mild soap or detergent.
- C) Mineral spirits mixed with water.
- D) 10% alcohol solution.

Answer --> B

Notes) Page 832, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1200) The most common types of hose washing machines will wash fire hose up to __ in diameter.

- A) 2 inches.
- B) 3 inches.
- C) 6 inches.
- D) 8 inches.

Answer --> B

Notes) Page 832, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1201) Fire hose couplings are normally made from varied percentages of all of the following alloys except –

- A) Brass.
- B) Bronze.
- C) Aluminum.
- D) Magnesium.

Answer --> B

Notes) Page 820, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1202) In the fire service, the most commonly used hose couplings are –

- A) Threaded and nonthreaded types.
- B) Quarter turn.
- C) Oilfield rocker lug.
- D) Snap (Jones snap).

Answer --> A

Notes) Pages 821,823, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1203) The part of the coupling that serves as the point of attachment of the hose is called the –

- A) Base.
- B) Nose.
- C) Shank.
- D) Source.

Answer --> C

Notes) Page 821, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called the tailpiece, bowl, or shell.

All Chapters

1204) Threaded couplings are either __ or __ types.

- A) 1 piece, 2 piece.
- B) 2 piece, 4 piece.
- C) 3 piece, 4 piece.
- D) 3 piece, 5 piece.

Answer --> D

Notes) Page 821, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1205) When two or more hoselines are joined together how can a firefighter distinguish the male side of the coupling from the female side?

- A) The male side is made from a different alloy than the female side.
- B) The male side displays a larger shank.
- C) By noting the location of the Higbee cut.
- D) By noting the presence of the rocker lugs or pins on the shank. Only male shanks have rocker lugs or pins.

Answer --> D

Notes) Page 822, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Knowledge of this little fact could someday save your life. The shank on the female coupling is smooth. It has no rocker lugs. The female swivel has lugs, but not the shank. Remember this. If you are in total darkness, and disoriented, the hoseline can lead you out of a building.

Always feel for the presence of rocker lugs on the male coupling. Follow the male coupling and it will lead you out of the building.

Remember the male coupling is next to the hose. The smooth female coupling is also next to the hose. The female swivel is on the opposite side of the female shank. So feel for the hose and then move your hand until you feel the shank. If it is smooth it is the female end. If it has rocker lugs, it's the male. Follow the male.

1206) What is the main purpose of the "Higbee cut?"

- A) Helps prevent cross-threading of the coupling.
- B) Helps prevent couplings from becoming too tight.
- C) Helps reduce friction loss.
- D) Serves as a point of attachment for a spanner wrench.

Answer --> A

Notes) Page 821, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1207) Which type of coupling lug is not commonly ordered, because of its tendency to hang when the hose is dragged over objects?

- A) Pin-lug.
- B) Rocker.
- C) Recessed.
- D) Surface.

Answer --> A

Notes) Page 822, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1208) Booster lines commonly have which type of coupling lugs?

- A) Pin-lug.
- B) Rocker.
- C) Recessed.
- D) Booster lines normally do not have couplings.

Answer --> C

Notes) Page 822, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1209) Which hand tool is normally used to tighten and loosen fire hose couplings?

- A) Adjustable wrench.
- B) Monkey wrench.
- C) Spanner wrench.
- D) Locking wrench.

Answer --> C

Notes) Page 822, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1210) Storz-type couplings (sexless couplings) are designed to connect and disconnect from each other with only a –

- A) 1/4 turn.
- B) 1/3 turn.
- C) 1/2 turn.
- D) 3/4 turn.

Answer --> B

Notes) Page 824, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change again from last version. The 4th Edition stated on page 405 to be 1/3 turn. Essentials 5th Edition page 641 has it at 1/4 turn. The answer is again back to 1/3 turn.

All Chapters

1211) How should the swivel of a fire hose coupling be cleaned?

- A) It should be sent through a hose washing machine.
- B) With a wire brush to remove tar, asphalt, or other foreign material.
- C) It should be submerged in warm, soapy water and worked forward and backward.
- D) All the above.

Answer --> C

Notes) Page 835, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hose-washing machines will not clean coupling sufficiently. The male coupling may need to be cleaned with a stiff brush, or wire brush if the threads are clogged with tar, asphalt, or other foreign materials.

1212) Hose that is used by trained firefighters to combat fires is called –

- A) Attack hose.
- B) Supply hose.
- C) Fire hose.
- D) All the above.

Answer --> A

Notes) Page 816, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1213) Hose that is designed for the purpose of moving water between the water source and a pump that is supplying attack hoselines or fire suppression systems is called –

- A) Supply hose.
- B) Intake hose.
- C) Water shuttle hose.
- D) Soft suction hose.

Answer --> A

Notes) Page 816, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1214) Intake hose that connects pumping apparatus or portable pumps to a water source is called –

- A) Soft sleeve hose.
- B) Hard suction hose.
- C) Suction hose.
- D) Intake suction hose.

Answer --> C

Notes) Page 818, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1215) All of the following would be considered hose appliances except –

- A) Valve devices.
- B) Wyes.
- C) Hose clamps.
- D) Water thieves.

Answer --> C

Notes) Page 835, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hose appliances have water flowing through them. Hose tools do not.

1216) All of the following would be considered hose tools except –

- A) Siamese.
- B) Hose rollers.
- C) Spanner wrenches.
- D) Hose clamps.

Answer --> A

Notes) Page 840, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Hose appliances have water flowing through them. Hose tools do not.

1217) Which type of valve is used to control water flowing from a hydrant and has a baffle that is moved by a handle or screw arrangement?

- A) Ball valve.
- B) Gate valve.
- C) Butterfly valve.
- D) Clapper valve.

Answer --> B

Notes) Page 836, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1218) Which type of valve is used in a siamese appliance to allow only one intake hose to be connected and charged before additional hoses are connected.

- A) Ball valve.
- B) Gate valve.
- C) Butterfly valve.
- D) Clapper valve.

Answer --> D

Notes) Page 836, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1219) Which valve is used in large pump intakes, and uses a flat baffle operated by a quarter-turn handle?

- A) Ball valve.
- B) Gate valve.
- C) Butterfly valve.
- D) Clapper valve.

Answer --> C

Notes) Page 836, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1220) Which valve is closed when the handle is at right angles to the hose and open when the handle is in line with the hose? Used in pumper discharges and gated wyes.

- A) Ball valve.
- B) Gate valve.
- C) Butterfly valve.
- D) Clapper valve.

Answer --> A

Notes) Page 836, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1221) The hose appliance which has two or three female connectors coming into the appliance, and a single male discharge exiting the appliance is called a –

- A) Wye.
- B) Siamese.
- C) Water Thief.
- D) Manifold.

Answer --> B

Notes) Page 837, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters sometimes confuse Siamese and wye appliances because of their similar appearances. Wye appliances divide a single hoseline into multiple lines, while a Siamese combines multiple lines into one line.

1222) The hose appliance which has one large female intake coming into the appliance and 2 or more male discharges exiting the appliance is called a –

- A) Wye.
- B) Siamese.
- C) Water Thief.
- D) Manifold.

Answer --> A

Notes) Page 835, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1223) The most common wye has –

- A) One 2 1/2 inch inlet and two 1 1/2 inch outlets.
- B) Two 2 1/2 inch inlets and one 1 1/2 inch outlet.
- C) One 1 1/2 inch inlet and two 2 1/2 inch outlets.
- D) Two 1 1/2 inch inlets and one 1 1/2 inch outlet.

Answer --> A

Notes) Page 837, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1224) What are Siamese appliances commonly used for?

- A) Overcoming friction loss problems in hose lays that must carry a large flow of water over a long distance.
- B) Allowing two or more attack hoselines to be used off the same supply line.
- C) Increasing the rate in which the water is pumped.
- D) Connecting two hoselines of different diameter.

Answer --> A

Notes) Page 837, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1225) Any of a variety of hose appliances with one female inlet for 2 1/2 inch or larger hose with three gated outlets, usually two 1 1/2 inch outlets and one 2 1/2 inch outlet is called a –

- A) Wye.
- B) Siamese.
- C) Water Thief.
- D) Manifold.

Answer --> C

Notes) Page 835, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1226) Which fitting is used to close off female couplings?

- A) Hose caps.
- B) Hose plugs.
- C) Reducers.
- D) Hose shunts.

Answer --> B

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1227) Which fitting is used to close off male couplings?

- A) Hose caps.
- B) Hose plugs.
- C) Reducers.
- D) Hose clamps.

Answer --> A

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1228) Which of the following is intended to prevent damage to a hose when it is dragged over sharp surfaces such as roof edges and windowsills?

- A) Hose Jackets.
- B) Hose Bridges.
- C) Hose Rollers.
- D) Hose clamps.

Answer --> C

Notes) Page 840, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1229) You are pumping an engine when you notice that a portion of hose has ruptured. Crews are inside fighting a structure fire and you have no time to shut down the line and replace the ruptured hose. What is the first hose tool you should consider using?

- A) Hose clamp.
- B) Hose jacket.
- C) Hose connector.
- D) None of the above. You need to shut down the line.

Answer --> B

Notes) Page 840, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1230) Which of the following are examples of hose clamps?

(1) Screw-Down (2) Hydraulic Press (3) Self-Locking Press (4) Press-Down

- A) 1, 3.
- B) 3, 4.
- C) 1, 2, 3.
- D) 1, 2, 4.

Answer --> D

Notes) Page 841, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1231) In which circumstance would you consider utilizing a hose clamp?

- A) To prevent charging a hose bed during a hose lay operation.
- B) To extend a hoseline without having to shut the water supply line down.
- C) To allow advancement of a hoseline up a stairway.
- D) All the above.

Answer --> D

Notes) Page 841, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also, to allow replacement of a burst hoseline without having to shut the line down.

1232) How far behind the apparatus should a hose clamp be applied? At least –

- A) 5 feet.
- B) 10 feet.
- C) 15 feet.
- D) 20 feet.

Answer --> D

Notes) Page 841, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1233) Firefighters should apply hose clamps no farther than __ from a coupling on the incoming water side.

- A) 5 feet.
- B) 10 feet.
- C) 15 feet.
- D) 20 feet.

Answer --> A

Notes) Page 841, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1234) Firefighters should exercise extra caution by standing to one side when applying and releasing –

- A) A press–Down hose clamp.
- B) A screw–Down hose clamp.
- C) A hydraulic Press.
- D) Any type of hose clamp

Answer --> D

Notes) Page 841, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1235) The primary purpose of a spanner wrench is to –

- A) Pull nails.
- B) Close gas valves.
- C) Tighten and loosen couplings.
- D) Pry objects open.

Answer --> C

Notes) Page 842, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1236) What tool would a firefighter use to tighten intake hose couplings to ensure an airtight connection?

- A) Rubber mallet.
- B) Sledge hammer.
- C) Pocket spanner wrench.
- D) Hydrant wrench.

Answer --> A

Notes) Page 842, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1237) All of the following can be used as an aid in carrying and handling charged hoselines except –

- A) Hose strap.
- B) Hose holder.
- C) Hose chain.
- D) Hose rope.

Answer --> B

Notes) Page 844, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1238) Which hose roll is used to produce a compact roll that may be transported and carried for special applications such as high-rise operations?

- A) Straight roll.
- B) Donut roll.
- C) Twin donut roll.
- D) Triple donut roll.

Answer --> C

Notes) Page 845, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1239) Which hose roll consists of starting at one end (usually the male end) and rolling the hose towards the other end? When completed, the male coupling is protected in the center of the roll and the female coupling is exposed.

- A) Straight roll.
- B) Donut roll.
- C) Twin donut roll.
- D) Triple donut roll.

Answer --> A

Notes) Page 844, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1240) Which hose roll is used in situations where the hose is going to be deployed for use directly from the roll?

- A) Straight roll.
- B) Donut roll.
- C) Twin Donut roll.
- D) Self-Locking Twin Donut roll.

Answer --> B

Notes) Page 845, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1241) A coupling with no distinct male or female components is called a -

- A) Threaded coupling.
- B) Nonthreaded coupling,
- C) Storz coupling.
- D) B and C.

Answer --> D

Notes) Page 821, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1242) Which hose roll has a built in carrying strap formed from the hose itself?

- A) Straight roll.
- B) Donut roll.
- C) Twin Donut roll.
- D) Self-Locking Twin Donut Roll.

Answer --> D

Notes) Page 846, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1243) The purpose of a "Reducer" is to –

- A) Extend a larger diameter hoseline by connecting a smaller diameter hoseline to the end.
- B) Extend a smaller diameter hoseline by connecting a larger diameter hoseline to the end.
- C) Prevent cross threading when attaching hoselines of different diameter.
- D) Reduces the amount of friction exerted on the hoseline when water is pumped at high volumes.

Answer --> A

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1244) All of the following are examples of hose loads except the –

- A) Horseshoe load.
- B) Figure eight load.
- C) Flat load.
- D) Accordion load.

Answer --> B

Notes) Page 847, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1245) Hose that is laid progressively on edge in folds that lie adjacent to each other, best describes which of the following hose loads?

- A) Accordion load.
- B) Horseshoe load.
- C) Flat load.
- D) Edge load.

Answer --> A

Notes) Page 848, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1246) Hose that is laid on edge around the perimeter of the hose bed in a "U" shape configuration, best describes which of the following hose loads?

- A) Accordion load.
- B) Horseshoe load.
- C) Flat load.
- D) Edge load.

Answer --> B

Notes) Page 848, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1247) Which of the following hose loads is the easiest to load on to the apparatus?

- A) Accordion load.
- B) Horseshoe load.
- C) Flat load.
- D) Edge load.

Answer --> C

Notes) Page 847, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1248) The main disadvantage of the flat hose load is –

- A) It is subject to wear on the edges of the hose.
- B) It comes out of the hose bed in a wavy snake like pattern upon the street.
- C) It contains sharp bends at both ends which require that the hose be periodically reloaded to prevent damaging the lining.
- D) Is more subject to wear from apparatus vibration during travel than the other loads.

Answer --> C

Notes) Page 847, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1249) Firefighters should follow all of the following guidelines regarding hose loading except –

- A) Check the gaskets and swivels before connecting any couplings.
- B) Remove any kinks twists from the hose when it must be bent to form a loop in the hose bed.
- C) Couplings should be tightened by hand and firefighters should never use wrenches or undue force.
- D) Keep the flat sides of the hose in the same plane when two sections of the hose are connected, making sure that all lugs are aligned as well.

Answer --> D

Notes) Page 852, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It is not necessary to align the lugs, but you should keep the flat sides of the hose in the same plane when two sections of hose are connected.

1250) How can a firefighter tell if fire hose has been properly loaded on to the hose bed?

- A) A firefighter should not be able to slide his/her hand between the folds.
- B) A firefighter should not be able to slide the tip of a Halligan bar between the folds.
- C) A firefighter should be able to slide his/her gloved hand between the folds.
- D) A firefighter should be able to slide the tip of a Halligan bar between the folds.

Answer --> C

Notes) Page 852, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1251) The hose lay for large diameter hose should be started ___ from the front of the hose bed.

- A) 2 to 6 inches.
- B) 6 to 12 inches.
- C) 12 to 18 inches.
- D) 18 to 22 inches.

Answer --> C

Notes) Page 848, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The extra space is reserved for the couplings. It allows them to pay out without flipping them over.

1252) Which hose load is the best way to load large diameter hose?

- A) Flat load.
- B) Horseshoe load.
- C) Accordion load.
- D) Edge role.

Answer --> A

Notes) Page 847, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1253) Extra hose added to the basic load to provide enough hose to make a hydrant connection, and also to provide a working line on the fire ground is called a(an) -

- A) Attack prep load.
- B) Straight prep.
- C) Hose load finish.
- D) Hose load source.

Answer --> C

Notes) Page 850, Essentials Of Fire Fighting And Fire Department Operations, 56th Edition.

1254) A short fold or reverse bend in the hose for the purpose of preventing complications with couplings while the hose is being pulled out is commonly called a -

- A) Kink.
- B) Hose fold.
- C) Safety fold.
- D) Dutchman.

Answer --> D

Notes) Page 852, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1255) Which hose finish would you utilize when making a forward lay?

- A) Straight finish.
- B) Straight horseshoe finish.
- C) Reverse horseshoe finish.
- D) Reverse accordion finish.

Answer --> A

Notes) Page 850, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1256) Which hose finish would you utilize when making a reverse lay?

- A) Straight finish.
- B) Straight horseshoe finish.
- C) Reverse horseshoe finish and skid load finish.
- D) Reverse accordion finish.

Answer --> C

Notes) Page 850, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1257) What is the main advantage of using a straight finish?

- A) It can be carried to the fire ground by one firefighter.
- B) Expedites removing fire fighting equipment.
- C) Speeds up the operation of pulling hose when making a hydrant.
- D) Can be utilized for a preconnected line.

Answer --> C

Notes) Page 850, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1258) The preconnected hose load, that can be pulled and advanced by one firefighter; that is slung over the shoulder and advanced, while the load pays off the firefighter's shoulder is called
-

- A) Minuteman load.
- B) Triple layer load.
- C) Preconnected flat load.
- D) Booster load.

Answer --> A

Notes) Page 854, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1259) The type of non collapsible hose, which is stored upon a reel, that can be quickly deployed by firefighters, is called –

- A) Minuteman load.
- B) Triple layer load.
- C) Preconnected flat load.
- D) Booster hoseline.

Answer --> D

Notes) Page 855, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1260) What is the main disadvantage of a Triple Layer Load?

- A) The three layers which can be as long as 50 feet, have to be completely removed before leading in the nozzle end of the hose.
- B) The load can snag on obstacles.
- C) The load is awkward to carry while wearing SCBA.
- D) It can not be used for 2 and 2 1/2 inch hose.

Answer --> A

Notes) Page 854, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1261) Threaded couplings are usually arranged so that –

- A) The male coupling is towards the water source and the female coupling is towards the fire.
- B) The female coupling is towards the water source and the male coupling is towards the fire.
- C) Does not matter as long as you are using a forward lay.
- D) Does not matter as long as you are using a reverse lay.

Answer --> B

Notes) Page 856, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1262) When hose is laid from the water source to the fire, it is called a –

- A) Reverse lay.
- B) Combination lay.
- C) Forward lay.
- D) Inverted lay.

Answer --> C

Notes) Page 856, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1263) When hose is laid from the fire to the water source it is called a –

- A) Reverse lay.
- B) Combination lay.
- C) Forward lay.
- D) Inverted lay.

Answer --> A

Notes) Page 858, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1264) If an apparatus is equipped with Storz couplings, firefighters must use –

- A) A forward lay.
- B) A reverse lay.
- C) A combination lay.
- D) Does not matter as long as the pump operator is equipped with the proper fittings and adapters.

Answer --> D

Notes) Page 861, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1265) The primary advantage of a forward lay is that –

- A) The first-in engine company can size-up the fire scene before laying a supply line.
- B) The pumper is able to remain at the scene so its equipment can be easily accessed by firefighters.
- C) It prevents the need for a second pumper in setting up a relay pumping operation.
- D) It is not necessary to use a four-way hydrant valve.

Answer --> B

Notes) Page 856, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1266) Which of the following equipment would be used by a firefighter to make a hydrant?

(1) Spanner wrench (2) Hydrant wrench (3) Four-way hydrant valve (4) Rubber mallet (5) Reducers

- A) 2, 3.
- B) 2, 3, 4.
- C) 1, 2, 3.
- D) 1, 2, 4, 5.

Answer --> C

Notes) Page 907, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1267) When performing a forward lay operation, which of the following is used to anchor the hose?

- A) Service pole.
- B) Sturdy sign post.
- C) Mailbox.
- D) Hydrant.

Answer --> D

Notes) Page 906, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1268) Which of the following has become the standard method for setting up a relay pumping operation?

- A) Laying hose from the water source back to the fire scene.
- B) Laying hose from the fire scene back to the water source.
- C) Utilizing a split lay is always the best way to set up a relay pumping operation.
- D) There is no standard method for setting up a relay pumping operations. Relay pumping set up is dictated by the situation.

Answer --> B

Notes) Page 858, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1269) When making pumper to hydrant connections, what techniques are used to prevent any kinks from forming in the hose when the line is charged?

- A) Make sure the hose is laid out flat, with the male and female coupling in-line with each other.
- B) Use of hard suction connections between the hydrant and the apparatus is an effective and easy method of reducing kinks.
- C) Put two twists in the hose before making the connections.
- D) None of the above are effective.

Answer --> C

Notes) Not listed in Essentials 6th Edition. Knightlite left question in because of its value.

1270) Which of the following would constitute a "combination lay?"

- A) Two lines laid forward.
- B) Two lines laid reverse.
- C) A forward lay followed by a reverse lay.
- D) All the above.

Answer --> D

Notes) Page 861, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1271) Advancing a __ involves placing the nozzle and the fold of the first tier on the firefighter's shoulder, and walking away from the apparatus towards the fire.

- A) Preconnected flat load.
- B) Minuteman load.
- C) Triple layer load.
- D) Wyed line load.

Answer --> C

Notes) Page 912, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1272) Firefighters entering a burning building should do all of the following except –

- A) Feel the door using the back of the hand with glove off.
- B) Stay low and out of the doorway thus avoiding blocking ventilation.
- C) Have backup firefighter(s) stand on the opposite side of the hose, than the firefighter on the nozzle to ensure stability.
- D) Bleed any air out of the line before entering the fire area.

Answer --> C

Notes) Page 863, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should always position themselves on the same side of the hoseline.

1273) In most cases involving advancing hoselines downstairs, firefighters should do which of the following?

- A) The line should be charged when advancing hoselines downstairs.
- B) The line should not be charged when advancing hoselines downstairs.
- C) The line should only be charged if the firefighters are sure there is fire present.
- D) Firefighters should never advance hoseline downstairs in working structure fires.

Answer --> A

Notes) Page 863, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1274) When fighting tall building fires, which of the following statements is true?

- A) Preconnected hoselines should be pulled from the apparatus and advanced to the fire area without regard for the distance between the apparatus and the fire.
- B) Hose should be carried into the building and connected to stand pipes located one floor above the fire floor.
- C) Hose should be carried into the building and connected to stand pipes located one floor below the fire floor.
- D) Hose should be carried into the building and connected to standpipes located on the same floor as the fire.

Answer --> C

Notes) Page 864, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1275) How many firefighters are needed to advance a dry hoseline up a three section ladder?

- A) 2
- B) 3
- C) 4
- D) 5

Answer --> B

Notes) Page 867, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Only one person is allowed on each section of the ladder.

1276) How many firefighters are needed to secure a 2 1/2 inch hose; when the hose is positioned in a large loop and crosses the loop over the line about 2 feet from behind the nozzle, where the nozzleman sits on the hose where it crosses?

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> A

Notes) Page 870, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1277) Which of the following is the safest way to control a loose hoseline?

- A) Position a hose clamp 5 feet from the closest coupling to the water source.
- B) Place a kink in the hose close to the water source.
- C) Make a flying leap for the nozzle.
- D) Cut off water flow to the hoseline.

Answer --> D

Notes) Page 871, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1278) When using the One-Firefighter method for operating a small size hose and nozzle, the hoseline should be straight for at least ___ behind the nozzle, and the firefighter should face in the direction the fire stream is projecting.

- A) 4 feet.
- B) 5 feet.
- C) 10 feet.
- D) 12 feet.

Answer --> C

Notes) Page 932, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1279) In utilizing the Two-Firefighter method of handling hoselines, the backup firefighter should do which of the following?

- A) Stand 3 feet behind the nozzleman.
- B) Keep the hose straight behind the nozzleman.
- C) Braces the hose against his(her) waist and hip.
- D) All the above.

Answer --> D

Notes) Page 869, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1280) The method for breaking a coupling in which a single firefighter stabilizes the coupling by placing one knee on the hose and shank of the female coupling, while rotating the swivel, is known as –

- A) Foot-tilt method.
- B) Knee-press method.
- C) Stiff-arm method.
- D) Stiff-leg method.

Answer --> B

Notes) Page 878, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1281) Firefighter Bill and Firefighter Bob are attempting to couple a fire hose using the two firefighter method. Firefighter Bill has the male coupling and Firefighter Bob has the female coupling. Which of the following would best describe Firefighter Bill's role in this operation?

- A) Firefighter Bill brings the two couplings together and aligns their positions.
- B) Firefighter Bill notes the location of the Higbee indicator.
- C) Firefighter Bill does nothing but hold the male coupling.
- D) Firefighter Bill turns the female swivel clockwise to complete the connection.

Answer --> C

Notes) Page 876, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

It also helps if Firefighter Bill looks away in another direction. That makes it easier for Firefighter Bob to make the connection without Bill trying to help.

1282) Why should dry hose be rolled in a straight roll for storage?

- A) To prevent the hose jacket from becoming mildewed.
- B) To protect the male coupling.
- C) It prevents mechanical damage to the hose jacket.
- D) To keep the liner from drying out.

Answer --> D

Notes) Page 826, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1283) Which hose appliance allows an original supply line to be connected to a hydrant and charged before the arrival of another pumper at the hydrant.

- A) Hydrant valve.
- B) Water thief.
- C) Manifold.
- D) Gated Wye.

Answer --> A

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1284) A device that facilitates the connection of hose lines of different sizes to provide an uninterrupted flow of extinguishing agent is called –

- A) Adapter.
- B) Fitting.
- C) Reducer.
- D) Enlarger.

Answer --> B

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1285) A fitting for connecting hose couplings with dissimilar threads, but comprising the same inside diameter is called –

- A) Adapter.
- B) Intake device.
- C) Reducer.
- D) Coupling device.

Answer --> A

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1286) An adapter used to attach a smaller hoseline to a larger one is called –

- A) Reducing adapter.
- B) Reducing device.
- C) Reducer.
- D) Condenser.

Answer --> C

Notes) Page 838, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1287) The main hose-carrying area of a pumper or other piece of apparatus designed to carry hose is called the –

- A) Hose stall.
- B) Hose compartment
- C) Hose bed.
- D) Hose hold.

Answer --> C

Notes) Page 846, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1288) An arrangement of hose usually placed on top of a hose load and connected to the end of the load is called the –

- A) Finish.
- B) Ending.
- C) Termination.
- D) Finale.

Answer --> A

Notes) Page 847, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called hose load finish.

1289) Which hose load finish consists of folding the last three lengths of hoseline into a compact bundle on top of the rest of the hose load?

- A) Straight finish.
- B) Reverse horseshoe finish.
- C) Skid load finish.
- D) Dutchman's finish.

Answer --> C

Notes) Page 851, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1290) The primary lines used for fire attack by most fire departments are –

- A) Minuteman packs.
- B) Preconnected hoselines.
- C) 1 3/4 inch loads.
- D) Fixed master streams.

Answer --> B

Notes) Page 852, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1291) A hose lay deployed by two pumpers, one making a forward lay and one making a reverse lay from the same point is called a –

- A) Broken lay.
- B) Combination lay.
- C) Center lay.
- D) Split lay.

Answer --> B

Notes) Page 861, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was D split lay.

1292) The quickest and easiest way to move fire hose at ground level is by utilizing the –

- A) Ground drag.
- B) Fast drag.
- C) Working line drag.
- D) Shoulder drag.

Answer --> C

Notes) Page 862, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1293) When should firefighters use elevators in burning buildings?

- A) When the stairwells are full of smoke.
- B) When the stairwells are involved in fire.
- C) When the building is over 10 stories.
- D) In rare instances.

Answer --> D

Notes) Page 864, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1294) The procedure for kinking a hose to control a loose hoseline is effective in all but which of the following hose?

- A) Forestry hose.
- B) 1 3/4 inch hose.
- C) 2 1/2 inch hose.
- D) LDH hose.

Answer --> D

Notes) Page 871, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

LDH hose is too large and too heavy to kink when charged.

All Chapters

1295) The boiling point of water is –

- A) 100 degrees F.
- B) 140 degrees F.
- C) 200 degrees F.
- D) 212 degrees F.

Answer --> D

Notes) Page 945, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

A firefighter should know that scalding of skin will occur at 140 degrees F.

1296) At its boiling point, water will expand approximately __ times its normal volume.

- A) 500
- B) 1000
- C) 1200
- D) 1700

Answer --> D

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1297) The primary way water extinguishes fire is by –

- A) Smothering the fire.
- B) Cooling the fire by absorbing its heat.
- C) Chemically inhibiting the fire.
- D) Removing the fuel from the fire.

Answer --> B

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Water absorbs heat from the fire thus extinguishing it.

1298) Which of the following statements regarding the characteristics of water are NOT true?

- A) Water has a greater heat-absorbing capacity than other common extinguishing agents.
- B) A relatively small amount of heat is required to change water into steam.
- C) Water is readily available and relatively inexpensive.
- D) Water can be applied in a variety of ways.

Answer --> B

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

A relatively large amount of heat is required to change water into steam. There is a high latent heat of vaporization.

All Chapters

1299) All of the following factors will influence the way a stream of water or other extinguishing agents pass through space except –

- A) Barometric pressure.
- B) Gravity.
- C) Wind.
- D) Air friction.

Answer --> A

Notes) Page 949, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also the stream is affected by –

The velocity of the water.
The operating pressure.
The nozzle design an adjustment.
The condition of the nozzle opening.
The fire streams that are utilized.

1300) The condition in which a fire stream leaves a nozzle is influenced by which of the following factors?

(1) Operating Pressure (2) Nozzle Manufacturer (3) Nozzle Design (4) Nozzle Adjustment
(5) Condition of the nozzle orifice

- A) 1, 2, 3, 4.
- B) 1, 2, 4, 5.
- C) 1, 3, 4, 5.
- D) 1, 2, 3, 4, 5.

Answer --> C

Notes) Page 950, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1301) __ is defined as the loss of pressure created by the turbulence of water moving against the interior walls of fire hose, pipes, fittings, and adapters.

- A) Friction pressure.
- B) Friction loss.
- C) Vapor pressure.
- D) Velocity pressure.

Answer --> B

Notes) Page 947, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

All Chapters

1302) Parallel or siamese hoselines are used in order to –

- A) Reduce flow and reduce friction.
- B) Increase flow and increase friction.
- C) Increase flow and reduce friction.
- D) Reduce flow and increase friction.

Answer --> C

Notes) Page 948 Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1303) In order to reduce pressure loss due to friction, firefighters should do all but which of the following?

- A) Use adapters only when necessary.
- B) Eliminate sharp bends.
- C) Use short lines as much as possible.
- D) Keep nozzles and valves only partially open when possible.

Answer --> D

Notes) Page 948, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Nozzles and valves should be fully open.

1304) In fire fighting elevation refers to –

- A) The current floor the attack lines are working on.
- B) The position of the fire in relation to sea level.
- C) The position of the nozzle in relation to the pumping apparatus.
- D) The position of the pumping apparatus in relation to sea level.

Answer --> C

Notes) Page 948, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1305) __ refers to the gain or loss of pressure in a hoseline due to a change in elevation.

- A) Elevation pressure.
- B) Elevation friction.
- C) Elevation effect.
- D) Elevation velocity.

Answer --> A

Notes) Page 948, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1306) The effects of elevation pressure are caused by which of the following factors?

- A) The effect of gravitational pull from the moon on any given day of the month.
- B) The force of gravity.
- C) The rate in which the water is pumped.
- D) Barometric pressure and other weather factors.

Answer --> B

Notes) Page 948, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1307) When water flowed through a hoseline or pipe is suddenly stopped, the resulting surge of pressure is referred to as –

- A) Water hammer.
- B) Water surge.
- C) Hyper-water surge.
- D) Water wrench.

Answer --> A

Notes) Page 949, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1308) Which of the following is not a major type of fire stream.

- A) Solid.
- B) Broken.
- C) Fog.
- D) Mist.

Answer --> D

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1309) Fire streams are classified into one of three sizes. Which of the following does not represent one of the three?

- A) Low-volume stream.
- B) High-volume stream.
- C) Handline stream.
- D) Master stream.

Answer --> B

Notes) Pages 950–951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1310) The best way to avoid causing a water hammer is to –

- A) Shut down pumpers before any nozzles, or valves are closed.
- B) Close nozzles and valves slowly.
- C) Close nozzles and valves quickly.
- D) Any of the above depending on the situation.

Answer --> B

Notes) Page 949, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

That includes hydrants, control valves, and hose clamps.

1311) A fire stream that discharges less than 40 gallons per minute would be classified as a –

- A) Low volume stream.
- B) Handline stream.
- C) Hoseline stream.
- D) Master stream.

Answer --> A

Notes) Page 950, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1312) A fire stream that discharges 40 to 350 gallons per minute would be considered a –

- A) Low volume stream.
- B) Handline stream.
- C) Broken stream.
- D) Master stream.

Answer --> B

Notes) Page 950, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1313) A fire stream that discharges more than 350 gpm would be classified as a –

- A) Booster stream.
- B) Tanker stream.
- C) Master stream.
- D) Pumper stream.

Answer --> C

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1314) Which of the following are essential components of a fire stream?

(1) Pump (2) Wetting agent (3) Hose (4) Proportioner (5) Agent (6) Nozzle

- A) 1, 2, 3, 4, 5, 6.
- B) 1, 3, 5, 6.
- C) 1, 3, 4, 5, 6.
- D) 1, 3, 4, 6.

Answer --> B

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1315) The fire stream produced from a fixed, smoothbore nozzle is known as a –

- A) Fog stream.
- B) Solid stream.
- C) Water curtain.
- D) Broken stream.

Answer --> B

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1316) Fog nozzles permit which of the following fire stream patterns?

(1) Straight stream (2) Narrow-angle fog (3) Water curtain (4) Wide angle fog

- A) 2, 3, 4.
- B) 1, 3, 4.
- C) 1, 2, 4.
- D) 1, 2, 3, 4.

Answer --> C

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1317) Fire streams that have been formed into coarse divided droplets are known as –

- A) Solid streams.
- B) Straight streams.
- C) Broken streams.
- D) Fog streams.

Answer --> C

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1318) Which fire stream is less likely to disturb the thermal layering in an interior structure fire attack?

- A) Solid stream.
- B) Broken stream.
- C) Fog stream.
- D) Foam stream.

Answer --> A

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1319) If a solid stream is used on a handline it should be operated at –

- A) 25 psi.
- B) 50 psi.
- C) 80 psi.
- D) 100 psi.

Answer --> B

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1320) A solid master stream device should operate at a pressure of –

- A) 25 psi.
- B) 50 psi.
- C) 80 to 100 psi.
- D) Over 100 psi.

Answer --> C

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version – old answer was 80 psi.

1321) Which of the following statements regarding solid streams is NOT true?

- A) Solid streams have a greater reach than other types of streams.
- B) Solid streams have greater penetration power than other types of streams.
- C) Solid streams operate at reduced nozzle pressures per gallon than other types of streams.
- D) Solid streams can absorb more heat than other types of streams.

Answer --> D

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Solid streams provide less heat absorption per gallon delivered than other types of streams.

All Chapters

1322) Typically, all of the following would be considered broken stream nozzles except –

- A) Automatic nozzle.
- B) Water curtain nozzle.
- C) Cellar nozzle.
- D) Piercing nozzle.

Answer --> A

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Automatic nozzles produce fog streams.

1323) The point at which a fire stream begins to lose its forward velocity is known as –

- A) Point of breakover.
- B) Point of friction equilibrium.
- C) Point velocity reduction.
- D) Point of jet reduction.

Answer --> A

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1324) The desired performance of a fog nozzle is judged by –

- A) The angle of the fog pattern.
- B) The amount of heat the fog stream can absorb.
- C) The distance the fog stream can travel.
- D) The ease in which the firefighter can hold the nozzle.

Answer --> B

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1325) Firefighters would use broken stream nozzles in all of the following situations except –

- A) Class C fires.
- B) Attic fires.
- C) Confined space fires.
- D) Below ground fires.

Answer --> A

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Obviously, a Class C fire is an electrical fire.

All Chapters

1326) All of the following would be considered one of the three principle types of control valves in handline nozzles except –

- A) Ball valve.
- B) Butterfly valve.
- C) Slide valve.
- D) Rotary valve.

Answer --> B

Notes) Page 962, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1327) The major difference between the rotary control valve and other types of handline nozzle valves, is which of the following –

- A) Nozzles with rotary control valves have a greater reach than other types.
- B) The rotary control valve allows for greater nozzle pressure.
- C) Nozzles with rotary control valves possess a limited stream angle range.
- D) The rotary control valve also controls the discharge pattern.

Answer --> D

Notes) Page 963, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1328) The nozzle that utilizes a sliding cylinder, which depending on its relative position to the cone, determines the amount of water flow, best describes which of the following nozzle control valve types?

- A) Ball valve.
- B) Slide valve.
- C) Butterfly valve.
- D) Rotary valve.

Answer --> B

Notes) Page 963, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1329) Maintenance for fire nozzles should include which of the following?

- A) Thoroughly cleaning with soap and water and a soft bristle brush.
- B) Thoroughly cleaning with soap and water with a stiff wire brush.
- C) Soaking the nozzle in 70% ethanol for at least one hour.
- D) Soaking the nozzle in a 50:50 acetone solution for at least one hour.

Answer --> A

Notes) Page 967, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1330) What may be the consequence, if ventilation is not provided ahead of hose teams involved in a direct or combination fire attack?

- A) The water will have little or no cooling effect upon the fire.
- B) The expansion capability of the water will be greatly reduced.
- C) There is a high possibility that steam and even fire will roll back over and around the hose team.
- D) Water will change to steam at a much slower rate.

Answer --> C

Notes) Page 946, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1331) Which method of proportioning is the simplest and most accurate way of mixing foam concentrate and water?

- A) Induction.
- B) Injection.
- C) Batch-mixing.
- D) Premixing.

Answer --> C

Notes) Page 975, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1332) Which method of proportioning is typically used with portable extinguishers, wheeled extinguishers, skid-mounted twin-agent units, and vehicle-mounted tank systems?

- A) Induction.
- B) Injection.
- C) Batch-mixing.
- D) Premixing.

Answer --> D

Notes) Page 977, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1333) Which of the following statements regarding maintaining nozzles is not correct?

- A) Never drag or drop nozzles.
- B) Thoroughly clean nozzles after each use with soap and water using a soft bristle brush.
- C) Store nozzles with the control bale in the open position.
- D) Use the flush setting on fog nozzles to remove any internal debris.

Answer --> C

Notes) Page 967, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Store nozzles with the control bale in the closed position.

All Chapters

1334) Which of the following would not be considered one of the five factors that affect the reach of a fire stream?

(1) Temperature (2) Wind (3) Gravity (4) Fire stream pattern selection (5) Water droplet friction with air (6) Water velocity.

- A) 1
- B) 4
- C) 2
- D) 5

Answer --> A

Notes) Page 956, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1335) Which statement regarding the use of fog streams is not true?

- A) Fog streams do not have as much reach or penetrating power as solid streams.
- B) Fog streams are affected by wind than are solid streams.
- C) Fog streams help maintain the thermal layer better than solid streams.
- D) Fog streams may push air into the fire area, thus intensifying the fire.

Answer --> C

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Fog streams disrupt the thermal layer in a room or compartment if applied incorrectly.

1336) Which is the most common nozzle control valve that provides effective control during nozzle operation with a minimum of effort.

- A) Ball valve.
- B) Slide valve.
- C) Rotary control valve.
- D) All the above are equally common.

Answer --> A

Notes) Page 963, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1337) IFSTA defines a handline nozzle as any nozzle that 1 to ____ can safely handle.

- A) 2 firefighters.
- B) 3 firefighters.
- C) 4 firefighters.
- D) 5 firefighters.

Answer --> B

Notes) Page 981, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

All Chapters

1338) IFSTA defines a handline nozzle that flows less than –

- A) 100 gpm.
- B) 150 gpm.
- C) 250 gpm.
- D) 350 gpm.

Answer --> D

Notes) Page 981, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1339) The use of solid-bore nozzles is limited to –

- A) Certain Class A foam applications.
- B) All Class A, and some Class B fires.
- C) All Class A, B, and de-energized Class C fires.
- D) Class D and Class K fires only.

Answer --> A

Notes) Page 981, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

1340) The amount of heat required to raise the temperature of a specific unit mass of a material 1 degree in temperature is known as –

- A) A calorie.
- B) A BTU.
- C) Latent heat of vaporization.
- D) Specific heat.

Answer --> D

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1341) The quality of heat absorbed by a substance at the point at which it changes from a liquid to a vapor is known as –

- A) Evaporation.
- B) Condensation.
- C) Latent heat of vaporization.
- D) Specific heat.

Answer --> C

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1342) What is the latent heat of vaporization of water at its boiling point of 212 Fahrenheit?

- A) 465 BTU/lb.
- B) 675 BTU/lb.
- C) 970 BTU/lb.
- D) 1232 BTU/lb.

Answer --> C

Notes) Page 944, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1343) In a compartment fire, the volume of steam that is produced depends on -

- A) The amount of water that is applied.
- B) The extent of the fire within the compartment.
- C) The amount of friction loss within the hoseline.
- D) The configuration of the fire stream.

Answer --> A

Notes) Page 946, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1344) The efficiency with which a fire stream absorbs heat is largely dependent upon -

- A) The surface area of the water introduced onto the fuel surface.
- B) The surface area of the water introduced into the heated environment.
- C) The flow of water coming from the nozzle.
- D) A and B.

Answer --> D

Notes) Page 946, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1345) Which of the following statements is not true?

- A) When water turns to steam in the upper layer of hot smoke and fire gases, the upper layer tends to expand rather than shrink.
- B) As water vapor rises, the hot gases are cooled and the upper layer contracts.
- C) Cooling the upper layer requires vaporizing the water while it passes through the hot gases.
- D) When water is directed into the hot upper layer of fire gases, the total amount of steam increases and fills the room with a mixture of hot smoke and steam, thus the upper layer of smoke expands downward.

Answer --> A

Notes) Page 947, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

When water turns to steam in the upper layer of hot smoke and fire gases, the upper layer tends to shrink rather than expand.

All Chapters

1346) The stream of water or other water-based extinguishing agent after it leaves the fire hose and nozzle until it reaches the desired point is called a

- A) Hose spray.
- B) Hose stream.
- C) Fire stream.
- D) Fire spray.

Answer --> C

Notes) Page 949, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1347) The minimum flow rate at which extinguishment can be achieved in a fire is call the -

- A) Decisive flow rate.
- B) Essential flow rate.
- C) Primary flow rate.
- D) Critical flow rate.

Answer --> D

Notes) Page 951, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1348) The velocity pressure at which water is discharged from a nozzle is called the -

- A) Nozzle velocity.
- B) Nozzle pressure.
- C) Fire stream pressure.
- D) Hoseline pressure.

Answer --> B

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1349) The fire stream of finely divided particles use for fire control is called a -

- A) Broken stream.
- B) Smooth stream.
- C) Solid stream.
- D) Fog stream.

Answer --> D

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1350) An adjustable pattern nozzle equipped with a shut off control device is called a –

- A) Combination nozzle.
- B) Fog nozzle.
- C) Smooth-bore nozzle.
- D) All the above.

Answer --> B

Notes) Page 954, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1351) A semi-solid stream that is produced by a fog nozzle is called a –

- A) Broken stream.
- B) Fog stream.
- C) Straight stream.
- D) Semi-solid stream.

Answer --> C

Notes) Page 955, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1352) What is the NFPA Standard for Fire Hose Connections (2009)?

- A) NFPA 1961.
- B) NFPA 1962.
- C) NFPA 1963.
- D) NFPA 1964.

Answer --> C

Notes) Page 957, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1353) A large-caliber water stream usually supplied by combining two or more hoselines into a manifold device or by fix piping that delivers 350 gallons per minute or more is called a –

- A) Master stream.
- B) Deck stream.
- C) Blitz stream.
- D) All the above.

Answer --> A

Notes) Page 957, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1354) On smooth bore nozzles, the purpose of the short, cylindrical section is to –

- A) Increase the reach of the hose stream.
- B) Increase the pressure of the hose stream.
- C) Give the water its round shape before discharge.
- D) Deliver the maximum gallons per minute at the tip.

Answer --> C

Notes) Page 958, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1355) A smooth bore nozzle tip should not be any larger than ____ the diameter of the hose.

- A) 1/4.
- B) 1/2.
- C) 5/8.
- D) 3/4.

Answer --> B

Notes) Page 958, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1356) When smooth bore nozzles are used on handlines, they are usually operated at what pressure?

- A) 50 psi.
- B) 100 psi.
- C) 150 psi.
- D) 200 psi.

Answer --> A

Notes) Page 959, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1357) The flow rate from smooth bore nozzles depends on –

- A) The velocity of the stream resulting from the pump pressure.
- B) The size of an nozzle orifice.
- C) The length of the hoseline.
- D) A and B.

Answer --> D

Notes) Page 959, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1358) An adjustable pattern fog nozzle in which the rated discharge is delivered at a designated nozzle pressure and nozzle setting is called –

- A) Basic fog nozzle.
- B) Constant gallonage fog nozzle.
- C) Constant pressure (automatic fog) nozzle.
- D) Constant/select gallonage fog nozzle.

Answer --> A

Notes) Page 959, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1359) A constant discharge rate fog nozzle with a feature that allows manual adjustment of the orifice to effect a predetermined discharge rate well the nozzle is flowing is called a –

- A) Basic fog nozzle.
- B) Constant gallonage fog nozzle.
- C) Constant pressure (automatic fog) nozzle.
- D) Constant/select gallonage fog nozzle.

Answer --> D

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1360) An adjustable pattern fog nozzle that discharges a constant discharge rate throughout the range of patterns from a straight stream to a wide fog at a designated nozzle pressure is called a –

- A) Basic fog nozzle.
- B) Constant gallonage fog nozzle.
- C) Constant pressure (automatic fog) nozzle.
- D) Constant/select gallonage fog nozzle.

Answer --> B

Notes) Page 959, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1361) An adjustable pattern fog nozzle in which the pressure remains relatively constant through a range of discharge rates is called a –

- A) Basic fog nozzle.
- B) Constant gallonage fog nozzle.
- C) Constant pressure (automatic fog) nozzle.
- D) Constant/select gallonage fog nozzle.

Answer --> C

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1362) Why should firefighters avoid abrupt changes in the reaction force of a hoseline?

- A) May increase friction loss.
- B) May create a water hammer.
- C) May disrupt the thermal layer.
- D) May throw firefighters off-balance.

Answer --> D

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1363) Automatic fog nozzles for hoselines are designed for which of the following flow rates?

- A) Low flows such as 10 gpm to 125 gpm.
- B) Mid-range flows such as 70 gpm to 200 gpm.
- C) High flows such as 70 gpm to 350 gpm.
- D) All the above.

Answer --> D

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1364) Automatic master stream fog nozzles are typically designed to flow between -

- A) 125 gpm to 200 gpm.
- B) 200 gpm to 450 gpm.
- C) 250 gpm to 550 gpm.
- D) 350 gpm to 1250 gpm.

Answer --> D

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1365) The designed operating pressure for most fog nozzles is -

- A) 50 psi.
- B) 75 psi.
- C) 100 psi.
- D) 125 psi.

Answer --> C

Notes) Page 961, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1366) The nozzle that consists of a rotating head with multiple outlets that distribute water in a circular pattern is called a –

- A) Cellar nozzle.
- B) Piercing nozzle.
- C) Garbage nozzle.
- D) Broken stream nozzle.

Answer --> A

Notes) Page 962, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1367) The nozzle that is used to access fires in concealed places is called a –

- A) Cellar nozzle.
- B) Piercing nozzle.
- C) Garbage nozzle.
- D) Broken stream nozzle.

Answer --> B

Notes) Page 962, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1368) The counterforce directed against a person holding a nozzle or a device holding a nozzle by the velocity of water being discharged is known as –

- A) Nozzle reaction.
- B) Nozzle kickback.
- C) Nozzle force.
- D) Hose stream reaction.

Answer --> A

Notes) Page 964, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1369) Who is responsible for determining the strategy and tactics for controlling a structure fire?

- A) The incident commander (IC).
- B) The Chief of the department.
- C) The first arriving officer.
- D) The first arriving firefighter.

Answer --> A

Notes) Page 1004, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1370) All the following skills would be considered Firefighter I except for –

- A) Suppression of Class B fuels.
- B) Suppression of vehicle fires.
- C) Suppression of structure fires.
- D) Suppression of Class D materials.

Answer --> A

Notes) Page 1003, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1371) Which statement regarding structure fire attack lines is NOT true?

- A) Firefighters should stay low while entering the structure.
- B) Any burning fascia, boxed cornices, or other doorway overhanging should be extinguished before entering the structure.
- C) Fire attack line deployment must be coordinated with ventilation in order to improve visibility and to make more accurate assessments of fire conditions.
- D) Attack lines should advance from the unburned side of the fire to keep from spreading the fire through the structure.

Answer --> D

Notes) Page 1013, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. CodeRQ

Answer change from last version. The traditional answer was to attack the fire on the unburned side. This is no longer considered true. Wind creates airflow patterns within a structure that directly increase fire expansion and firefighter casualties. You want the wind at your back.

1372) Just before entering a burning building, the nozzle firefighter should do all of the following except –

- A) Bleed the air out of the hoseline.
- B) Set the nozzle to the correct pattern.
- C) Extinguish any burning materials near the entrance of the building.
- D) Set up a water curtain to protect any threatened exposures.

Answer --> D

Notes) Page 1012, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1373) The offensive strategy used in fighting structure fires usually means deploying resources for interior tactical operations to accomplish incident priorities. Which of the following factors will help determine the tactics used during an offensive strategy?

- A) Value.
- B) Time.
- C) Size.
- D) All the above.

Answer --> D

Notes) Page 1005, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1374) Which of the following factors used during an offensive strategy would include tactical flow rates need it to control the fire, available resources, and fire conditions?

- A) Value.
- B) Time.
- C) Size.
- D) Hazards.

Answer --> C

Notes) Page 1005, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1375) Which of the following factors regarding a defensive strategy is incorrect?

- A) The property is not salvageable.
- B) Sufficient resources are not available for an offensive strategy.
- C) There is a danger of structural collapse.
- D) A threat to occupant life exists.

Answer --> D

Notes) Page 1006, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

The correct factor would be no threat to occupant life exists, and no occupants are savable. Another factor would be that an offensive strategy would endanger the lives of firefighters, because of hazardous conditions that exist at the scene.

1376) What is the primary intention of a defensive strategy?

- A) To enter the building as quickly as possible and put hoselines between trapped occupants and the fire.
- B) To establish lost control (Salvage) at the same time as conducting fire suppression operations.
- C) To isolate or stabilize an incident and keep it from expanding.
- D) To conduct fire suppression operations from the outside of the building until proper ventilation can be accomplished.

Answer --> C

Notes) Page 1006, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1377) Defensive operations are employed when which of the following conditions are present?

- A) There's an excessive volume of fire.
- B) There is structural deterioration.
- C) The risk outweighs the benefit.
- D) All the above.

Answer --> D

Notes) Pages 1006–1007, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Also included would be unfavorable wind conditions.

1378) Booster lines should not be used for fire suppression in which of the following situations?

- A) Dumpster fires.
- B) Brush fires.
- C) Small structure fires.
- D) Chimney fires.

Answer --> C

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1379) Hoseline selection depends on all of the following fire conditions except –

- A) The age of the building.
- B) The volume of water needed to extinguish the fire.
- C) The number of firefighters available to handle the hoseline.
- D) The reach needed to extinguish the fire.

Answer --> A

Notes) Pages 1008–1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. CodeRQ

Answer change from last version. Old answer was ... The size of the building.

Also involved are – The fire loading material involved, the need for speed and mobility, the size of the building, tactical requirements, ease of hoseline deployment, potential fire spread, size of the fire area, and location of the fire.

All Chapters

1380) When water is applied in short bursts directly into the burning fuels, firefighters are said to be implementing a(an) –

- A) Direct attack.
- B) Indirect attack.
- C) Combination attack.
- D) Ventilation attack.

Answer --> A

Notes) Page 1013, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1381) When firefighters are unable to enter a burning structure and water is applied using a straight stream or narrow fog, firefighters are said to be implementing a(an) –

- A) Direct attack.
- B) Indirect attack.
- C) Combination attack.
- D) Ventilation attack.

Answer --> B

Notes) Page 1014, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1382) What is meant by the term, "shielded fire?"

- A) A fire burning in a fire proof container that has little chance of spreading.
- B) A fire that generates so much radiant heat that launching any kind of direct attack is nearly impossible.
- C) A fire that cannot be seen from a doorway because objects in the room are obstructing its view.
- D) A fire attack in which the nozzle is set to a wide fog pattern for the purpose of creating a water curtain that shields firefighters from the heat.

Answer --> C

Notes) Page 1015, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1383) Hot gas layers accumulating in the upper levels of a compartment may transition to __ at any time.

- A) Rollover.
- B) Flashover.
- C) Smoke explosion.
- D) All the above.

Answer --> D

Notes) Page 1015, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Firefighters should always remember that smoke is fuel.

All Chapters

1384) With the nozzle set to a 40 to 60 degree fog pattern, and applying short bursts of water at 1 to 2 second intervals would be an example of –

- A) Thermal layer disruption.
- B) Gas cooling.
- C) Stratified cooling.
- D) Thermal obstruction.

Answer --> B

Notes) Page 1015, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1385) Applying water to smoke that is not heated will cause which of the following to happen?

- A) It will quickly aid in darkening down the fire.
- B) It will create steam thus aiding in the extinguishment of the fire.
- C) It will cause the fire to flare up.
- D) It will cause unnecessary water damage and disrupt the thermal layer which has a tendency to decrease visibility if ventilation has not been accomplished.

Answer --> D

Notes) Page 1014, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer was revised for this new edition.

1386) Which of the following hoselines would firefighters select if a 50 to 100 foot reach was required?

- A) 1 1/2 inch hoseline.
- B) 1 3/4 inch hoseline.
- C) 2 inch hoseline.
- D) 2 1/2 inch hoseline.

Answer --> D

Notes) Page 1010, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1387) Which of the following situations is contraindicated for utilizing a Master Stream?

- A) When the size of the fire has gone beyond the reach, flow, or penetration of handlines.
- B) When water resources are in short supply, and personnel are ample.
- C) When massive runoff of residual water can be allowed.
- D) When interior attack of the fire can no longer be maintained.

Answer --> B

Notes) Page 1010, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Master streams should be used when there is an ample water supply, but personnel are limited.

All Chapters

1388) Which hoseline offers 'good' mobility?

- A) 1 1/2 inch hoselines.
- B) 2 inch hoselines.
- C) 2 1/2 inch hoselines.
- D) Master streams.

Answer --> A

Notes) Page 1010, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Exception – Aerial Master Streams can offer good mobility.

1389) Which method of fire suppression uses the steam-generating technique of ceiling-level attack to extinguish a fire?

- A) Direct attack.
- B) Indirect attack.
- C) Combination attack.
- D) B and C

Answer --> D

Notes) Page 1014, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1390) The transition from offensive fire attack to defensive fire attack occurs when –

- A) It is confirmed that all occupants have been rescued or it left the building on their own power.
- B) Conditions in the structure deteriorate rapidly and unexpectedly.
- C) When there's a lack of personnel or other resources at the scene.
- D) When occupants have been spotted within the structure.

Answer --> B

Notes) Page 1007, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1391) All the following statements regarding changing a fire attack from offensive to defensive is true except for –

- A) All personnel must be made aware of the transition.
- B) The incident commander should order a personnel accountability report.
- C) All hoselines operating within the structure should be abandoned.
- D) Some units may need to stay in place to protect egress and withdrawal of other units.

Answer --> C

Notes) Page 1007, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Hoseline should not be abandoned unless absolutely necessary. When you abandon a hoseline, you cannot use it to protect yourself during the evacuation.

All Chapters

1392) Which of the following would NOT be considered one of the four main uses of a master stream?

- A) Direct fire attack.
- B) Supplementing handlines that are already attacking the fire from the exterior.
- C) To protect exposures.
- D) To assist in hydraulic ventilation operations.

Answer --> D

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Also included would be indirect fire attack.

1393) One important aspect regarding the placement of master streams is the angle in which the stream enters the structure. Which of the following angles would be considered most effective?

- A) At an upward angle, directed towards the ceiling.
- B) At a horizontal angle midway between the floor and the ceiling.
- C) At a downward angle, directed towards the floor.
- D) Does not matter as long as the master stream is directed towards the base of the fire.

Answer --> A

Notes) Page 1029, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1394) Why is it important that firefighters avoid operating master streams at too low of an angle?

- A) They may lose control of the master stream device or hoseline.
- B) It is ineffective to operate master streams at low angles.
- C) It reduces the volume of water that can be pumped to the nozzle.
- D) It reduces the pressure of the stream at the nozzle.

Answer --> A

Notes) Page 1029, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1395) Typically, it is not practical to supply master streams with anything less than –

- A) One 2 1/2 inch hoseline.
- B) Two 2 1/2 inch hoselines.
- C) One 3 inch hoseline.
- D) One 4 inch hoseline.

Answer --> B

Notes) Page 1029, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1396) It takes a minimum of __ firefighters to deploy a master stream.

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> B

Notes) Page 1030, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1397) In a wildland fire which of the following fuels would involve roots, peat, and other partially decomposed organic matter?

- A) Subsurface fuels.
- B) Surface fuels.
- C) Wildland fuels.
- D) Aerial fuels.

Answer --> A

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1398) The compass direction a slope faces is often called the slope's –

- A) Location.
- B) Exposure.
- C) Aspect.
- D) Origin.

Answer --> C

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1399) Natural gas in its pure form is –

- A) Propane.
- B) Ethane.
- C) Methane.
- D) Butane.

Answer --> C

Notes) Page 1043, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1400) You are called to a scene of a lumber yard where a fork lift is leaking gas from its LPG tank inside a barn. A waitress from a restaurant next door runs out screaming that natural gas is leaking from the kitchen stove. As a firefighter where would you expect the gas from both the stove and the fork lift to accumulate?

- A) The gas from the stove would rise to the highest point, and the gas from the fork lift would accumulate at the lowest point in the room.
- B) The gas from the stove would accumulate at the lowest point and the gas from the fork lift would rise to the highest point in the room.
- C) The gas from the stove and from the fork lift would both rise to the highest point in the room.
- D) The gas from the stove and from the fork lift both would accumulate at the lowest point in the room.

Answer --> A

Notes) Pages 1042–1043, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

Natural gas is lighter than air and therefore will rise. The gas used in the fork lift is LPG and is heavier than air.

1401) Natural gas is explosive at concentrations of –

- A) 1 – 5 %.
- B) 5 – 15 %.
- C) 15 – 20 %.
- D) 20 – 25 %.

Answer --> B

Notes) Missing Reference in, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Question left in for reference.

1402) LPG (liquefied petroleum gas) becomes explosive in concentrations between –

- A) 1.5 – 10 %.
- B) 10 – 20 %.
- C) 20 – 30 %.
- D) 30 – 35 %.

Answer --> A

Notes) Missing Reference in Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1403) The best method for suppressing Class C fires is to –

- A) Apply water by lofting a fog spray over a long distance.
- B) Use a Class C foam.
- C) Use a Class A foam.
- D) Stop the flow of electricity before commencing suppression activities.

Answer --> D

Notes) Page 1031, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1404) What gives Natural Gas its distinctive odor?

- A) Methane.
- B) Ethane.
- C) Propane.
- D) Mercaptan.

Answer --> D

Notes) Page 1043, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1405) LPG expands rapidly when heated, ____ times for every 10 degrees of increase in temperature.

- A) 1.0.
- B) 1.5.
- C) 2.0.
- D) 2.5.

Answer --> B

Notes) Page 1044, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1406) A firefighter's first concern when arriving at a incident involving CNG or LPG distribution systems includes all of the following except –

- A) Immediately extinguish the flames if the gas is burning.
- B) Evacuate the area immediately around the break.
- C) Evacuate the area downwind from the break.
- D) Eliminate the ignition source.

Answer --> A

Notes) Page 1044, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

If fire is visible, allow the fuel to burn itself out.

All Chapters

1407) Fires involving computer equipment are best controlled using –

- A) Dry chemical extinguishers.
- B) Halotron extinguishing agents.
- C) CO2 extinguishers.
- D) Dry powder extinguishers.

Answer --> B

Notes) Page 1032, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1408) The primary danger to firefighters regarding electrical fires is

- A) Arcing wires on the ground.
- B) Ultraviolet burns to the eyes by looking at the arc.
- C) Cardiac and respiratory arrest.
- D) Failure to recognize that a hazard exists.

Answer --> D

Notes) Page 1031, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1409) Fires involving downed transformers are best left up to qualified utility personnel. If firefighters have to extinguish a downed transformer the best means of extinguishment is –

- A) A dry chemical extinguisher.
- B) High expansion foam.
- C) Halotron.
- D) CO2.

Answer --> A

Notes) Page 1033, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This applies to transformer fires when the transformer is still attached to the pole. If the transformer is a ground level you can either use of carbon dioxide extinguisher or dry chemical to extinguish the fire.

1410) Firefighters should control the power source at residential structure fires by –

(1) Pulling the meter (2) Pulling the main breaker switch (3) Removing fuses

- A) (1) or (3) only.
- B) (1) or (2) only.
- C) (2) or (3) only.
- D) (1), (2) or (3).

Answer --> C

Notes) Page 1031, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1411) The primary reason not to apply water to Class C fires is because it –

- A) Has little effect.
- B) Can damage electrical equipment.
- C) Creates a hazard for the firefighter because it conducts electricity.
- D) Produces toxic smoke and fumes.

Answer --> C

Notes) Page 1031, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1412) How can a firefighter tell if a downed power line is dead?

- A) If the line is broken.
- B) If the line is not arcing.
- C) If bystanders tell you the line is dead.
- D) There is no way of telling. Firefighters should assume that all downed power lines are live.

Answer --> D

Notes) Page 1032, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1413) When should firefighters enter a utility vault?

- A) To make repairs.
- B) To extinguish a fire.
- C) To attempt a rescue.
- D) Only after a qualified person has shut off the power.

Answer --> D

Notes) Page 1033, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

Answer change from last version. Old answer was only to attempt a rescue.
If firefighters must enter a utility vault, it should only be done so by personnel trained in confined space entry.

1414) Which of the following is not a factor affecting the seriousness of an electrical shock?

- A) The path the electricity takes through the body.
- B) The height of the individual.
- C) The length of exposure.
- D) The frequency AC or DC.

Answer --> B

Notes) Page 1035, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also other factors include, the degree of skin resistance, the available current, and also the available voltage.

All Chapters

1415) If a firefighter MUST leave a potentially charged apparatus the firefighter should –

- A) Test to see if the ground is energized by placing one foot on the ground and trying to detect a tingling in his/her foot.
- B) Hold on to the apparatus and jump making sure both feet land on the ground at the same time.
- C) Jump clear of the apparatus (keeping feet together) making sure that the firefighter does not come in contact with the ground and the apparatus at the same time.
- D) Firefighters should never leave potentially charged vehicles.

Answer --> C

Notes) Page 1036, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Normally, firefighters should remain inside a vehicle or apparatus that is in contact with power lines.

1416) You arrive at the scene of a downed power line. The position of the break is midway between the two utility poles. Where should the exclusion zone be established?

- A) 50 feet in all directions.
- B) 100 feet in all directions.
- C) Between the two poles closest to the break.
- D) Should extend one pole beyond the two utility poles closest to the break on each side, and all directions.

Answer --> D

Notes) Page 1036, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. SCQ

1417) If a power line falls onto a fence or metal guardrail, how much of the fence should be considered energized?

- A) 50 feet in either direction from where the wire touches the fence.
- B) 100 feet in either direction from where the wire touches the fence.
- C) 150 feet in either direction from where the wire touches the fence.
- D) The entire length of the fence or guardrail should be considered energized.

Answer --> D

Notes) Page 1036, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1418) The only fire stream that is recommended to be used around electrical equipment is a __ with at least __ of nozzle pressure.

- A) Straight stream, 250 psi.
- B) Fog stream, 250 psi.
- C) Solid stream, 100 psi.
- D) Fog stream, 100 psi.

Answer --> D

Notes) Page 1036, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Do not use solid or straight streams on fires involving electrical equipment.

All Chapters

1419) What is meant by 'ground gradient' ?

- A) The angle of the slope of the ground that can effect the rate in which a flammable liquid can spread.
- B) The polarization of light by the ground that forms a mirage on the pavement. i.e. Looks like puddles of water on the road.
- C) The tendency of an energized electrical conductor to pass a current along the path of least resistance to the ground.
- D) The overall makeup of the ground surface. Smooth ground surfaces contribute to the spread of hazardous fuel spills, while rough ground surfaces increase absorption, but offer better containment.

Answer --> C

Notes) Page 1036, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1420) Which statement regarding extinguishment of Class D fires is NOT true?

- A) Class D fires burn at extremely high temperatures and are reactive to water.
- B) Water is only effective as an extinguishing agent if it is applied in sufficient volumes to lower the ignition temperature of the metal.
- C) Directing hose streams at burning metal can lead to violent decomposition of the water and can release hydrogen gas.
- D) Once an ash layer covers the burning metal, firefighters can safely assume the fire has burned itself out.

Answer --> D

Notes) Page 1038, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Even though there may not be any visible flames, don't assume the fire is out. It may be an extended period of time before the substance is cool to safe levels.

1421) Fire attack during interior operations must be coordinated with which of the following?

(1) Forcible entry. (2) Search and rescue operations. (3) Ventilation. (4) Control of utilities.

- A) 1, 3, 4.
- B) 1, 2, 3.
- C) 3, 4.
- D) 1, 2, 3, 4.

Answer --> D

Notes) Page 1008, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1422) Typically, fire attack in high rise buildings is usually initiated –

- A) On the floor above the fire floor.
- B) On the floor below the fire floor.
- C) Two floors below the fire floor.
- D) On the same floor as the fire.

Answer --> B

Notes) Page 1016, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1423) When fighting basement fires that have no basement windows, where should ventilation be located?

- A) The stairway to the basement should be used for ventilation.
- B) A ventilation hole should be cut as close to the stairway as possible.
- C) A ventilation hole should be cut on the ground floor near a window.
- D) The foundation of the building should be breached to create a ventilation opening.

Answer --> C

Notes) Reference missing, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. Questions was left in place for reference.

The window is then opened allowing for smoke and hot fire gases to escape.

1424) Hose of 3/4 inch to 2 inches in diameter used for firefighting purposes is called –

- A) Small-diameter hose.
- B) Small line.
- C) Garbage line.
- D) A and B.

Answer --> D

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
NTQ

1425) Firefighters should be aware that unprotected steel beams elongate if exposed to temperatures above –

- A) 300 degrees F.
- B) 500 degrees F.
- C) 800 degrees F.
- D) 1000 degrees F.

Answer --> D

Notes) Page 1020, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1426) The typical attack line for suppressing vehicle fires should be at least –

- A) Booster line
- B) 1 1/2 inch hose.
- C) 2 inch hose.
- D) 2 1/2 inch hose.

Answer --> B

Notes) Page 1039, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1427) Whenever possible fire apparatus should park __ from a vehicle fire.

(1) Uphill (2) Upwind (3) Downhill (4) Downwind

- A) 1, 2.
- B) 1, 3.
- C) 2, 4.
- D) 2, 3.

Answer --> A

Notes) Page 1040, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1428) Firefighter Jon says that firefighters should extinguish any fire near the vehicle occupants first.

Firefighter Kevin says a hoseline should be placed between the vehicle fire and any exposures. Who is correct?

- A) Firefighter Jon
- B) Firefighter Kevin.
- C) Both are correct.
- D) Both are incorrect.

Answer --> C

Notes) Page 1039, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1429) Which method should be used to extinguish vehicle undercarriage fires?

- A) A straight stream deployed from a distance is able to reach under the vehicle.
- B) A straight stream a close proximity, deflected off the pavement.
- C) Directing the stream through an opened engine compartment to the undercarriage of the vehicle.
- D) All the above.

Answer --> D

Notes) Page 1042, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1430) When sealed components of motor vehicles become heated, the gases inside them expand. If the component fails, projectiles can be launched at great speeds, representing a potential safety hazard to firefighters. All of the following are a potential risk of launching projectiles except –

- A) Shock-absorber type bumpers.
- B) Hollow driveshafts.
- C) Catalytic converters.
- D) Hatchback supports.

Answer --> C

Notes) Page 1039, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1431) Which of the following would represent a critical function served by backup hoselines?

(1) Protecting the attack hoseline team from extreme fire behavior. (2) Protecting the means of egress for the attack hoseline team. (3) Providing additional fire suppression capability in the event that the fire increases in volume.

- A) 1.
- B) 1, 2.
- C) 2, 3.
- D) 1, 2, 3.

Answer --> D

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1432) A backup hoseline should be –

- A) At least the same size and provide the same fire flow as the attack hoseline.
- B) Twice the diameter of the attack hoseline.
- C) Smaller than the attack hoseline in order to conserve the water supply.
- D) Of any size hoseline as long as the fire flow remains the same as the attack hoseline.

Answer --> A

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1433) Which of the following factors will dictate nozzle and stream selection?

(1) Fire conditions. (2) Available water supply. (3) The ambient temperature and relative humidity of the scene. (4) The number of firefighters available to safely operate the hoseline. (5) The capabilities of the nozzle being used.

- A) 1, 2, 3, 4.
- B) 2, 3, 4, 5.
- C) 1, 2, 4, 5.
- D) 1, 3, 4, 5.

Answer --> C

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1434) For interior fire attack, which of the following generally is the most useful nozzle?

- A) Broken stream nozzle.
- B) Fog nozzle.
- C) Straight stream nozzle.
- D) Piercing nozzle.

Answer --> B

Notes) Page 1009, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1435) Ground cover fires are fires that involve all of the following except –

- A) Brush.
- B) Crops.
- C) Trash receptacles.
- D) Forests.

Answer --> C

Notes) Page 1049, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1436) All of the following are factors that affect wildland fire behavior except –

- A) Time of day.
- B) Weather.
- C) Fuel.
- D) Topography.

Answer --> A

Notes) Page 1049, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1437) In wildland fires, fuels are often classified by grouping together materials with similar burning characteristics. When considering this, what fuel classification would you assign to living surface vegetation such as grass or brush, and nonliving surface vegetation such as logs and heavy limbs?

- A) Subsurface fuels.
- B) Surface fuels.
- C) Aerial fuels.
- D) Suspended fuels.

Answer --> B

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Brush up to 6 feet in height would also be included.

1438) All the following would be considered the three basic types of ground cover fires based on the type and location of the fuel except for –

- A) Ground fires.
- B) Surface fires.
- C) Crown fires.
- D) Suspended fires.

Answer --> D

Notes) Page 1049, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1439) Aerial fuels are fuels –

- A) That are suspended, or upright fuels that are physically separated from the ground.
- B) Small twigs or leaves on the ground.
- C) Decomposing pine needles in the ground.
- D) Any low vegetation living or dead.

Answer --> A

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

This would include brush over 6 feet tall.

1440) How would you expect the continuity of a fuel in a wildland fire to affect the burning characteristics of the fuel itself?

- A) Patchy fuels will spread at a faster rate than fuels that are close together.
- B) Fuels that are close together will spread at a faster rate.
- C) The continuity of the fuel does not play a role in the rate a wildland fire will burn.
- D) Continuity of the fuel effects the fuels burning characteristics only if it also is affected by weather and volume.

Answer --> B

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Because the fuels are close together the fire will spread at a faster rate because of heat transfer. Patchy fuels will spread slower because they lack the heat transfer factor.

All Chapters

1441) Firefighter Ed says that small or light fuels burn faster than larger and heavier fuels. Firefighter Ellen says that tightly compacted fuels burn faster than aerial fuels. Firefighter Elizabeth says that the amount of fuel present in a given area influences a fire's intensity.

Who is correct?

- A) Firefighter Ed.
- B) Firefighter Ellen.
- C) Firefighter Ed and Elizabeth.
- D) They all are correct.

Answer --> C

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Tightly compacted fuels such as hay bales will burn slower than those loosely piled.

1442) All of the following aspects of weather have an effect upon wildland fire behavior except -

- A) Wind.
- B) Temperature.
- C) Barometric pressure.
- D) Relative humidity.

Answer --> C

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Precipitation also has an obvious effect on wild land fires.

1443) Which statement regarding topography and wildland fires is true?

- A) Fire will move faster downhill than uphill.
- B) Fire will move faster uphill than downhill.
- C) The steeper the grade of a slope, the slower the fire will spread.
- D) Ridges, trees, and rock outcroppings prevent erratic fire behavior.

Answer --> B

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1444) North of the equator, wildland fires will typically burn faster on __ exposures.

- A) Northern.
- B) Southern.
- C) Eastern.
- D) Western.

Answer --> B

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Southern exposures typically receive most of the sun's direct rays and therefore receive more heat.

All Chapters

1445) Which part of a wildland fire spreads most rapidly?

- A) Head.
- B) Finger.
- C) Origin.
- D) Perimeter.

Answer --> A

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1446) The sides of a wildland fire are called the –

- A) Fingers.
- B) Perimeters.
- C) Flanks.
- D) Spot fires.

Answer --> C

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1447) Long narrow strips extending out from the main fire are called –

- A) Heads.
- B) Fingers.
- C) Spot fires.
- D) Heels.

Answer --> B

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1448) Fires caused by flying sparks or embers landing outside the main fire are called –

- A) Island fires.
- B) Spot fires.
- C) Spark fires.
- D) Finger fires.

Answer --> B

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1449) Unburned areas inside the fire perimeter are called –

- A) Islands.
- B) The Green.
- C) The Black.
- D) The Green fingers.

Answer --> A

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1450) The area where a wildland fire starts and the point from which it spreads is called the –

- A) Source.
- B) Origin.
- C) Heel.
- D) Point of ignition (POI).

Answer --> B

Notes) Page 1052, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1451) When firefighters try to extinguish wildland fires by cutting the progress of the fire, by the process of removing fuels, they are said to be fighting the fire using a(an) –

- A) Direct attack.
- B) Indirect attack.
- C) Perimeter attack.
- D) Flank attack.

Answer --> B

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1452) When firefighters try to extinguish wildland fires by extinguishing the fire's flames, they are said to be fighting the fire using a(an) –

- A) Direct attack.
- B) Indirect attack.
- C) Perimeter attack.
- D) Flank attack.

Answer --> A

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1453) The main objective in attacking wildland fires is to –

- A) Attack the Head first.
- B) Attack from the Heel side.
- C) Attack from the flanks.
- D) Establish a control line that completely encircles the fire, and rendering all fuel within the zone harmless.

Answer --> D

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1454) Which of the following is NOT one of the Ten Standard Fire Fighting Orders?

- A) Ensure adequate water supply.
- B) Ensure instructions are given and understood.
- C) Retain control at all times.
- D) Recognize current weather conditions and obtain forecasts.

Answer --> A

Notes) Page 1056, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1455) One of the best ways to control basement fires without deploying personnel directly to the basement is with –

- A) Master stream deck guns.
- B) Handlines attacking from the floor above the fire, via the basement stairs.
- C) A hole is cut in the floor just above the fire, and a cellar nozzle is inserted to extinguish the fire.
- D) High expansion foam through a window or door.

Answer --> C

Notes) Page 1020, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.
CodeRQ

1456) The term used to describe when firefighters becomes so focused on fire fighting or other operational assignments that they fail to sense changes in the environment is called –

- A) Pre-occupational awareness.
- B) Situational awareness.
- C) Freelancing.
- D) Tunnel vision.

Answer --> D

Notes) Page 1008, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1457) The term used to describe when firefighters have an active, and conscious knowledge of a situation or environment around them during an emergency incident is called –

- A) Pre-occupational awareness.
- B) Situational awareness.
- C) Freelancing.
- D) Operational awareness.

Answer --> B

Notes) Page 1008, 1058, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Look up, look down, look all around.

1458) Approaches to storage vessels exposed to fire should be made –

- A) From the ends of the vessel.
- B) At right angles to the vessels.
- C) At a 45-degree angle from the vessels.
- D) At any of the above.

Answer --> C

Notes) Page 1044, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

The approach should never be made from the ends or at right angles to the vessels.

1459) Serious hazards can arise with explosions caused by short-circuit arcing or blown fuses that may ignite accumulated gases. In these situations firefighters should keep the public back at least –

- A) 300 ft.
- B) 500 ft.
- C) 1000 ft.
- D) 1500 ft.

Answer --> A

Notes) Page 1033, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1460) What should firefighters do if they encounter a Class D fire and do not have on hand any Class D extinguishing agents?

- A) Direct a 30 degree fog stream towards the fire.
- B) Use a 2 1/2 inch hoseline with a straight stream directed at the base of the fire.
- C) Use a master stream appliance to control the Class D fire.
- D) Protect exposures and allow the metal to burn out.

Answer --> D

Notes) Page 1037, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1461) To aggressively attack a structure fire from the exterior with large diameter fire streams is call a –

- A) Aggressive attack.
- B) Offensive attack.
- C) Strike attack.
- D) Blitz attack.

Answer --> D

Notes) Page 1062, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1462) What is the minimum number of firefighters that can be used in a RIC?

- A) 1.
- B) 2.
- C) 3.
- D) 4.

Answer --> B

Notes) Page 1063, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1463) Some fire departments allow freight elevators to be used to transport fire fighting equipment to staging areas in multistory buildings. Where should these staging areas be located?

- A) On the fire floor.
- B) On the floor just below the fire floor.
- C) Two floors below the fire floor.
- D) One floor above the fire floor.

Answer --> C

Notes) Page 1017, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1464) Which of the following dictates the number of personnel required to advance a hoseline and operate the nozzle within the confines of a structure?

- A) The number of lengths of hose used.
- B) The diameter of the hoseline.
- C) The nozzle reaction.
- D) The relative size of the fire.

Answer --> C

Notes) Page 1011, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The greater the nozzle reaction, the more firefighters you will need.

All Chapters

1465) One of the greatest possible hazards that are ever-present at trash container fires is –

- A) The strong possibility of fire spread.
- B) The strong possibility the fire will rage out of control.
- C) The possible exposure to toxic products of combustion.
- D) The inability to protect exposures.

Answer --> C

Notes) Page 1048, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Always wear full PPE and SCBA at trash container fires.

1466) Small trees on or immediately adjacent to the surface of the ground would be considered –

- A) Subsurface fuels.
- B) Surface fuels.
- C) Aerial fuels.
- D) Raised fuels.

Answer --> B

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1467) The amount of fuel present in a given area that influences the fire's intensity and the amount of water needed to achieve extinguishment would be considered its –

- A) Mass.
- B) Area.
- C) Perimeter.
- D) Volume.

Answer --> D

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1468) Which of the following largely determines the moisture content of live fuels?

- A) Precipitation.
- B) Relative humidity.
- C) Dew point.
- D) Temperature.

Answer --> A

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1469) The outside boundary, or the distance around the outside edge of a wild land fire is called the –

- A) Edge.
- B) Area.
- C) Flanks
- D) Perimeter.

Answer --> D

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Also called the fire edge.

1470) The side of the fire opposite from the head is called the –

- A) Heel.
- B) Rear.
- C) Black.
- D) A and B.

Answer --> D

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1471) Unburned fuels at the scene of a wildland fire located next to involved areas are called the –

- A) Green.
- B) White.
- C) Red.
- D) Black.

Answer --> A

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1472) The area of a wildland fire where fuels have been consumed is called the –

- A) Red.
- B) Yellow.
- C) Hot.
- D) Black.

Answer --> D

Notes) Page 1053, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

All Chapters

1473) What is the Standard on Protective Clothing and Equipment for Wildland Fire Fighting?

- A) NFPA 1500.
- B) NFPA 1977.
- C) NFPA 1981.
- D) NFPA 2100.

Answer --> B

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

1474) Which of the following would not be considered part of the equipment the NFPA Standard requires wildland firefighters to carry?

- A) Helmet, eye protection and neck shroud.
- B) Flame retardant jump suit, and fire shelter.
- C) Protective footwear, and gloves.
- D) Extra food and canteens of water.

Answer --> D

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition.

Although canteens and extra food is not part of the standard, most firefighters will carry such equipment.

Also, it is important to mention that the protective footwear should not have steel toes.

1475) For exterior fire attack, which of the following generally is the most useful nozzle?

- A) Broken stream nozzle.
- B) Fog nozzle.
- C) Straight stream nozzle.
- D) Piercing nozzle.

Answer --> C

Notes) Page 1011, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1476) Which of the following factors should be taken into account when making a decision to enter a burning building?

- A) What is the wind direction and velocity?
- B) What is the condition of the building and the initial fire location?
- C) Where are the occupants and what exposures should be considered?
- D) All the above.

Answer --> D

Notes) Page 1011, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1477) Before entering a burning building who should conduct a quick size-up and maintain a high level of situational awareness?

- A) The incident commander.
- B) The company officer leading the crew.
- C) The firefighter on the nozzle.
- D) Every member of the crew.

Answer --> D

Notes) Page 1012, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1478) When does entry size-up of a burning building begin?

- A) Prior to reaching the fire room.
- B) Well before reaching the entry point.
- C) Upon receipt of the alarm.
- D) Upon arrival on the scene.

Answer --> B

Notes) Page 1012, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

General size-up of burning structures begins with preplanning. In this case we are talking about entry size-up only.

1479) When should you open the door to a fire room?

- A) Only if you have a charged hose line and are ready to control the conditions you encounter.
- B) Only if the roof has been ventilated by truck company crews.
- C) Only if there is a backup line ready or RIT team standing by.
- D) Never.

Answer --> A

Notes) Page 1012, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1480) When you are at the door of a fire room with an attack hoseline in place, open the door slightly, apply water to the hot layered gases and then wait ____ to observe any reactions before entering the structure.

- A) 2 to 5 seconds.
- B) 5 to 10 seconds.
- C) 10 to 15 seconds.
- D) 15 to 20 seconds.

Answer --> B

Notes) Page 1013, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Firefighter should also maintain control of the door as it is opened, and should place a rope hose tool or utility strap over the doorknob so it can be quickly pulled closed if necessary.

All Chapters

1481) When operating in multistory buildings, firefighters should always check for fire extension ____ before advancing the hoseline to the fire floor.

- A) On the floor above the fire floor.
- B) On the floor below the fire floor.
- C) On the top floor.
- D) On the ground or basement floor.

Answer --> B

Notes) Page 1016, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1482) Fires originating ____ are some of the most difficult and dangerous structure fires that you may encounter.

- A) In basements or subfloors.
- B) In high-rise buildings.
- C) In two-story residential structures.
- D) In buildings constructed of heavy timber (Type IV).

Answer --> A

Notes) Page 1017, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1483) Residential buildings have a variety of areas within the structure that can be converted to sleeping quarters. Which of the following situations would pose a high degree of life safety hazards not only for the occupants, but for firefighters as well?

- A) Sleeping quarters in the attic.
- B) Sleeping quarters in a converted garage.
- C) Sleeping quarters in an unattached building.
- D) Sleeping quarters in the basement.

Answer --> D

Notes) Page 1018, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1484) According to UL tests, which of the following practices is sufficient to ensure the integrity of a floor system above a basement fire?

- A) Sounding the floor with a heavy tool.
- B) Utilizing a thermal imager to examine the floor joists.
- C) Feel the floor for sponginess.
- D) None of the above tests are sufficient to ensure the integrity of the floor system above a basement fire.

Answer --> D

Notes) Page 1019, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Once the fire has been extinguished, a visual inspection of the floor joists should be made before personnel are permitted to work on the first floor.

All Chapters

1485) A structure or separate part of the fire ground to which fire could spread is called a(an) –

- A) Exposure.
- B) Threaten occupancy.
- C) Risk target.
- D) All the above.

Answer --> A

Notes) Page 1020, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1486) The most likely approach to exterior exposure protection is to –

- A) Evacuate persons who are in the path of the fire.
- B) Relocate park vehicles or railroad cars.
- C) Use forklifts or heavy equipment to move piled storage.
- D) Use water spray or foam extinguishing agents to place a protective cover on the exposure.

Answer --> D

Notes) Page 1022, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1487) Who is responsible for turning back on utilities after a fire incident?

- A) The fire department safety officer.
- B) The utility provider.
- C) The incident commander.
- D) The company officer assigned to that exposure.

Answer --> B

Notes) Page 1022, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Utility company personnel will have to determine if the building and the utility distribution system is safe before the services can be reestablished.

1488) The electric meter is the primary location for shutting off the power to a residence. If the lines are buried underground, where would you expect to find the meter box and shutoff?

- A) On the side of the building.
- B) In the basement of the structure where the utility line enters.
- C) On the side of the pole where the line extends underground.
- D) On top of the pole of the closest transformer.

Answer --> C

Notes) Page 1023, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1489) When shutting off the power to a residence, pull the handle on the side of the meter –

- A) Up.
- B) Down.
- C) To the left.
- D) To the right.

Answer --> B

Notes) Page 1023, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1490) Any voltage in excess of ____ is considered high-voltage.

- A) 200 volts.
- B) 400 volts.
- C) 600 volts.
- D) 800 volts.

Answer --> C

Notes) Page 1023, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1491) Any voltage that is less than 600 volts is considered to be –

- A) Low voltage.
- B) Light voltage.
- C) Medium voltage.
- D) Minimum voltage.

Answer --> A

Notes) Page 1023, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1492) Under which conditions will solar panels generate current?

- A) When exposed to sunlight.
- B) When exposed to sunlight or moonlight.
- C) When exposed to sunlight or artificial lighting.
- D) When exposed to sunlight, moonlight, or artificial lighting.

Answer --> D

Notes) Page 1024, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Solar panels generate current whenever there is any kind of light source.

All Chapters

1493) In cases where structures are powered by wind turbines, where would you turn off the power to make the building safe?

- A) At the meter box with the main power shut off.
- B) At the base of the wind turbine.
- C) In the wind turbine control box usually located in the basement of the structure.
- D) The power from wind turbines cannot be safely turned off.

Answer --> A

Notes) Page 1024, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

You should remember that although the power to the building maybe shut off at the meter box, the power line from the wind turbine to the meter will remained energized.

1494) Natural gas in its pure form is methane, and has a flammability range of –

- A) 1 to 10%.
- B) 5 to 15%.
- C) 15 to 20%.
- D) 10 to 20%.

Answer --> B

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1495) Natural gas is –

(1) Non-toxic. (2) Lighter than air. (3) Moderately toxic. (4) Heavier than air.

- A) 1, 2.
- B) 1, 3.
- C) 2, 3.
- D) 3, 4.

Answer --> A

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Although natural gas is non-toxic, it is classified as an asphyxiant because it may displace normal breathing air in a confined space and lead to suffocation.

1496) Natural gas has no odor on it's own, however ____ is added by the utility company, which causes a very distinctive sulfur-like odor, much like rotten eggs.

- A) Sulfur dioxide.
- B) Sulfur hydroxide.
- C) Mercaptan.
- D) Hydrosulfide.

Answer --> C

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1497) Natural gas shut offs are in-line valves located on the owner supply side of the meter; that is between the distribution system and the meter. To close a valve firefighters should turn the tang –

- A) Continuously counterclockwise until firmly closed.
- B) Continuously clockwise until firmly closed.
- C) Until it's 90 degrees to the pipe.
- D) Until it's 45 degrees to the pipe.

Answer --> C

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1498) To close a natural gas pipe valve, firefighters should use which of the following tools?

- A) Spanner wrench.
- B) Pipe wrench.
- C) Adjustable wrench.
- D) All the above.

Answer --> D

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1499) Under which of the following conditions might you expect natural gas to lose its odorant, making it difficult to detect without the proper instruments?

- A) When the natural gas leaks underground in wet soil.
- B) When the ambient relative humidity is below 50%.
- C) In a heavy rainstorm.
- D) All the above.

Answer --> A

Notes) Page 1025, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1500) Which of the following would be considered liquefied petroleum gases (LPG)?

(1) Propane. (2) Methane. (3) Pentane. (4) Butane. (5) Hexane.

- A) 1, 4.
- B) 2, 4.
- C) 1, 2, 4.
- D) 1, 2, 3, 4, and 5.

Answer --> A

Notes) Page 1026, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1501) LPG gas is about –

- A) 1 1/2 times lighter than air.
- B) 1 1/2 times heavier than air.
- C) Twice as heavy as air.
- D) Twice as light as air.

Answer --> B

Notes) Page 1026, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1502) LPG gas has an explosive range of –

- A) 0.5 to 5 %.
- B) 1.5 to 10 %.
- C) 3 to 15 %.
- D) 5 to 10 %.

Answer --> B

Notes) Page 1026, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1503) One of the first priorities in a fire at a protected structure is to –

- A) Connect the fire Department pumper to the closest fire hydrant.
- B) Set up a relay pumping operation from the fire to the closest fire hydrant.
- C) Initiate the protected structure's fire suppression units.
- D) Connect the fire department pumper to the fire department connection (FDC).

Answer --> D

Notes) Page 1027, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1504) Which of the following statements regarding shutting down a sprinkler system control valve is correct?

- A) Shutting down a sprinkler system control valve should only be done once the fire has been brought under control.
- B) The sprinkler system control valve can only be shut down on order from the incident commander.
- C) Once the sprinkler system control valve has been shut down, a firefighter with a portable radio should be stationed at the control valve that has been closed so that the valve can be reopened if necessary.
- D) All the above.

Answer --> D

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1505) Which of the following valves has a yoke on the outside with a threaded stem that opens and closes the gate inside the valve housing?

- A) Post-indicator valve (PIV).
- B) Wall post indicator valve (WPIV).
- C) Outside stem and yoke valve (OS&Y).
- D) Post-indicator valve assembly (PIVA).

Answer --> C

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1506) Which of the following valves has a metal post that houses the valve stem and a movable plate with the words OPEN or SHUT visible through a small glass window on the side of the housing?

- A) Post-indicator valve (PIV).
- B) Wall post indicator valve (WPIV).
- C) Outside stem and yoke valve (OS&Y).
- D) Post-indicator valve assembly (PIVA).

Answer --> A

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1507) Which of the following valves does not use a plate with the words Open and Shut, but uses a circular disk inside a flat plate on the top of the valve housing?

- A) Post-indicator valve (PIV).
- B) Wall post indicator valve (WPIV).
- C) Outside stem and yoke valve (OS&Y).
- D) Post-indicator valve assembly (PIVA).

Answer --> D

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

When the valve is opened, the disc is perpendicular to the surrounding plate. When the valve is closed, the disc is in line with the plate that surrounds it.

1508) Which of the following valves is similar to a PIV except that it extends horizontally through a wall with the target and valve operating nut on the outside of the building?

- A) Post-indicator valve (PIV).
- B) Wall post indicator valve (WPIV).
- C) Outside stem and yoke valve (OS&Y).
- D) Post-indicator valve assembly (PIVA).

Answer --> B

Notes) Page 1028, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1509) When operating master streams, firefighters should aim the stream so that it enters the structure –

- A) At a downward angle causing it to deflect water off the floor of the fire room.
- B) At an upward angle causing it to deflect off the ceiling or other overhead objects.
- C) Perfectly horizontal so the stream reaches a back wall and deflects water equally to the ceiling and to the floor.
- D) In back of firefighters who are conducting a direct attack within the fire room.

Answer --> B

Notes) Page 1029, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Never deploy a master stream while firefighters are actively operating on a direct attack within a structure.

1510) Master stream devices flow at a minimum of –

- A) 350 gpm.
- B) 400 gpm.
- C) 450 gpm.
- D) 500 gpm.

Answer --> A

Notes) Page 1029, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1511) Using water on energized equipment is inappropriate because any voltage greater than ____ is potentially dangerous.

- A) 12 volts.
- B) 24 volts.
- C) 40 volts.
- D) 50 volts.

Answer --> C

Notes) Page 1032, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1512) If water must be used to control energized equipment, it should be applied at a distance and in the form of a –

- A) Fog stream.
- B) Spray stream.
- C) Straight stream.
- D) A and B.

Answer --> D

Notes) Page 1032, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1513) A toxic compound found in some older oil-filled electrical transformers is called –

- A) Trinitrotoluene.
- B) Anhydrous ammonium sulfide.
- C) Polychlorinated biphenyl.
- D) Mineral oil.

Answer --> C

Notes) Page 1033, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ
Abbreviated PCB.

1514) PCBs used in electrical transformers have been outlawed for years, however, firefighters should be aware that even transformers marked as containing no PCBs can legally contain up to –

- A) 49 ppm.
- B) 65 ppm.
- C) 80 ppm.
- D) 95 ppm.

Answer --> A

Notes) Page 1033, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1515) The danger area in the proximity of a ground gradient may extend up to ____ from the downed power line.

- A) 50 feet.
- B) 75 feet.
- C) 100 feet.
- D) 150 feet.

Answer --> D

Notes) Page 1037, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1516) What is the NFPA Standard on Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

- A) NFPA 1971.
- B) NFPA 1975.
- C) NFPA 1976.
- D) NFPA 1977.

Answer --> A

Notes) Page 1037, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1517) Your first action upon arrival at a vehicle fire is to –

- A) Establish a water supply.
- B) Don personal protective equipment.
- C) Size up the incident.
- D) Stabilize the vehicle.

Answer --> C

Notes) Page 1038, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1518) At a vehicle fire, once you have sized up the incident your next task should be –

- A) Establish scene safety around the vehicle.
- B) Save the vehicle occupants.
- C) Extinguish the fire.
- D) Confirm the type of fuel used by the vehicle, and select the appropriate extinguishing agent.

Answer --> A

Notes) Page 1039, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Situational awareness is key at vehicle fires. You and your crew will not be safe if you focus on the fire itself and ignore the power lines that ignited the vehicle in the first place.

1519) How should you approach a vehicle which is on fire?

- A) From the unburned side of the vehicle.
- B) From the burned side of the vehicle.
- C) At a 45 degree angle.
- D) Downhill and downwind from the vehicle if possible.

Answer --> C

Notes) Page 1040, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1520) At a vehicle fire, how should you control burning metal?

- A) With large amounts of water.
- B) With a Class A foam.
- C) With a Class D extinguishing agent.
- D) With a Class K extinguishing agent.

Answer --> C

Notes) Page 1040, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1521) In vehicle fires, all the following would be considered extraordinary hazards except for –

- A) A vehicle hauling sodium nitrate.
- B) A vehicle with pressurize natural gas tanks.
- C) A vehicle with large-capacity saddle fuel tanks.
- D) A vehicle carrying radioactive materials such as medical isotopes.

Answer --> A

Notes) Pages 1040–1041, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Sodium nitrate is common table salt.

1522) In vehicle fires where the fire is limited to the trunk or engine compartment your first task is to –

- A) Protect exposures around the vehicle.
- B) Gain access to the engine compartment or trunk.
- C) Cool the entire vehicle with a wide fog stream.
- D) Gain access to these compartments through the cab of the vehicle.

Answer --> B

Notes) Page 1041, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1523) At vehicle fire is powered by alternative energy sources, how far should you park the apparatus away from the incident?

- A) 50 feet.
- B) 100 feet.
- C) 125 feet.
- D) 150 feet.

Answer --> B

Notes) Page 1043, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1524) At vehicle fires powered by alternative energy sources, you should consider and execute all the following except for –

- A) Approach the vehicle from the uphill and upwind direction if possible.
- B) Use non-sparking extrication tools.
- C) Set out road flares to keep other vehicles at a safe distance.
- D) Deploy a backup hoseline.

Answer --> C

Notes) Page 1043, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Do not use road flares.

All Chapters

1525) You are at an incident involving a vehicle powered by CNG with no visible fire. What should be your course of action?

- A) Use a gas detector to locate leaks.
- B) Use a gas detector to locate shutoff valves.
- C) Eliminate any ignition source within the area.
- D) All the above.

Answer --> D

Notes) Page 1044, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ SCQ

Also, stay clear of any detected vapor clouds. CNG stands for compressed natural gas.

1526) What is the third most common vehicle fuel type?

- A) Compressed natural gas (CNG).
- B) Diesel.
- C) Liquefied petroleum gas (LPG).
- D) Electrical energy.

Answer --> C

Notes) Page 1044, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1527) When considering electric or hybrid electric vehicles, you may find the batteries for these vehicles in all the following places except –

- A) In the engine compartment.
- B) In the trunk area.
- C) Under the vehicle.
- D) Under the passenger and/or drivers seats.

Answer --> D

Notes) Page 1045, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1528) You arrive on-scene to an electric or hybrid electric vehicle fire where there is fire visible. What should be your next mode of operation?

- A) Gain access to the compartment which is burning and extinguish the fire using 1 1/2 to 1 3/4 inch handlines and a wide fog pattern.
- B) Direct an apparatus-mounted master stream onto the vehicle.
- C) Direct a blanket of foam down on the vehicle using the rain down method.
- D) Do not approach the vehicle, but rather establish scene safety and protect exposures.

Answer --> D

Notes) Page 1045, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ SCQ

Never approach an electric vehicle that's on fire or there is arcing under the hood.

All Chapters

1529) Electric vehicles run solely on electricity stored in batteries, and firefighters can use inertia switches and pilot circuits to shut off the high-voltage system. How long will it take for energy in the system to dissipate?

- A) 5 minutes.
- B) 10 minutes.
- C) 30 minutes.
- D) Up to 1 hour.

Answer --> A

Notes) Page 1045, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1530) In electric vehicles, what color are the high-voltage cables?

- A) Yellow.
- B) Orange.
- C) Blue.
- D) Black.

Answer --> B

Notes) Page 1045, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

There is still an electrocution hazard with blue and yellow color coded cables, but they do not carry high voltage. You should still never cut any orange, blue, or yellow color-coded electrical cables or components in electric or hybrid electric vehicles.

1531) Ethanol and methanol fires burn a bright _____ and may be hard to see during the day.

- A) Orange.
- B) Pink.
- C) Blue.
- D) Red.

Answer --> C

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1532) What percentage of gasoline sold in the United States is an ethanol blend?

- A) 25%.
- B) 50%.
- C) 65%.
- D) 75%.

Answer --> B

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1533) What extinguishing agent should you use on a vehicle powered by ethanol or methanol?

- A) Water with a wetting agent additive.
- B) Class A foam.
- C) Dry chemical or carbon dioxide.
- D) Alcohol Resistant Class B foam.

Answer --> D

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1534) Biodiesel has a flashpoint of -

- A) 150 degrees F.
- B) 200 degrees F.
- C) 266 degrees F.
- D) 300 degrees F.

Answer --> C

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1535) What should you used to extinguish a fire in a vehicle powered by biodiesel?

(1) Dry chemical. (2) CO₂. (3) Water fog spray. (4) Foam.

- A) 1, 2.
- B) 3, 4.
- C) 1, 3, 4.
- D) 1, 2, 3, 4.

Answer --> D

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1536) What is the self-ignition temperature of hydrogen?

- A) 266 degrees F.
- B) 345 degrees F.
- C) 419 degrees F.
- D) 550 degrees F.

Answer --> D

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1537) What is the flammability range of hydrogen?

- A) 1 to 15%.
- B) 2 to 55%.
- C) 4 to 75%.
- D) 5 to 80%.

Answer --> C

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1538) How do you extinguish a fire in a vehicle powered by hydrogen?

- A) Gain access to the compartment which is burning and extinguish the fire using 1 1/2 to 1 3/4 inch handlines and a wide fog pattern.
- B) Direct an apparatus-mounted master stream onto the vehicle.
- C) Direct a blanket of foam down on the vehicle using the rain down method.
- D) You don't. Instead you protect exposures and allow the fuel to burn off

Answer --> D

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1539) When operating at a scene involving a burning hydrogen-powered vehicle, if extrication is required, make sure you never cut the –

- A) A posts.
- B) B posts.
- C) C posts.
- D) D posts.

Answer --> C

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

The C posts contain the vents.

1540) All the following would be considered stacked and piled combustible materials except for –

- A) Raw materials such as those found at sawmills, lumberyards, or manufacturing facilities.
- B) Loose flammable materials, such as mulch or fertilizer, at nurseries or garden centers.
- C) Bales of used cardboard or pallets near large retail outlets.
- D) The contents of dumpsters.

Answer --> D

Notes) Page 1046, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1541) Which of the following would you consider to be the greatest danger at incidents involving stacked or piled materials?

- A) Exposures, primarily near structures and ground cover.
- B) Toxic fumes from the burning materials.
- C) The potential of explosion.
- D) Radiant heat exposure to firefighters.

Answer --> A

Notes) Page 1047, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Of course if the stacked material contains bags of chemical fertilizer, I would be worried about explosion.

1542) How does NFPA define or specify what constitutes a small structure?

- A) Any structure that can be loaded onto the bed of a tractor-trailer truck and transported.
- B) Any structure that lacks a permanent foundation.
- C) Any structure not exceeding 1 story tall and not exceeding 10' x 20' in size.
- D) NFPA does not define or specify what constitutes a small structure, only that a fire should be attacked from the exterior

Answer --> D

Notes) Page 1047, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1543) Wind-driven, high intensity fires in the tree tops of heavily forested areas are known as -

- A) Canopy fires.
- B) Surface fires.
- C) Crown fires.
- D) A and C.

Answer --> D

Notes) Page 1050, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1544) Fires that involve organic material called humus that generally covers the soil of forested areas are known as-

- A) Groundcover fires
- B) Surface fires.
- C) Ground fires
- D) Duff fires.

Answer --> C

Notes) Page 1050, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1545) The most common type of groundcover fire burning on the soil surface consuming low lying grass, shrubs, and other vegetation are known as –

- A) Groundcover fires
- B) Surface fires.
- C) Ground fires
- D) Duff fires.

Answer --> B

Notes) Page 1050, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1546) Which type of fire can go undetected for months before it enters the flaming stage?

- A) Underground fires.
- B) Surface fires.
- C) Ground fires
- D) Crown fires.

Answer --> C

Notes) Page 1050, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1547) Which of the following best describes the phenomena in which fuels that contain less moisture ignite more easily and burn with greater intensity than those with a higher moisture content?

- A) Fuel moisture content.
- B) Fuel moisture differential.
- C) Fuel moisture ratio.
- D) Fuel moisture dynamics.

Answer --> A

Notes) Page 1051, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1548) A friction match with a large head capable of burning in a wind is called a –

- A) Lucifer match.
- B) Fusee.
- C) Safety match.
- D) Locofoco.

Answer --> B

Notes) Page 1054, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1549) The first and most important principle in fighting ground cover fires is –

- A) Fire location.
- B) Instant access.
- C) Weather conditions.
- D) Life safety.

Answer --> D

Notes) Page 1055, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1550) When fighting ground cover fires, all the following would be considered resources except for –

- A) Water supply.
- B) Personnel.
- C) Rain in the weather forecast.
- D) Apparatus and equipment.

Answer --> C

Notes) Page 1055, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1551) During a ground fire incident, situational awareness must be continued throughout the incident to counter any changes in –

- A) Fire behavior.
- B) Weather.
- C) Topography.
- D) All the above.

Answer --> D

Notes) Page 1055, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

1552) What resources are used in wildland fires to monitor fire development and spread?

- A) Lookouts.
- B) Communications.
- C) Watches.
- D) Overlooks.

Answer --> A

Notes) Page 1055, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

All Chapters

1553) At a wildland fire, where should the safety zone be established?

- A) In the unburned area.
- B) In the burned area.
- C) Upwind and uphill from the fire.
- D) Downwind and downhill from the fire

Answer --> B

Notes) Page 1056, Essentials Of Fire Fighting And Fire Department Operations, 6th Edition. NTQ

Only if it has significantly cooled and is accessible.

1554) Salvage operations encompass all of the following except –

- A) Reducing primary and secondary damage.
- B) Reducing smoke damage.
- C) Searching for hidden fires.
- D) Reducing water damage.

Answer --> C

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Searching for hidden fires would be overhaul operations.

1555) The quality of an organization's relationship with individuals who have contact with that organization is known as –

- A) Community service.
- B) Community relations.
- C) Customer relations.
- D) Customer service.

Answer --> D

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1556) The practice of minimizing damage and providing customer service through effective mitigation and recovery efforts before, during and after an emergency incident is known as –

- A) Loss control.
- B) Salvage.
- C) Overhaul.
- D) Property conservation.

Answer --> A

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1557) An aspect of loss control that consists of those operations associated with fire fighting that aid in reducing primary and secondary damage during fire fighting operations is known as –

- A) Salvage.
- B) Overhaul.
- C) Property conservation.
- D) Scene preservation.

Answer --> A

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1558) An aspect of loss control that consists of those operations involved in searching for extinguishing hidden or remaining fires is known as –

- A) Scene examination.
- B) Overhaul.
- C) Mop-up.
- D) Scene preservation.

Answer --> B

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1559) Salvage operations should commence –

- A) Upon arrival on the scene.
- B) After suppression operations have been terminated.
- C) After overhaul operations have terminated.
- D) After the fire marshal has inspected the scene for arson evidence.

Answer --> A

Notes) Page 1106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

They continue until the last unit leaves the scene.

1560) Overhaul operations consist of all of the following except –

- A) Searching for and extinguishing hidden fires.
- B) Recognizing and preserving any evidence of arson.
- C) Making the fire area and contents safe from the elements.
- D) Ventilating the building.

Answer --> D

Notes) Page 1118, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1561) The final part of salvage is –

- A) Gathering all furniture and placing it in the center of a room and covering it with a tarp.
- B) Removing excess water from the structure.
- C) Removing destroyed contents from the structure.
- D) Protecting the property from the weather and from trespassers.

Answer --> D

Notes) Page 1106, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1562) Your engine company arrives at a one story wood-framed residential structure. The attic is involved with a small fire. Your ladder company has ventilated the roof and is standing by with a charged line. Your engine company is in the room just below the fire (uninvolved at this time) also with a charged line. What action would you take?

- A) Order your ladder company to extinguish the fire through the ventilation hole they just cut.
- B) Order your engine company to pull the ceiling and extinguish the fire from the floor below.
- C) Order manpower to cover or remove the contents of the room prior to pulling the ceiling.
- D) None of the above.

Answer --> C

Notes) Page 1107, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. SCQ

1563) In salvage operations, the most desirable procedure dictates that room contents should be –

- A) Gathered to the center of the room to be covered.
- B) Left in place until the cause of the fire can be determined.
- C) Removed from the room or moved to the outside of the building.
- D) Only non burned contents should be covered.

Answer --> C

Notes) Page 1107, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. CodeRQ

Answer change from last version. Old answer was A. However, gathering items to the center of the room and covering them is still the most often used procedure. Removing them from the structure is the best procedure.

1564) Which of the following would you NOT expect to find in an Automatic Sprinkler Kit?

- A) Extra sprinkler heads.
- B) Sprinkler wrench.
- C) Sprinkler tong or stopper.
- D) Sprinkler wedges.

Answer --> A

Notes) Page 1110, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1565) Carryalls are used for which of the following purposes?

- A) To carry debris or smoldering objects.
- B) To carry handtools into the fire.
- C) For storing SCBAs after they have been used.
- D) For carrying the belongings of the occupant.

Answer --> A

Notes) Page 1111, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1566) The best method for removing large amounts of water from a basement is to use a –

- A) Fire department pumper.
- B) Portable water pump.
- C) Water chute.
- D) Water vacuum.

Answer --> B

Notes) Page 1111, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1567) How many firefighters does it take to roll a One-Firefighter spread?

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> B

Notes) Page 1113, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Trick question. One firefighter to spread it, but two firefighters to roll it.

1568) What is the most effective means for removing water from a building, that is leaking through the ceiling from the floor above?

- A) Portable water pump.
- B) Portable vacuum.
- C) Water chute.
- D) Fire department pumper.

Answer --> C

Notes) Page 1114, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1569) A __ is made from a salvage cover that is placed on the floor for the purpose of holding small amounts of water.

- A) Chute.
- B) Catchall.
- C) Carryall.
- D) Coverall.

Answer --> B

Notes) Page 1116, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1570) When pulling a ceiling during overhaul activities, the best tool for the job is –

- A) A pike pole.
- B) An axe.
- C) A Plaster hook.
- D) A and C only.

Answer --> D

Notes) Page 1118, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1571) During overhaul procedures –

- A) A charged attack line should always be available.
- B) Booster lines are all that's needed.
- C) Pressurized water cans are all that is necessary.
- D) Garden hoses provide sufficient protection during overhaul activities.

Answer --> A

Notes) Page 1120, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1572) Who should visually direct and supervise overhaul operations?

- A) An officer leading the overhaul crew.
- B) A fire investigator.
- C) An officer not directly engaged in overhaul tasks.
- D) Both B and C.

Answer --> D

Notes) Page 1118, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1573) Small burning objects found during overhaul should be extinguished using which of the following methods?

- A) Soaked down with a fog stream.
- B) Soaked with a wetting agent and sprayed with a pressurized water tank.
- C) Dunked in a bucket of water.
- D) Covered with Class A foam.

Answer --> C

Notes) Page 1122, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

You should then drench them with a hose stream.

1574) During overhaul, large smoldering objects such as mattresses and stuffed furniture should –

- A) Be soaked down with a fog stream until they are no longer smoldering.
- B) Be cut up into small sections and soaked in large tubs of water.
- C) Be removed to the outside of the building where they can be easily extinguished without imposing much water damage on the structure.
- D) Be left in place, closely monitored by firefighters for rekindling.

Answer --> C

Notes) Page 1122, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1575) All of the following may be evidence of a hidden fire except –

- A) Wet wallpaper.
- B) Peeling paint.
- C) Cracked Plaster.
- D) Smoke emitting from cracks.

Answer --> A

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Also the discoloration of materials, rippled wallpaper, and burned areas.

1576) When using a pike pole to pull a ceiling during overhaul, the firefighter should do all of the following except –

- A) Stand between the area being pulled and a doorway that provides the means of escape.
- B) Pull down and away from the firefighter's body.
- C) Stand directly under the area being pulled.
- D) Wear full protective equipment.

Answer --> C

Notes) Page 1122, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1577) The only way to know if fires in bales, rags, cotton, hay, and other similar materials have been fully extinguished is by –

- A) Wetting them down with a fog stream for at least 15 minutes.
- B) Wetting them down with a straight stream for 15 minutes.
- C) Soaking them in a large body of water such as a pool or pond.
- D) Breaking them completely apart.

Answer --> D

Notes) Page 1122, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1578) Firefighters should feel walls and floors for heat using the –

- A) Palm of the hand.
- B) Back of the hand.
- C) Index and middle fingers.
- D) Thumb.

Answer --> B

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

IFSTA dropped the reference of using the back of the hand to feel for heat in this section, but this procedure is commonly used in the fire service. In addition the thermal imager is proving to be a more reliable technique.

1579) From a community standpoint, what is the end result of good loss control practices?

- A) It raises community awareness of the dangers of fire.
- B) It holds down the cost of fire insurance in the community.
- C) It builds goodwill between the fire service and the community.
- D) It increases in real dollar contributions, and/or funding to the department by the community.

Answer --> C

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1580) During normal salvage operations, how many salvage covers are required to cover the contents of an average size room?

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> A

Notes) Page 1108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1581) Your crew is assigned to perform salvage operations inside a bedroom. Where should the chest of drawers be placed?

- A) On its side, directly on the bed.
- B) On its side, to one side of the bed.
- C) Upright, at the foot of the bed.
- D) On its side, at the foot of the bed.

Answer --> C

Notes) Page 1108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. SCQ

1582) What purpose can a rolled rug serve in salvage operations?

- A) It can be used as a water chute.
- B) It can be placed on top of furniture, acting as a stiff pole under the salvage cover, allowing water to run off both sides of the covered furniture.
- C) It may be used to absorb excess water on the floor.
- D) It can be used as a salvage cover.

Answer --> B

Notes) Page 1108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1583) What should firefighters do if there is a shortage of salvage covers?

- A) Use the available covers as water chutes, and catchall.
- B) Stack the occupant's belongings higher than normal, and use available covers.
- C) Consolidate several rooms of furniture in one room, and use available salvage covers.
- D) Use the available salvage covers to cover the highest valued belongings.

Answer --> A

Notes) Page 1108, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1584) The principle reason why canvas salvage covers should be washed after being exposed to the ashes of a fire is –

- A) To prevent the cover from smelling like mildew.
- B) To prevent the belongings being covered from becoming soiled the next time the cover is used.
- C) To prevent the cover from rotting because of a chemical reaction of the carbon contained in the ash.
- D) To foster a clean appearance.

Answer --> C

Notes) Page 1109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1585) Which of the following is NOT normally used for repairing salvage covers?

- A) Hot glue gun plugs.
- B) Duct or mastic tape.
- C) Iron-on patches.
- D) Sew-on patches.

Answer --> A

Notes) Page 1110, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1586) Why should floor runners be used during salvage operations?

- A) To point the way to involved areas for the salvage crew.
- B) To protect the floors from heat.
- C) To protect the floor coverings of the occupancy.
- D) To channel water out of the occupancy.

Answer --> C

Notes) Page 1111, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1587) The __ is the most common method in which firefighters deploy salvage covers.

- A) Balloon throw.
- B) Parachute throw.
- C) Tarp throw.
- D) Fireman's throw.

Answer --> A

Notes) Page 1115, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1588) How many firefighters are usually required to construct a catchall?

- A) 1
- B) 2
- C) 3
- D) 4

Answer --> B

Notes) Page 1117, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1589) What is the main purpose of covering all openings in a structure after a fire?

- A) To keep vandals out.
- B) To protect the structure from further damage by the weather.
- C) To lower the owners liability if someone becomes injured at the occupancy.
- D) To restrict the amount of incoming air in case of rekindle.

Answer --> B

Notes) Page 1116, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1590) What is the best tool to use during overhaul operations for opening up walls and floors?

- A) Pike poles, and plaster hooks.
- B) Battery-operated saws.
- C) Bale hooks and pitchforks.
- D) Axes.

Answer --> D

Notes) Page 1118, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1591) Which of the following electronic sensors are capable of detecting hidden fires in walls?

- A) Thermal signature detection, Ultrasonic signature detection.
- B) Electron microscopy signature detection, Infrared signature detection.
- C) Ultraviolet signature detection, Infrared signature detection.
- D) Thermal signature detection, Infrared heat detection.

Answer --> D

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1592) Which of the following are capable of harboring hidden fires for prolonged periods of time?

- A) Insulation materials.
- B) Voids between ceilings and floors.
- C) Attics and crawl spaces.
- D) Sealed basements.

Answer --> A

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1593) A device that is designed to be driven into the wall or wooden framing to provide a strong point from which to hang salvage covers is called

- A) S-hook.
- B) L-hook.
- C) J-hook.
- D) K-hook.

Answer --> C

Notes) Page 1112, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1594) Who should be conducting overhaul operations after a fire has been contained?

- A) The firefighters involved with the extinguishment of the fire.
- B) The firefighters involved in rescue operations.
- C) Fresh firefighters who were not involved with either the suppression or rescue operations.
- D) All of the above.

Answer --> C

Notes) Page 1119, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Firefighters involved with suppression and rescue operations are normally exhausted and are more susceptible to injury.

1595) Which statement regarding overhaul operations is not true?

- A) Firefighters should maintain awareness of available exit routes.
- B) Firefighters should continue working in teams of two or more.
- C) RIT members can be relieved of their duties and are free to join in overhaul operations.
- D) Firefighters should beware of hidden gas or electrical utilities.

Answer --> C

Notes) Page 1120, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

RIT should be maintained through the overhaul process.

1596) Typically, overhaul begins –

- A) At the tallest point in the structure.
- B) At the lowest point in the structure.
- C) In the area of least severe involvement.
- D) In the area of most severe involvement.

Answer --> D

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1597) What should firefighters do when fire has burned around windows or doors?

- A) Use the back of the hand to feel for heat in the wooden moldings around the doors or windows.
- B) Use a thermal imager to look for signs of excessive heat beneath these moldings.
- C) Remove the moldings in order to properly check for hidden fire.
- D) All the above.

Answer --> C

Notes) Page 1121, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

The molding should be removed, and the area behind them cooled with water.

1598) Damage caused by or resulting from actions taken to fight a fire and leaving the property unprotected is called –

- A) Primary damage.
- B) Collateral damage.
- C) Secondary damage.
- D) Tertiary damage.

Answer --> C

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1599) Damage caused by the fire itself and not by the actions taken to fight a fire is called –

- A) Primary damage.
- B) Collateral damage.
- C) Secondary damage.
- D) Tertiary damage.

Answer --> A

Notes) Page 1104, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1600) A form of drain opening provided in outer walls at floor or roof level, to remove water to the exterior of the building in order to reduce water damage is called a –

- A) Runoff drain.
- B) Scupper.
- C) Channel shoot.
- D) Water duct.

Answer --> B

Notes) Page 1109, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1601) In the 2010 edition of NFPA 1801, the term for thermal imaging cameras was changed. The standardized term is now –

- A) Thermal cameras.
- B) Heat sensors.
- C) Thermal sensors.
- D) Thermal imagers.

Answer --> D

Notes) Page 1123, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Abbreviated TI.

1602) Thermal imagers do not provide quality images of items behind all the following materials except for –

- A) Mirrors.
- B) Metal.
- C) Glass.
- D) Gypsum board.

Answer --> D

Notes) Page 1123, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Thermal imagers do not provide quality images of items behind reflective materials.

1603) Your first consideration before beginning overhaul operations is –

- A) Inspecting the premises.
- B) Safety.
- C) Developing an operational plan.
- D) Eliminating or mitigating hazards.

Answer --> B

Notes) Page 1119, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1604) What kinds of fires should fire departments investigate?

- A) Suspicious fires.
- B) Fires in which accelerants were involved.
- C) Structure fires only.
- D) All fires.

Answer --> D

Notes) Page 1145, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1605) The general area where the ignition source and the material first ignited actually came together for the first time is called the –

- A) Area of origin.
- B) Point of origin.
- C) Area of ignition.
- D) Point of ignition.

Answer --> A

Notes) Page 1145, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1606) The exact physical location where the heat source and fuel come into contact with each other and a fire begins is called –

- A) Area of origin.
- B) Point of origin.
- C) Point of ignition.
- D) Ignition center.

Answer --> B

Notes) Page 1145, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1607) The sequence of events that allows the ignition source and the materials first ignited to come together is called the –

- A) Fire pattern.
- B) Fire events.
- C) Fire characteristics.
- D) Fire cause.

Answer --> D

Notes) Page 1146, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1608) Who provides the best opportunity to observe evidence of cause and to assist in the fire cause determination effort?

- A) The fire chief.
- B) The incident commander.
- C) The fire investigator.
- D) The firefighters fighting the fire.

Answer --> D

Notes) Page 1146, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1609) The crime of willfully, maliciously, and intentionally starting an incendiary fire or causing an explosion to destroy one's property or the property of another is called -

- A) Arson.
- B) Pyromania.
- C) Torching.
- D) Torching off.

Answer --> A

Notes) Page 1146, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1610) The apparent and obvious design of burned material and the burning path of travel from the point of origin is called the -

- A) Fire path.
- B) Fire pattern.
- C) Burn pattern.
- D) Arson pattern.

Answer --> B

Notes) Page 1147, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

This was previously known as burn pattern. The term has changed.

1611) Arsonists are more apt to set fires under which of the following weather conditions?

- A) During warm weather, because the fire is harder to cool down.
- B) During cold weather, because fewer witnesses will be around to see him/her.
- C) During inclement weather, because it will take longer for the fire department to respond.
- D) Weather does not play a role to predict when an arsonist will set a fire.

Answer --> C

Notes) Page 1156, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1612) Firefighters should take note of which of the following during the course of a fire event?

- A) People leaving the scene by car.
- B) People arriving at the scene while the fire is working.
- C) People staying and watching the fire.
- D) It is not the firefighter's job to note individuals arriving or leaving a fire scene.

Answer --> A

Notes) Page 1156, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Most people are curious and will stay and watch a fire.

All Chapters

1613) A combustible material such as rolled rags, blankets, newspapers, or flammable liquids, used to spread fire from one point to another is called a –

- A) Incendiary devices.
- B) Trailers.
- C) Incipient igniters.
- D) Urban duff.

Answer --> B

Notes) Page 1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1614) All of the following represent observations firefighters should make upon arriving at a scene except –

- A) Location of the fire.
- B) Wind direction and velocity.
- C) The presence of trailers.
- D) Noticing whether windows are locked or unlocked.

Answer --> C

Notes) Pages 1157–1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Firefighters should look for the presence of trailers during the firefighting operation not upon arriving at the scene. Sorry, trick question.

Firefighters should also try to observe Time or arrival and extent of the fire, containers or cans found outside the structure, burglary tools present, and familiar faces in the crowd of bystanders.

1615) En route to a fire scene it is the firefighter's responsibility to note all of the following factors except –

- A) The presence of unusual odors.
- B) The presence of man-made barriers that block access of the apparatus.
- C) Weather and natural hazards.
- D) Time of day.

Answer --> A

Notes) Pages 1157–1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Noting the presence of odors is usually observed while the firefighter is fighting the fire. However, SCBA should always be worn during fire suppression.

People leaving the scene should also be noted.

All Chapters

1616) Which of the following factors has a great effect on the natural path of fire spread?

- A) Wind direction and velocity.
- B) Barometric pressure and cloud cover.
- C) Time of day and the extent of the fire.
- D) Location of the fire.

Answer --> A

Notes) Page 1157, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1617) Firefighter Chris says that firefighters should look for familiar faces in the crowd of bystanders. Take note of anyone who seems to be present at several fires. Firefighter Jason says that firefighters while fighting the fire should periodically remove their SCBA mask in order to detect unusual odors at the scene. Who is correct?

- A) Firefighter Chris.
- B) Firefighter Jason.
- C) Both are correct.
- D) Both are incorrect.

Answer --> A

Notes) Page 1157, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Never remove your SCBA mask during a fire.

1618) All of the following would be an indication of arson except –

- A) Several rekindles in the same area.
- B) Flashback.
- C) Flashover.
- D) Reignition.

Answer --> C

Notes) Page 1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1619) Firefighter Frank says that most incendiary devices don't leave evidenced of their existence at a fire scene. Firefighter Fred says metal cans or plastic containers found outside the structure, may have been used to transport accelerants. Who is correct?

- A) Firefighter Frank.
- B) Firefighter Fred.
- C) Both are correct.
- D) Both are incorrect.

Answer --> B

Notes) Page 1157, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1620) Firefighter Betty says when investigating the cause of a fire, business records should be checked to see if they are current and up to date.
Firefighter Liza says when investigating the cause of a fire, business records should be checked to see if they were left exposed to the fire or in their normal place. Who is correct?

- A) Firefighter Betty.
- B) Firefighter Liza.
- C) Both are correct.
- D) Both are incorrect.

Answer --> B

Notes) Page 1159, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1621) Noting a fire's movement and intensity can help trace all of the following except –

- A) How the fire spread.
- B) Identify the original ignition source.
- C) Determine the monetary losses from the fire.
- D) Determine the fuel(s) involved.

Answer --> C

Notes) Page 1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1622) Which would NOT be considered a suspicious area for a fire to start?

- A) Bathtubs.
- B) File drawers.
- C) Kitchens.
- D) Closets.

Answer --> C

Notes) Page 1159, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1623) All are indications of arson except –

- A) Intrusion alarms have been tampered with or intentionally disabled.
- B) Major appliances missing and/or replaced with junk.
- C) A lack of material possessions in the structure.
- D) Fire detection and protection systems have been tampered with.

Answer --> C

Notes) Page 1159, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Although the absence of important personal possessions such as photo albums, furnishings, appliances, toys, and pets may be an indication of possible arson, it certainly is not definitive proof. The amount of personal possessions an occupant has, is related to his/her economic status, and/or personal life-style.

All Chapters

1624) Preserving evidence of the fire scene is the responsibility of which of the following?

- A) Line officers.
- B) The incident commander.
- C) The driver operator/engineer.
- D) All firefighters at the scene.

Answer --> D

Notes) Page 1159, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1625) The search for the area of origin of a fire starts –

- A) On the outside of the building.
- B) From the unburned portion of the interior.
- C) From the area of the greatest charring.
- D) A and B.

Answer --> D

Notes) Page 1147, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1626) Firefighter Richard says that firefighters should not remove more debris than is necessary during salvage operations.

Firefighter Barbara says that firefighters should be thorough in their salvage operations and should attempt to leave the scene as neatly and as orderly as possible.

Firefighter James says that thorough salvage and overhaul operations in the area of origin should not be performed until the cause of the fire has been determined.

Who is correct?

- A) Firefighter Barbara.
- B) Firefighter Richard and Firefighter Barbara.
- C) Firefighter Richard and Firefighter James.
- D) Firefighter Barbara and Firefighter James.

Answer --> C

Notes) Page 1147, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

Thorough salvage and overhaul efforts can destroy evidence.

1627) Which of the following are considered fire indicators?

- A) Fire patterns.
- B) Melted metal and glass.
- C) Degree of damage to the structure and contents.
- D) All the above.

Answer --> D

Notes) Page 1148, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1628) After the fire investigator has completed collecting evidence, where should burned debris be piled?

- A) It should remain in the premises for the property owner to deal with.
- B) It should be piled in the street.
- C) It should be piled on the side walk.
- D) It should be piled in the backyard or alley.

Answer --> D

Notes) Page 1164, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1629) Firefighter Bill says that charred documents found in a fireplace should be removed and placed in a waterproof container. Firefighter Will says that charred documents found in a fireplace should be gently soaked down to prevent further deterioration. Firefighter Phil says that charred documents found in a fireplace should be protected by immediately closing dampers and other openings. Who is correct?

- A) Firefighter Bill.
- B) Firefighter Bill and Will.
- C) Firefighter Phil.
- D) Firefighter Phil and Bill.

Answer --> C

Notes) Page 1162, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1630) Floor charring maybe a result of which of the following?

(1) Flashover. (2) Fuel at a greater height falling downward in a flaming state. (3) Ventilation. (4) Ignitable liquids.

- A) 1, 4.
- B) 1, 2, 4.
- C) 1, 3, 4.
- D) 1, 2, 3, 4.

Answer --> D

Notes) Page 1148, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1631) How should firefighters protect footprints until they can be photographed, or plaster casts can be made?

- A) Cover them with cardboard boxes.
- B) Cordon them off with fire line tape.
- C) Cover them with a tarp or salvage cover.
- D) Mark them with florescent spray paint.

Answer --> A

Notes) Page 1162, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1632) The majority of fires in North America are –

- A) Accidental or natural.
- B) Incendiary.
- C) Willful.
- D) Malicious.

Answer --> A

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1633) Fires that are caused by unintentional acts or omission are known as –

- A) Accidental.
- B) Natural.
- C) Willful.
- D) Malicious.

Answer --> A

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1634) Fires that are set with criminal intent are known as –

- A) Criminal fires.
- B) Arson fires.
- C) Willful fires.
- D) Incendiary fires.

Answer --> D

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

1635) Fires that are caused by lightening, spontaneous heating such as hay bales decomposing and generating heat are known as –

- A) Accidental.
- B) Natural.
- C) Acts of God.
- D) Spontaneous combustion.

Answer --> B

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1636) Fires that are intentionally set are known as –

- A) Criminal fires.
- B) Intentional fires.
- C) Incendiary fires.
- D) Malicious fires.

Answer --> C

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.
CodeRQ

1637) What would be considered another term for arson fires?

- A) Incendiary.
- B) Intentional.
- C) Willful.
- D) Malicious.

Answer --> A

Notes) Page 1146, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1638) Charred vertical surfaces such as walls, closed doors, and objects will face towards –

- A) The unburned side of the fire.
- B) The area or point of origin of the fire.
- C) The area opposite to the point of origin of the fire.
- D) The side of the structure in which the wind is blowing from.

Answer --> B

Notes) Page 1149, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1639) Continuous changes of possession of physical evidence that must be established in court to admit such material into evidence is known as –

- A) Progression of evidence.
- B) Evidence preservation.
- C) Evidence progression.
- D) Chain of custody.

Answer --> D

Notes) Page 1146, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

All Chapters

1640) Material or other chemicals designed and used to start fires are known as –

- A) Accelerants.
- B) Incendiary devices.
- C) Molotov cocktails.
- D) Ignition devices.

Answer --> B

Notes) Page 1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1641) Which of the following may produce abnormally high heat and may be confused with the use of accelerants?

- A) Synthetic carpets.
- B) Natural wall hangings.
- C) Polyurethane.
- D) Household cleaning materials.

Answer --> C

Notes) Page 1158, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1642) The exact physical location where a heat source and fuel come in contact with each other and start a fire is known as the –

- A) Hot zone.
- B) Point of origin.
- C) Point of ignition.
- D) Black zone.

Answer --> B

Notes) Page 1145, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1643) What does the discovery of what appears to be multiple areas of origin indicate?

- A) An unintentional fire.
- B) The indication that a strong wind was present in the fire container.
- C) The fire was intentionally set.
- D) All the above.

Answer --> C

Notes) Page 1149, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1644) Recent laboratory tests on fire started with accelerants indicate that –

- A) Fire and burn patterns traditionally used for fire indicators are extremely reliable.
- B) 95% of the time when such accelerants are used, arson is the cause of the fire.
- C) Fire burn patterns traditionally used for fire indicators are not as reliable as once thought.
- D) The intensity of the fire is evenly distributed throughout the container.

Answer --> C

Notes) Page 1149, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Firefighters should be aware of general patterns that will exist and realize that a fire investigator should be called if there are any questions concerning the area of origin or fire cause.

1645) Where would be the point of origin of an exterior fire on flat ground, with consistent fuel, and no wind?

- A) In the center of the circular fire pattern.
- B) In the area of the greatest char.
- C) On the perimeter of the fire pattern.
- D) All the above.

Answer --> A

Notes) Page 1150, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

This type of condition in which the ground is level, the fuel is consistent and there is no wind would be extremely rare.

1646) In an exterior fire where would you expect more unburned materials to remain?

- A) At the fingers of the fire.
- B) At the area of origin.
- C) On the periphery of the fire.
- D) At the head of the fire.

Answer --> B

Notes) Page 1150, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1647) In an exterior fire, grass will fall in what direction to the fire as it burns?

- A) Towards the area of origin.
- B) Away from the area of origin.
- C) Perpendicular to the area of origin.
- D) In a counterclockwise circular motion.

Answer --> A

Notes) Page 1150, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Even if the grass completely burns, the remaining ash will still point toward the area of origin.

All Chapters

1648) An ignition source that has sufficient temperature and energy to be in contact with fuel long enough to raise it to its ignition temperature is called a –

- A) Capable ignition source.
- B) Pertinent ignition source.
- C) Competent ignition source.
- D) Qualified ignition source.

Answer --> C

Notes) Page 1153, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1649) The history of the fire, beginning when the ignition source and the first fuel ignited meet at the area of origin, and proceeding through the entire duration of fire spread through the scene is known as –

- A) Fire events.
- B) Fire chronology.
- C) Ignition sequence.
- D) Ignition events.

Answer --> C

Notes) Page 1153, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1650) Besides accidental all of the following would be considered acceptable classifications of fire causes except for –

- A) Natural.
- B) Incendiary.
- C) Undetermined.
- D) Determined.

Answer --> D

Notes) Page 1154, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1651) Who has the initial responsibility of fire scene security?

- A) The first arriving police officers.
- B) The first arriving fire officer.
- C) The incident commander.
- D) Fire suppression personnel who respond to extinguish the fire.

Answer --> D

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1652) Early security measures at a fire should include which of the following?

- A) Restricting access to the scene.
- B) Protecting any potential evidence located in the area.
- C) Minimizing fire suppression and over all activities that could destroy important information regarding the origin and cause of the fire.
- D) All the above.

Answer --> D

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1653) During incidents involving explosions, a perimeter should be established at ____ the distance from the farthest point debris was found.

- A) 1.0 times.
- B) 1.5 times.
- C) 2.0 times.
- D) 2.5 times.

Answer --> B

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1654) At a structure fire, where should a perimeter be established?

- A) 100 feet from the structure in all directions.
- B) The perimeter should include the involved structure plus all structures surrounding the incident.
- C) It should extend beyond the farthest piece of evidence located during exterior examination of the structure.
- D) The perimeter should involve the structure itself and all access roads leading to the incident.

Answer --> C

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1655) To be effective, fire scene perimeters must be –

- A) Recognizable.
- B) Enforceable.
- C) Extensive.
- D) A and B.

Answer --> D

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1656) All the following statements regarding establishing parameters at fire scenes is true except for –

- A) The initial perimeter should only be as large as necessary to conduct an investigation.
- B) Ensure that the perimeter is visible and recognizable to everyone at the scene.
- C) Use uniform law enforcement officers or firefighters to control access into the established perimeter.
- D) Keep a log of all persons who enter and leave the incident perimeter whenever it is necessary to limit the number of personnel entering the scene.

Answer --> A

Notes) Page 1160, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

The initial perimeter should be larger than what is necessary for investigation.

1657) The term that refers to anything that can taint physical evidence is known as –

- A) Corruption.
- B) Contamination.
- C) Pestilence.
- D) Spoliation.

Answer --> B

Notes) Page 1163, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1658) The term that refers to evidence that is destroyed, damaged, altered, or otherwise not preserved by someone who has responsibility for the evidence is known as –

- A) Corruption.
- B) Contamination.
- C) Pestilence.
- D) Spoliation.

Answer --> D

Notes) Page 1164, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1659) What is THIRA ?

- A) A family fire prevention initiative.
- B) An acronym for Threat and Hazard Identification and Risk Assessment.
- C) An entity of Homeland Security that investigates suspicious fires.
- D) An incendiary liquid use to mask arson fires.

Answer --> B

Notes) Page 1222, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1660) Which of the following processes of THIRA would attempt to answer the question: "What could happen in my community?"

- A) Give the threats and hazards context.
- B) Examine the core capabilities.
- C) Identify the threats and hazards.
- D) Set capability targets.

Answer --> C

Notes) Page 1222, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1661) Which of the following processes of THIRA would use capability targets to decide how to use resources from the whole community?

- A) Give the threats and hazards context.
- B) Examine the core capabilities.
- C) Apply the results.
- D) Set capability targets.

Answer --> C

Notes) Page 1222, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1662) Which of the following processes of THIRA would attempt to answer the question: "What effect would each threat or hazard have on the jurisdiction's core capabilities as identified in the National Preparedness Goal?"

- A) Give the threats and hazards context.
- B) Examine the core capabilities.
- C) Identify the threats and hazards.
- D) Set capability targets.

Answer --> B

Notes) Page 1222, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1663) Hazard identification requires that the community –

- A) Determines the specific types of hazards it will face.
- B) Determines the threat the hazard will pose.
- C) Make an estimate of the portion of the population that may be affected.
- D) All the above.

Answer --> D

Notes) Page 1223, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1664) THIRA threats and hazards are divided in all but which of the following categories?

- A) Cyber hazards.
- B) Natural hazards.
- C) Threats or human-caused hazards.
- D) Technological hazards.

Answer --> A

Notes) Page 1223, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1665) A good model for THIRA program delivery would include which of the following?

(1) Education. (2) Enforcement. (3) Economic incentives. (4) Engineering. (5) Emergency response.

- A) 1, 2, 5.
- B) 2, 4, 5.
- C) 1, 2, 3, 5.
- D) 1, 2, 3, 4, 5.

Answer --> D

Notes) Pages 1224–1225, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

This is called the five Es.

1666) Enforcement activities assigned to the fire department are generally limited to all but which of the following?

- A) Building code enforcement.
- B) Insurance code enforcement.
- C) Fire code enforcement.
- D) Life safety code enforcement.

Answer --> B

Notes) Page 1225, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1667) THIRA economic incentives –

- A) Penalize the individual for not participating in the program.
- B) Offer tax deductions for installing sprinkler systems.
- C) Pay the individual participating in the program.
- D) B and C.

Answer --> D

Notes) Page 1225, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1668) Which THIRA element provide solutions to prevent a hazard or reduce harm once a hazard occurs?

- A) Emergency response.
- B) Engineering.
- C) Enforcement.
- D) Education.

Answer --> B

Notes) Page 1226, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1669) Fire and life safety education is designed to –

- A) Inform citizens about unsafe behaviors and provide information on how to change those behaviors.
- B) Teach citizens how to survive a fire if one occurs in their home.
- C) Enforce fire codes within a given jurisdiction.
- D) All the above.

Answer --> A

Notes) Page 1226, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1670) A condition that encourages a fire to start or increases the extent or severity of a fire is known as a –

- A) Fire source.
- B) Fire hazard.
- C) Fire potential.
- D) Safety hazard.

Answer --> B

Notes) Page 1226, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition.

1671) Unsafe behaviors or conditions that could result in injury, death, or property damage not associated with fire is known as –

- A) Hazard source.
- B) Safety violation.
- C) Safety danger.
- D) Safety hazard.

Answer --> D

Notes) Page 1226, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1672) Which of the following hazards can benefit from fire and life safety education?

- A) Unsafe behaviors.
- B) Unsafe conditions.
- C) Hazardous processes.
- D) All the above.

Answer --> D

Notes) Page 1226, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1673) All of the following would be considered unsafe behaviors except for –

- A) Poor housekeeping.
- B) Careless use of flammable and combustible liquids.
- C) Dead battery in or nonworking smoke detector.
- D) Not wearing seatbelts.

Answer --> C

Notes) Page 1227, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

A dead battery or a nonworking smoke detector would be considered an unsafe condition.

1674) All the following would be considered unsafe conditions except for –

- A) Ice on sidewalk or exterior stairs.
- B) Lose handrail on stairway.
- C) Unsecured swimming pool access.
- D) Unattended cooking materials.

Answer --> D

Notes) Page 1228, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Unattended cooking materials would be considered an unsafe behavior.

1675) Which of the following would be considered an important category for fire and life safety messages?

(1) Prevent. (2) Prepare. (3) Protect. (4) Persuade. (5) Pursue.

- A) 1, 4.
- B) 2, 3, 4.
- C) 1, 2, 3, 4.
- D) 1, 2, 3, 4, 5.

Answer --> C

Notes) Page 1228, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1676) The "Prevent" category for fire and life safety messages would include all but which of the following?

- A) Install a home sprinkler system.
- B) Smoke outside.
- C) Correct fire and burn hazards in the kitchen.
- D) Use a flashlight when the power is out.

Answer --> A

Notes) Pages 1229–1230, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Installing a home sprinkler system would fall under the category of "Prepare."

1677) The "Prepare" category for fire and life safety messages would include all but which of the following?

- A) Install and test smoke alarms.
- B) Practice a school fire drill.
- C) Know who will wake up and assist children.
- D) Set water heaters at 120 degrees F.

Answer --> D

Notes) Page 1230, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Setting the water heater to 120 degrees F would fall under the category of "Prevent."

1678) The "Protect" category for fire and life safety messages would include all but which of the following?

- A) Crawl low under smoke.
- B) Get out fast and stay out.
- C) Extinguish candles when you leave a room.
- D) Stop, drop, and roll if you're close catch on fire.

Answer --> C

Notes) Pages 1230–1231, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Extinguishing candles when you leave a room would fall under the "Prevent" category.

All Chapters

1679) The "Persuade" category for fire and life safety messages would include all but which of the following?

- A) Encourage outside smoking only.
- B) Call 911 or local emergency number after escape.
- C) Install, test, and maintain residential smoke alarms.
- D) Attend public fireworks displays and avoid personal use of fireworks.

Answer --> B

Notes) Page 1231, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Calling 911 would fall under the category of "Protect."

1680) What is the youngest age group to whom fire and life safety messages can be effectively taught?

- A) Preschool children.
- B) Elementary age children.
- C) Middle school children.
- D) High school students.

Answer --> A

Notes) Page 1231, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1681) All the following fire and life safety messages would be appropriate for elementary age children except for -

- A) Smoke alarm safety.
- B) Survival skills.
- C) Use or misuse of fire.
- D) Home escape plan.

Answer --> A

Notes) Pages 1232-1233, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Smoke alarm safety would be more a topic for high school students.

1682) All the following fire and life safety messages would be appropriate for preschool children except for -

- A) Matches and lighters safety.
- B) Stop, drop, and roll.
- C) Home escape.
- D) Smoke alarm response.

Answer --> D

Notes) Pages 1231-1232, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Smoke alarm response would be more a topic for elementary age children.

All Chapters

1683) All the following fire and life safety messages would be appropriate for middle school children except for –

- A) Safe driving habits.
- B) Fire science, making the connection between fire behavior and classroom science.
- C) Health and safety education, such as CPR training.
- D) Cooking safety.

Answer --> A

Notes) Pages 1232–1233, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Safe driving habits would be more a topic for high school students.

1684) Which age group is twice as likely to die in a fire, leading all other age groups in fire-related deaths?

- A) Preschool children.
- B) High school students.
- C) Adults.
- D) Older adults.

Answer --> D

Notes) Page 1234, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

They're also at greater risk for injuries due to fire and burn injuries as well as injuries related to trips and falls.

1685) What is the leading cause of fire fatalities among older adults?

- A) Fires related to cooking.
- B) Careless smoking.
- C) Fires from faulty electrical wiring.
- D) Fires related to poorly maintained heating equipment.

Answer --> B

Notes) Page 1234, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1686) What is the leading cause of fire-related injuries among older adults?

- A) Fires related to cooking.
- B) Careless smoking.
- C) Fires from faulty electrical wiring.
- D) Fires related to poorly maintained heating equipment.

Answer --> A

Notes) Page 1234, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1687) Structure surveys are performed by fire companies for which of the following reasons?

- A) To become familiar with public-access structures and workplaces.
- B) To provide a public service to homeowners and renters in their place of residence.
- C) Because they are mandated by law.
- D) A and B.

Answer --> D

Notes) Page 1235, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1688) Surveys in private residential structures are –

- A) Not required by law.
- B) Required annually.
- C) Required in residences over one-story tall.
- D) Required by law in urban jurisdictions.

Answer --> A

Notes) Page 1235, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1689) Company-level preincident surveys are generally conducted on all but which of the following occupied structures?

- A) Hotels and motels.
- B) Apartment complexes.
- C) Private residences.
- D) Commercial, industrial, institutional, and educational structures.

Answer --> C

Notes) Page 1235, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1690) Children under the age of 18 years account for ____ of all arson arrests.

- A) 25%.
- B) 36%.
- C) 54%.
- D) 61%.

Answer --> C

Notes) Page 1236, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1691) What is the second leading cause of fatalities in residential fires?

- A) Careless smoking.
- B) Cooking related fires.
- C) Faulty electrical wiring.
- D) Juvenile fire setting.

Answer --> D

Notes) Page 1236, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1692) Which category of juvenile fire setters would include boys and girls between two and 10 years of age?

- A) Curiosity/experimental.
- B) Troubled/crisis.
- C) Delinquent/criminal.
- D) Pathological/emotionally disturbed.

Answer --> A

Notes) Page 1237, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1693) Which category of juvenile fire setters would include those who set multiple fires that are very destructive and sophisticated?

- A) Curiosity/experimental.
- B) Troubled/crisis.
- C) Delinquent/criminal.
- D) Pathological/emotionally disturbed.

Answer --> D

Notes) Page 1237, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1694) Which category of juvenile fire setters would include a juvenile who knows the danger of fires and the consequences of his or her actions?

- A) Curiosity/experimental.
- B) Troubled/crisis.
- C) Delinquent/criminal.
- D) Pathological/emotionally disturbed.

Answer --> C

Notes) Page 1237, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1695) Which category of juvenile fire setters would include those who use fire to express anger, sadness, or frustration?

- A) Curiosity/experimental.
- B) Troubled/crisis.
- C) Delinquent/criminal.
- D) Pathological/emotionally disturbed.

Answer --> B

Notes) Page 1237, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

1696) Consensus-based standards or codes established to provide uniformity and regulations in regards to construction, design, and use is known as –

- A) Building code.
- B) Model code.
- C) Fire code.
- D) Life safety code.

Answer --> B

Notes) Page 1238, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

When adopted by the local jurisdiction, these codes become enforceable law.

1697) Which of the following are considered model: organizations?

- A) Canadian Commission on Building and Fire Codes (CCBFC).
- B) International Code Council (ICC).
- C) National Fire Protection Association (NFPA).
- D) All the above.

Answer --> D

Notes) Page 1238, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

Each code organization has a series of codes that, when adopted, can be used to regulate building components such as structural, mechanical, electrical, and plumbing, as well as fire and life safety.

1698) Model codes are only enforceable when –

- A) NFPA has approved each code.
- B) They are sanctioned from the Department of defense (DOD).
- C) The AHJ adopts them.
- D) All the above.

Answer --> C

Notes) Page 1239, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ

All Chapters

1699) What is the NFPA Standard for Professional Qualifications for Fire Inspector and Plan Examiner?

- A) NFPA 1031.
- B) NFPA 1033.
- C) NFPA 1035.
- D) NFPA 1037.

Answer --> A

Notes) Page 1239, Essentials Of Fire Fighting And Fire Department Operation, 6th Edition. NTQ