



**STUDENT NAME:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

ASSESSMENT			
<b>UNIT OF COMPETENCY:</b>	MARF035 Contribute to fire prevention and firefighting (basic firefighting)		
<b>ASSESSMENT EVENT:</b>	Theory Assessment		
<b>TOTAL MARKS:</b>	72	<b>TIME ALLOWED:</b>	90 MINUTES
<b>MARKS REQUIRED FOR SATISFACTORY RESULT:</b>	51 (70%)	<b>MARKS OBTAINED:</b>	

**INSTRUCTIONS TO STUDENTS**

- This assessment will be completed during the course and prior to the completion of the course
- Ask assessor/invigilator for clarification in case of difficulty in reading or understanding the assessment/questions
- Your assessor will explain assessment requirements and conditions to you
- All questions are compulsory and should be attempted
- Answers should be noted on answer sheets
- Working of calculations should be shown on the answer sheet
- For multiple choice questions circle the letter/number against the correct answer
- Mobile phones are not to be used during the assessment
- The assessor will provide you feedback on your incorrect answers after marking the assessment

**STUDENT DECLARATION**

Please tick the boxes indicating your agreement to the following:

- € I have understood the instructions provided and have received all relevant documentation and learning material to complete the assessment/s
- € I have been advised of the assessment requirements, have been made aware of my rights and responsibilities as a Student, have the knowledge and skills; and agree to be assessed at this time.
- € I have been made aware of the 'Appeals Procedure'.
- € That in case my responses to questions are not clear, the assessor will set up another meeting with me or ask to follow up questions.
- € I have been advised that a resit opportunity will be provided, if I am unsuccessful in the first attempt. The decision to provide a resit is at the discretion of the assessor dependent upon this assessment & my overall performance in this course.
- € I confirm having read and understood the Instructions to Students, Student Declaration and assessment process.



	STUDENT SIGNATURE: _____		DATE: _____
	ASSESSOR to complete with feedback for student and further instruction if resubmit is required		
ASSESSOR'S NAME: _____	DATE MARKED: _____	ASSESSMENT RESULT: * S / NYS	
ASSESSOR SIGNATURE: _____	_____	* S= Satisfactory NYS = Not Yet Satisfactory	
ASSESSOR FEEDBACK TO STUDENT:			
I have received the results and feedback for this assessment:			STUDENT'S SIGNATURE: _____





**SECTION 1: MARF035 - Follow procedures to minimise and fight fires on board a vessel**

**- Multiple Choice**

Time allowed: Theory Assessment 60 minutes

- **Multiple Choice**
- **Read each question carefully, then indicate your answer on this sheet by circling your corresponding response**
- **Indicate one response for each question**
- **Successful completion of this multiple-choice theory paper is 20 correct answers**

- |                    |                    |
|--------------------|--------------------|
| 1. a b c <b>d</b>  | 16. <b>a</b> b c d |
| 2. a b c <b>d</b>  | 17. a b c <b>d</b> |
| 3. <b>a</b> b c d  | 18. a b <b>c</b> d |
| 4. <b>a</b> b c d  | 19. a b <b>c</b> d |
| 5. a <b>b</b> c d  | 20. a b c <b>d</b> |
| 6. a <b>b</b> c d  | 21. a b c <b>d</b> |
| 7. a b c <b>d</b>  | 22. <b>a</b> b c d |
| 8. a <b>b</b> c d  | 23. a b <b>c</b> d |
| 9. a b <b>c</b> d  | 24. a b c <b>d</b> |
| 10. <b>a</b> b c d | 25. a <b>b</b> c d |
| 11. a <b>b</b> c d | 26. a b <b>c</b> d |
| 12. a b c <b>d</b> | 27. a <b>b</b> c d |
| 13. a <b>b</b> c d | 28. <b>a</b> b c d |
| 14. a b <b>c</b> d | 29. a b c <b>d</b> |
| 15. <b>a</b> b c d |                    |





Question	SECTION 1: FIRE FIGHTING - Multiple Choice	Marks
1.	What are the 4 elements of the Fire tetrahedron? <b>KE8</b> a) Air, Water, earth, chain reaction b) Fire, heat, air, fuel c) Heat, oxygen, chain reaction, convection d) <b>Oxygen, fuel, heat, chain reaction</b>	1
2.	Fire can spread through: <b>KE13</b> a) Conduction b) Convection c) Radiation d) <b>All of the above</b>	1
3.	In which way does convection cause the fire to spread? <b>KE13</b> a) <b>Upwards</b> b) From oven fires c) Sideways d) Contact between materials	1
4.	Conduction causes the fire to spread <b>KE13</b> a) <b>Through contact between materials</b> b) In ceiling spaces c) Downwards d) Through electrical connections	1
5.	Scrunched up oil rags and metal filings can cause a fire on board due to <b>KE13</b> a) Flammable bins b) <b>Spontaneous ignition</b> c) Convection d) All of the above	1
6.	Fire Patrol systems are required on commercial passenger vessels that carry more than <b>KE27</b> a) 2 passengers b) <b>36 passengers</b> c) 5000 passengers d) 250 Cattle	1
7.	When bunkering (fuel transfer) what precautions should you take? <b>KE25</b> a) Follow bunkering checklist b) No naked flames nearby c) Prevent oil / fuel spills d) <b>All of the above</b>	1
8.	Where are copies of the "Ship Fire plan" located for the benefit of <b>shore-based</b> Fire Teams/ Fire Brigade? <b>KE16</b> a) Engine room b) <b>Gangway</b> c) Purser's office d) Engineer's office	1



9. Muster lists contain: **KE18** 1
- a) Location of Passengers
  - b) Passage plans and times of departures
  - c) **Duties for crew during emergencies**
  - d) Crew watch rotations
10. One of the first things you should familiarise yourself with on joining a ship is: **KE24, KE16** 1
- a) **The fire control plan and evacuation instructions**
  - b) The laundry procedures
  - c) The mealtime roster and pay rates
  - d) The specifications of the ship and stability booklet
11. If the fire fighter tugs **three** times on the fire lifeline what does it mean? **KE15** 1
- a) Pay out more line
  - b) **Help me out immediately**
  - c) Im having a rest
  - d) Cannot find fire
12. Fire drills should include: **KE12** 1
- a) Rescuing an unconscious person from smoke filled room
  - b) Entering an enclosed room on fire
  - c) Crew getting dressed in BA Equipment
  - d) **All of the above**
13. Fixed powder firefighting apparatus are fitted to ships carrying **Liquefied Gases in Bulk** for the purpose of: **KE23** 1
- a) Because the Law of the Seas says you have to
  - b) **Fighting fire on the deck and in cargo handling areas.**
  - c) Fighting fires inside containers
  - d) Fighting fires in the galley
14. In Australia, which is the most suitable fire extinguisher for fighting a class B fire? **KE19** 1
- a) Red with a white band
  - b) Red
  - c) **Red with a blue band**
  - d) Red with a black band
15. When fighting a fire in an enclosed space, which extinguisher could asphyxiate you? **KE14** 1
- a) **Red with a black band**
  - b) Red
  - c) Red with a white band
  - d) Blue or red with a blue band
16. Which fire extinguisher is **most suitable** for a Diesel Oil fire? **KE5** 1
- a) **Foam**
  - b) Water
  - c) Dry chemical
  - d) Wet Chemical



17. Which of the following fire extinguishers can conduct electricity? **KE5** 1  
a) Foam  
b) Water  
c) Wet Chemical  
d) All of the above
18. A CO2 fire extinguishers colour is: **KE5** 1  
a) Red with a blue band  
b) Red with a white band  
c) Red with a black band  
d) Blue with a red band
19. How often should fire extinguishers be serviced? **KE19** 1  
a) Daily  
b) Every 5 years  
c) Annually  
d) Only if they get used
20. Which of the following fire fighting equipment are designed to smother a fire? **KE9** 1  
a) CO2  
b) Foam  
c) Wet Chemical  
d) All of the above
21. Which is the best portable fire extinguisher to use for a fuel fire? 1  
**KE19, KE9**  
a) Water  
b) Wet chemical  
c) Dry Chemical  
d) Aqueous Film Forming Foam (AFFF)
22. What are the four sections that make up a fireman's outfit? **KE6** 1  
a) Personal protective outfit, Distress Signal Unit, Breathing Apparatus, Fireproof Line  
b) Fire Axe, Gumboots, Fireproof Torch, Walkie Talkie  
c) Hazmat Suit, Sunglasses, Cotton Pants, Hard Hat  
d) Fire Extinguisher, Fire Blanket, Foam Applicator, 'How to Fight Fires' Handbook
23. Where would you expect to find a fire blanket? **KE28** 1  
a) Bridge  
b) Gangway  
c) Galley  
d) Linen cupboard
24. The appropriate response on discovering a fire is to: **KE1.2** 1  
a) Activate the alarm  
b) Inform the bridge  
c) Restrict the spread and try to extinguish  
d) All of the above





25. How many ready means of escape must all passenger and crew spaces have to lifeboat and liferaft embarkation areas? **KE30** 1  
a) 1  
b) 2  
c) 3  
d) 0
26. How many independently driven fire pumps must all passenger ships over 4,000 Gross Tonnage carry? **KE30** 1  
a) 1  
b) 2  
c) 3  
d) 4
27. What permit system should be employed prior to all welding operations? **KE25** 1  
a) Dry Work  
b) Hot Work  
c) Wet Work  
d) Dangerous Work
28. When does static electricity pose a threat onboard ship: **KE11** 1  
a) During refueling/ bunkering  
b) When wearing a wooly jumper  
c) While discharging ballast water  
d) During painting
29. Before releasing a fixed fire suppression system in an engine room, you should: **KE29** 1  
a) Do so only on Masters orders  
b) Evacuate personnel  
c) Shut ventilation and close fuel shut-offs  
d) All of the above

**Question SECTION 2: FIRE FIGHTING – Short Answers**

**Marks**

30. Name 4 general safety principles to help prevent fire onboard ships: **KE25** 4  
1. No smoking in hazardous areas  
2. Cleanliness  
3. Good housekeeping  
4. Ability to recognize fire hazards and to take the necessary steps to prevent fires.
31. List 3 galley fire hazards: **KE11** 3  
1. combustible liquids, e.g. cooking oil, hot fat  
2. hot surfaces, e.g. ovens, frying pans, flues  
3. defective electrical connections
32. What is the sound signal for? **KE2** 2  
1. Fire Alarm: Continuous ringing of a bell  
2. General Alarm: Seven short blasts followed by one long blast on the ship's whistle and bells
33. List 3 items of communication equipment used onboard during emergencies: **KE6, KE26** 3  
messengers / telephones / walkie-talkies / ship-to-shore VHF / public address system, Lifelines



34. List 4 topics you would cover during a debrief after a fire drill: **KE17** 4

What went well, what needs to improve, what issues were identified, communication standards, actions of other crew members, equipment malfunction, equipment not being in its proper place, crew not proficient in using equipment

35. Fill in the table with the 6 classes of fire: **KE7** 6

Class	Fuel
<b>Class A</b>	Solids which contain carbon
<b>Class B</b>	Combustible liquids
<b>Class C</b>	Combustible gases
<b>Class D</b>	Combustible metals
<b>Class E</b>	Live electrical equipment
<b>Class F</b>	Cooking oils and fats

36. Outline when you would use the following nozzle settings: **KE21** 3

Jet: Attack at base of fire

Spray: Create a water wall to protect the hose team

Mist/ Fog: Minimise water use for boundary cooling or to attack liquid fuel

37. Why is it important to watch a fire zone after the fire has been extinguished? **KE17,KE3.5** 2

A fire watch is kept to guard against re-flash

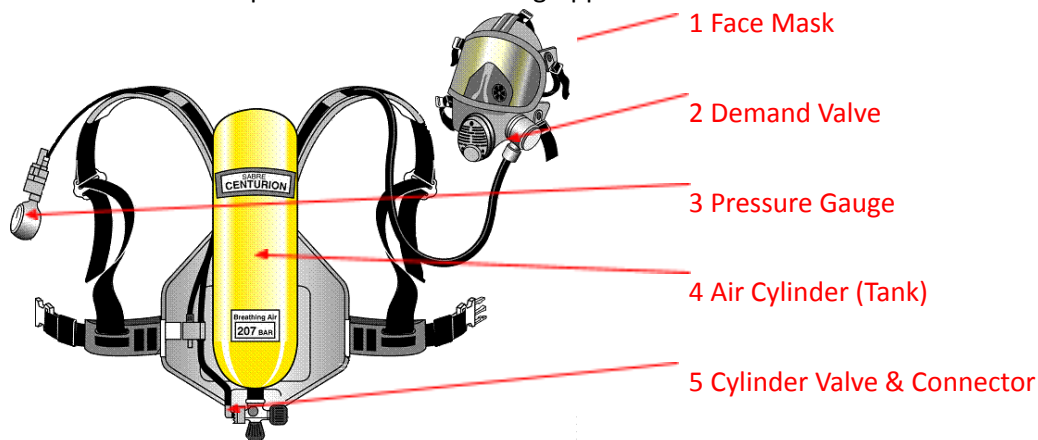
38. What 3 main points must be relayed to the bridge when encountering a fire? **KE24** 3

1. Confirm the exact location for the vessel's fire party
2. Give them the information regarding the type of fire to expect
3. suggested areas to be closed up to isolate the fire and in which areas the fire should be isolated

39. What causes an automatic sprinkler system to activate? **KE28** 2

When a fire starts a plume of hot gases rise to the ceiling. If a sprinkler is present, a glass bulb or solder link gets hot and at a specific temperature (typically 68°C) breaks releasing a cap and allowing water to flow onto a specially designed diffuser

40. Label the main components of the Breathing Apparatus Set below: **KE6** 5





Question	SECTION 3 – FIRE FIGHTING – True or False (Circle Correct Answer)	Marks
41.	Emergency escape routes cannot be used in reverse direction for access to the fire spot: <b>KE16</b> True / False	1
42.	Fires should be contained in the areas where they originated and not allowed to escape to other sections of the ship: <b>KE3.1</b> True / False	1
43.	Fire / Smoke Alarms only need to be investigated if there is accompanying smoke as most are false alarms? <b>KE10</b> True / False	1
44.	The Work Health and Safety (WHS) Act 2011 and AMSA maritime safety regulations establish requirements for fire safety, emergency response, and crew training on vessels. <b>KE31</b> True / False	1
45.	Ventilation flaps should be shut in the event of a machinery space or cargo space fire. <b>KE29</b> True / False	1
46.	During shipboard firefighting, following Work Health and Safety (WHS) requirements means all crew involved must wear the correct protective equipment, including fire-resistant clothing, gloves, boots, and a self-contained breathing apparatus (SCBA) when entering hazardous environments. <b>KE31</b> True / False	1