



# PHYSICS

1. For which Diode is used ?

- (1) modulation
- (2) oscillation
- (3) amplification
- (4) purification

(SSC Section Officer (Audit)  
Exam. year 1997)

2. Who among the following developed the technology of underground nuclear explosion ?

- (1) Dr. Homi J. Bhabha
- (2) Dr. Vikram Sarabhai
- (3) Dr. Raja Ramanna
- (4) Dr. P. K. Iyengar

(SSC Section Officer (Audit)  
Exam. year 1997)

3. Which among the following types of coal produces most heat per unit ?

- (1) Coal
- (2) Lignite
- (3) Anthracite
- (4) Pit

(SSC Section Officer (Audit)  
Exam. year 1997)

4. Which among the following waves is used for communication by artificial satellites ?

- (1) Micro waves
- (2) Radio waves
- (3) A. M.
- (4) Frequency of  $10^{16}$  series

(SSC Section Officer (Audit)  
Exam. year 1997)

5. What is found in frequency modulation ?

- (1) Fixed frequency
- (2) Fixed dimension
- (3) Change in frequency and dimension
- (4) Change in dimension only

(SSC Section Officer (Audit)  
Exam. year 1997)

6. When the speed of car is doubled, then what will be the braking force of the car to stop it in the same distance ?

- (1) four times
- (2) two times
- (3) half
- (4) one-fourth

(SSC Section Officer (Audit)  
Exam. year 1997)

7. The dimension of which of the following is the same as that of impulse ?

- (1) Volume
- (2) Momentum
- (3) Torque
- (4) Change in the rate of momentum

(SSC Section Officer (Audit)  
Exam. year 1997)

8. Which among the following is the fundamental quantity ?

- (1) Volume
- (2) Time
- (3) Velocity
- (4) Force

(SSC Section Officer (Audit)  
Exam. year 1997)

9. When a ring of metal is heated what happens to its hole ?

- (1) expands
- (2) contracts
- (3) it expands or contracts according to its diameter
- (4) it expands or contracts according to its coefficient of expansion

(SSC Section Officer (Audit)  
Exam. year 1997)

10. If the diameter of a capillary is doubled, then the rise of water in it will be

- (1) two times
- (2) half
- (3) four times
- (4) no change

(SSC Section Officer (Audit)  
Exam. year 1997)

11. Why the needle of iron swims on water surface when it is kept gently ?

- (1) It will remain under the water, when it will displace more water than its weight
- (2) the density of needle is less than that of water
- (3) due to surface tension
- (4) due to its shape

(SSC Section Officer (Audit)  
Exam. year 1997)

12. The mass of a star is two times the mass of the Sun. How it will come to an end ?

- (1) Neutron Star
- (2) Black hole
- (3) White Dwarf
- (4) Red Giant

(SSC Section Officer (Audit)  
Exam. year 1997)

13. Rain drops fall from great height. Which among the following statements is true regarding it?

- (1) they fall with that ultimate velocity, which are different for different droplets
- (2) they fall with same ultimate velocity

(3) their velocity increases and they fall with different velocity on the earth

(4) their velocity increases and they fall with same velocity on the earth

(SSC Section Officer (Audit)  
Exam. year 1997)

14. On which of the following techniques photostate machine works ?

- (1) Magnetic Image—Making
- (2) Thermal Image—Making
- (3) Electrostatic Image—Making
- (4) Electromagnetic Image—Making

(SSC Section Officer (Audit)  
Exam. year 1997)

15. One Kilowatt hour is equal to—

- (1) 3.6 Mega Joule
- (2) 3.8 Mega Joule
- (3) 3.2 Mega Joule
- (4) 4.0 Mega Joule

(SSC Section Officer (Audit)  
Exam. year 1997)

16. What is the minimum escape velocity of rocket to be launched into space ?

- (1) 5 Km/Sec.
- (2) 6 Km/Sec.
- (3) 11 Km/Sec.
- (4) 15 Km/Sec.

(SSC Section Officer (Audit)  
Exam. year 1997)

17. Which of the following statements is true when we see 'rainbow' ?

- (1) We face sun and raindrops
- (2) The Sun remains behind us and we face raindrops
- (3) In light rainfall, we face Sun
- (4) The sky remains clear and the sun is at lower position in the sky

(SSC Section Officer (Audit)  
Exam. year 1997)

18. How much calorie of energy is released by a boiled egg ?

- (1) 40
- (2) 50
- (3) 60
- (4) 77

(SSC Section Officer (Audit)  
Exam. year 1997)

- 19.** The splitting of different colours of light in a prism is :  
 (1) Reflection of light  
 (2) Dispersion of light  
 (3) Diffraction of light  
 (4) Refraction of light

(SSC Combined Graduate Level  
 Prelim Exam. 04.07.1999  
 (First Sitting))

- 20.** A boat will submerge when it displaces water equal to its own:  
 (1) volume (2) weight  
 (3) surface area (4) density

(SSC Combined Graduate Level  
 Prelim Exam. 04.07.1999  
 (Second Sitting))

- 21.** Surface tension in a liquid is due to :

- (1) Adhesive force between molecules  
 (2) Cohesive force between molecules  
 (3) Gravitational force between molecules  
 (4) Electrical force between molecules.

(SSC Combined Graduate Level  
 Prelim Exam. 27.02.2000  
 (First Sitting))

- 22.** A circular plate, a cube and a sphere, all made up of same material and having the same mass, are heated to 300°C and left in a room. Which of them will have the slowest rate of cooling?

- (1) Circular plate  
 (2) Cube  
 (3) Sphere  
 (4) All will cool at the same rate

(SSC Combined Graduate Level  
 Prelim Exam. 27.02.2000  
 (First Sitting))

- 23.** Optic fibres are used in :

- (1) CAT scans  
 (2) X-ray photos  
 (3) Ultrasound scans  
 (4) Endoscopy

(SSC Combined Graduate Level  
 Prelim Exam. 27.02.2000  
 (First Sitting))

- 24.** Two waves, each of amplitude 1.5 mm and frequency 10 Hz, are travelling in opposite direction with a speed of 20 mm/s. The distance in mm between adjacent nodes is :

- (1) 1.0 (2) 1.2  
 (3) 1.5 (4) 2.0

(SSC Combined Graduate Level  
 Prelim Exam. 27.02.2000  
 (Second Sitting))

- 25.** The snow on the mountains does NOT melt all at once when it is heated by the sun because:

- (1) it becomes very hard  
 (2) it reflects most of the heat from the sun  
 (3) it has a low specific heat capacity  
 (4) it has a high latent heat of fusion

(SSC Combined Graduate Level  
 Prelim Exam. 27.02.2000  
 (Second Sitting))

- 26.** A person standing on a railway platform listens to the whistles of arriving and departing trains. The whistle heard is

- (1) the same in both cases in all respects  
 (2) of higher intensity when train arrives  
 (3) of higher pitch when train arrives  
 (4) of higher pitch when train departs

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 27.** Holography is a technique of

- (1) recording a permanent, sharp two dimensional black and white or multicolour photograph  
 (2) recording a permanent three dimensional multicolour photograph  
 (3) recording a permanent three dimensional black and white photograph  
 (4) recording a permanent three dimensional photograph of a given single colour or a multicolour

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 28.** The velocity of sound in moist air is more than in dry air because the moist air has

- (1) less density than dry air.  
 (2) less pressure than dry air.  
 (3) more pressure than dry air.  
 (4) more density than dry air.

(SSC CGL Tier-I Exam, 09.08.2015  
 (1st Sitting) TF No. 1443088)

- 29.** An ice block with a piece of lead embedded in it floats in water. If ice melts the water level

- (1) Rises (2) Falls  
 (3) Remains same  
 (4) Falls first and then rises

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 30.** The velocity of heat radiation in vacuum is

- (1) Equal to that of light  
 (2) Less than that of light  
 (3) Greater than that of light  
 (4) Equal to that of sound

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 31.** The plastic material commonly used for making gear wheels is

- (1) Polyesters (2) Nylons  
 (3) Bakelit (4) Polystyrene

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 32.** Ultra violet radiations of the Sun do not reach the earth because, earth's atmosphere is surrounded by

- (1) Carbon dioxide  
 (2) Ammonia  
 (3) Chlorine (4) Ozone

(SSC Section Officer (Audit)  
 Exam. 09.09.2001)

- 33.** "Curie" is unit of :

- (1) Radioactivity  
 (2) Temperature  
 (3) Heat  
 (4) Energy

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (First Sitting))

- 34.** Which of the following is used in oven ?

- (1) X-rays (2) UV rays  
 (3) Microwaves (4) Radiowaves

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (First Sitting))

- 35.** When heated from 0° to 10°C volume of a given mass of water will :

- (1) Increase gradually  
 (2) Decrease gradually  
 (3) Increase and then will decrease  
 (4) Decrease and then will increase

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (First Sitting))

- 36.** Energy is continuously created in the sun due to:  
 (1) nuclear fusion  
 (2) nuclear fission  
 (3) radioactivity  
 (4) artificial radioactivity

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (Second Sitting))

- 37.** In electronics what comes under tank circuit ?

- (1) Resistance and capacity  
 (2) Resistance and inductance  
 (3) Capacity and inductance  
 (4) Resistance, capacity and inductance

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (Middle Zone))

- 38.** Coolis tube is used to produce

- (1) Radio waves  
 (2) Micro waves  
 (3) X-rays  
 (4) Gama rays

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (Middle Zone))

- 39.** Which of the following is used for regulated electric supply ?

- (1) Zener diode  
 (2) Junction diode  
 (3) Gun diode  
 (4) Tunnel diode

(SSC Combined Graduate Level  
 Prelim Exam. 24.02.2002  
 (Middle Zone))

- 40.** The source of the Sun's energy is the process of

- (1) Photoelectric emission  
 (2) Nuclear fission  
 (3) Nuclear fusion  
 (4) Thermionic emission

(SSC CPO Sub-Inspector  
 Exam. 12.01.2003)

- 41.** Gamma rays can cause

- (1) gene mutation  
 (2) sneezing  
 (3) burning (4) fever

(SSC CPO Sub-Inspector  
 Exam. 12.01.2003)

- 42.** The substance which conducts current in the solid state is

- (1) diamond (2) graphite  
 (3) iodine  
 (4) sodium chloride

(SSC CPO Sub-Inspector  
 Exam. 12.01.2003)

- 43.** Which set of conditions represents the easiest way to liquify a gas ?

- (1) Low temperature and high pressure  
 (2) High temperature and low pressure  
 (3) Low temperature and low pressure  
 (4) High temperature and high pressure

(SSC CPO Sub-Inspector  
 Exam. 12.01.2003)

- 44.** What is colour of light related to ?

- (1) Amplitude (2) Frequency  
 (3) Quality (4) Velocity

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003  
 (First Sitting))

- 45.** What principle/law explains the working of the hydraulic brakes in automobiles ?

- (1) Bernoulli's law  
 (2) Posieulle's principle  
 (3) Pascal's law  
 (4) Archimedes' principle

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003  
 (First Sitting))

- 46.** The best conductor of heat among the following is

- (1) alcohol (2) mercury  
 (3) ether (4) water

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003  
 (Second Sitting))

- 47.** What is viewed through an electron microscope?

- (1) Electrons and other elementary particles  
 (2) Structure of bacteria and viruses  
 (3) Inside of human stomach  
 (4) Inside of the human eye

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003 (Second  
 Sitting))

- 48.** What apparatus is used to locate a submerged object?

- (1) Radar (2) Sonar  
 (3) Quasar (4) Pulsar

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003  
 (Second Sitting))

- 49.** The instrument which uses sound waves to measure the depth of oceans is

- (1) Radar (2) Sonar  
 (3) Altimeter (4) Venturimeter

(SSC Combined Graduate Level  
 Prelim Exam. 11.05.2003  
 (Second Sitting))

- 50.** Which combination of colour is the most convenient during day and night time ?

- (1) Organe and blue  
 (2) White and black  
 (3) Yellow and blue  
 (4) Red and green

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 51.** The instrument that measures and records the relative humidity of air is

- (1) Hydrometer (2) Hygrometer  
 (3) Lactometer (4) Barometer

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 52.** The shape of our milky way galaxy is

- (1) circular (2) elliptical  
 (3) spiral  
 (4) None of the above

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 53.** The different colours of different stars are due to the variation of

- (1) temperature  
 (2) pressure  
 (3) density  
 (4) radiation from them

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 54.** The fundamental scientific principle in the operation of battery is

- (1) acid-base interaction  
 (2) dialysis  
 (3) dissociation of electrolytes  
 (4) oxidation-reduction

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 55.** Instrument used to measure the force and velocity of the wind is

- (1) Ammeter (2) Anemometer  
 (3) Altimeter (4) Audiometer

(SSC CPO Sub-Inspector  
 Exam. 07.09.2003)

- 56.** Wollen clothes keep the body warm because

- (1) Wool increases the temperature of the body  
 (2) Wool is a bad conductor  
 (3) Wool absorbs radiant heat from outer objects  
 (4) Wool rejects heat from the outer objects

(SSC Section Officer (Commercial  
 Audit) Exam. 16.11.2003)

- 57.** If the length of a simple pendulum is halved then its period of oscillation is  
 (1) doubled  
 (2) halved  
 (3) increased by a factor  $\sqrt{2}$   
 (4) decreased by a factor  $\sqrt{2}$   
 (SSC Section Officer (Commercial Audit) Exam. 16.11.2003)

- 58.** Mist is caused by  
 (1) dry ice  
 (2) ice at low temperature  
 (3) water vapour at low temperature  
 (4) carbon-monoxide in solid form  
 (SSC Section Officer (Commercial Audit) Exam. 16.11.2003)

- 59.** While catching a ball, a player pulls down his hands to lower the—  
 (1) force (2) momentum  
 (3) impulse (4) catching time  
 (SSC Section Officer (Audit) Exam. 14.12.2003)

- 60.** When a barometer reading suddenly recedes, it indicates that climate—  
 (1) will be very warm  
 (2) will be extremely stormy  
 (3) will remain cold  
 (4) incessant rain for at least 48 hours  
 (SSC Section Officer (Audit) Exam. 14.12.2003)

- 61.** A particle dropped from the top of a tower uniformly falls on ground at a distance which is equal to the height of tower. Which of the following paths will be traversed by the particle ?  
 (1) Circle (2) Parabolic  
 (3) Great circle  
 (4) Hyper-parabolic  
 (SSC Section Officer (Audit) Exam. 14.12.2003)

- 62.** Electron microscope was invented by  
 (1) Knoll and Ruska  
 (2) Robert Koch  
 (3) Leeuwenhock  
 (4) C.P. Swanson  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 63.** When a bottle of scent is kept open in a corner of a room its odour is felt in all parts of the room. This is due to the phenomenon of :  
 (1) evaporation (2) vaporisation  
 (3) diffusion (4) sublimation  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 64.** Clear nights are colder than cloudy nights because of  
 (1) conduction  
 (2) condensation  
 (3) radiation  
 (4) insolation  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 65.** Speed of sound is the greatest in :  
 (1) Water (2) Air  
 (3) Glass (4) Glycerine  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 66.** A gas thermometer is more sensitive than a liquid thermometer because a gas :  
 (1) is lighter than liquid  
 (2) expands more than a liquid  
 (3) is easy to obtain  
 (4) does not change state easily  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 67.** Which one of the following is used for sun glasses ?  
 (1) Pyrex glass  
 (2) Flint glass  
 (3) Crooks glass  
 (4) Crystal glass  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (First Sitting))

- 68.** The speed of light with the rise in the temperature of the medium :  
 (1) Increases  
 (2) Decreases  
 (3) Remains unaltered  
 (4) Drops suddenly  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (Second Sitting))

- 69.** Clothes keep us warm in winter because they :  
 (1) supply heat  
 (2) do not radiate heat  
 (3) prevent air from contacting the body  
 (4) prevent the heat of the body from escaping  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (Second Sitting))

- 70.** In a refrigerator what produces the cooling ?  
 (1) The ice which deposits on the freezer  
 (2) The sudden expansion of a compressed gas  
 (3) The evaporation of a volatile liquid  
 (4) None of these  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (Second Sitting))

- 71.** Why are we able to hear short wave broadcasts better than long wave broadcasts ?  
 (1) Short waves are more energetic than long waves.  
 (2) Short waves are unaffected by atmospheric disturbances.  
 (3) Short wave broadcasts are made by nearby radio stations.  
 (4) By convention, short waves are meant for long distances, whereas long waves are reserved for short distances.  
 (SSC Combined Graduate Level Prelim Exam. 08.02.2004 (Second Sitting))

- 72.** When the barometer reading dips suddenly, it is an indication of  
 (1) Hot weather  
 (2) Calm weather  
 (3) Storm  
 (4) Dry weather  
 (SSC CPO Sub- Inspector Exam. 05.09.2004)

- 73.** Good conductor of electricity is  
 (1) dry air (2) paper  
 (3) kerosene (4) graphite  
 (SSC CPO Sub- Inspector Exam. 05.09.2004)

- 74.** Which of the following is a non-renewable source of energy ?  
 (1) Biogas (2) Solar  
 (3) Wind (4) Coal  
 (SSC CPO Sub- Inspector Exam. 05.09.2004)

- 75.** Solar energy is converted into chemical energy during  
 (1) Transpiration  
 (2) Photosynthesis  
 (3) Diffusion  
 (4) Osmosis  
 (SSC CPO Sub- Inspector Exam. 05.09.2004)

- 76.** The term 'equinox' means  
 (1) The path which the Earth takes around the Sun  
 (2) The axis of the Earth around which it rotates  
 (3) When the day and night are of equal duration  
 (4) The time when the Sun seems to be going round and round in the sky in the Arctic but does not go below the horizon  
 (SSC CPO Sub-Inspector Exam. 05.09.2004)
- 77.** Heat from the Sun reaches the Earth by  
 (1) Reflection (2) Conduction  
 (3) Radiation (4) Convection  
 (SSC CPO Sub-Inspector Exam. 05.09.2004)
- 78.** In which of the following cases, kinetic energy is being used in performing work ?  
 (1) Paddling the bicycle to cover a distance  
 (2) Driving a car to cover a distance  
 (3) Wind mill grinding wheat grain  
 (4) Rowing a boat in the lake  
 (SSC CPO Sub-Inspector Exam. 05.09.2004)
- 79.** Which of the following parts of the sunlight makes the solar cooker hot ?  
 (1) Ultra violet (2) Red light  
 (3) Infra red (4) Cosmic rays  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 80.** If the velocity-time graph of a particle is represented by  $y = mt + c$ , then the particle is moving with  
 (1) constant speed  
 (2) constant velocity  
 (3) constant acceleration  
 (4) varying acceleration  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 81.** Which of the following occurred first ?  
 (1) Albert Einstein propounded the General Theory of Relativity  
 (2) Max Planck unveiled the Quantum Theory  
 (3) Guglielmo Marconi sent out the first wireless signals  
 (4) Wright Brothers successfully flew an aircraft  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 82.** A passenger standing in a bus is thrown outward when the bus takes a sudden turn. This happens due to  
 (1) Outward pull on him  
 (2) Inertia of motion  
 (3) Change in momentum  
 (4) Change in acceleration  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 83.** When pressure is increased the melting point of ice  
 (1) increases  
 (2) does not change  
 (3) decreases  
 (4) depends on the impurities in the ice  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 84.** Longitudinal waves cannot travel through  
 (1) Vacuum (2) Solid  
 (3) Liquid (4) Gas  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 85.** Electrostatic precipitator is used to control the pollution of  
 (1) air (2) water  
 (3) noise (4) thermal  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 05.12.2004)
- 86.** Tungsten is used for the manufacture of the filament of an electric bulb, because  
 (1) It is a good conductor  
 (2) It is economical  
 (3) It is malleable  
 (4) It has a very high melting point  
 (SSC CPO Sub-Inspector Exam. 26.05.2005)
- 87.** What is the wavelength of visible spectrum ?  
 (1)  $1300 \text{ \AA} - 3000 \text{ \AA}$   
 (2)  $3900 \text{ \AA} - 7600 \text{ \AA}$   
 (3)  $7800 \text{ \AA} - 8000 \text{ \AA}$   
 (4)  $8500 \text{ \AA} - 9800 \text{ \AA}$   
 (SSC CPO Sub-Inspector Exam. 26.05.2005)
- 88.** Who measured the velocity of light first ?  
 (1) Galileo (2) Newton  
 (3) Romer (4) Einstein  
 (SSC CPO Sub-Inspector Exam. 26.05.2005)
- 89.** When a vehicle passes, TV reception gets distorted. This is because  
 (1) metal reflects radiowaves  
 (2) spark plug creates electromagnetic disturbances  
 (3) vehicle pollution affects the performance of the TV components  
 (4) modern vehicles use electro-ignition system  
 (SSC CPO Sub-Inspector Exam. 26.05.2005)
- 90.** The energy emitted by the Sun is due to  
 (1) Chemical reaction  
 (2) Nuclear fission  
 (3) Nuclear fusion  
 (4) All of the above  
 (SSC CPO Sub-Inspector Exam. 26.05.2005)
- 91.** The sky appears blue because of  
 (1) Atmospheric water vapour  
 (2) Scattering of light  
 (3) Reflection on sea water  
 (4) Emission of blue wavelength by the sun  
 (SSC Section Officer (Audit) Exam. 05.06.2005)
- 92.** Dynamo is a device for converting  
 (1) Heat energy into electrical energy  
 (2) Mechanical energy into electrical energy  
 (3) Magnetic energy into electrical energy  
 (4) Chemical energy into electrical energy  
 (SSC Section Officer (Audit) Exam. 05.06.2005)
- 93.** Oil rises up the wick in a lamp because  
 (1) Oil is very light  
 (2) Of the diffusion of oil through the wick  
 (3) Of the surface tension phenomenon  
 (4) Of the capillary action phenomenon  
 (SSC Section Officer (Audit) Exam. 05.06.2005)
- 94.** In the atmosphere ultraviolet rays are absorbed by  
 (1) Oxygen (2) Nitrogen  
 (3) Ozone (4) Helium  
 (SSC Section Officer (Audit) Exam. 05.06.2005)

- 95.** Which of the following metals is used for the manufacture of heating elements provided in electric iron ?  
 (1) Nickel (2) Chromium  
 (3) Nichrome (4) Tungsten  
 (SSC Statistical Investigators Grade-IV Exam. 31.07.2005)
- 96.** An electron microscope gives higher magnification than an optical microscope, because :  
 (1) it uses more powerful lenses  
 (2) the velocity of electron is smaller than that of visible light  
 (3) the electrons have more energy than the light particles  
 (4) the wavelength of electrons is smaller as compared to the wavelength of visible light  
 (SSC Statistical Investigators Grade-IV Exam. 31.07.2005)
- 97.** The hydraulic brakes used in automobiles is a direct application of :  
 (1) Archimedes' principle  
 (2) Toricellian law  
 (3) Bernoulli's theorem  
 (4) Pascal's law  
 (SSC Statistical Investigators Grade-IV Exam. 31.07.2005)
- 98.** Where are mesons found ?  
 (1) Cosmic rays  
 (2) X-rays  
 (3) Gamma rays  
 (4) Laser beam  
 (SSC Section Officer (Commercial Audit) Exam. 25.09.2005)
- 99.** Plants are dried up in winter due to frost because  
 (1) Evaporation does not take place  
 (2) Photosynthesis does not take place at such low temperature  
 (3) Respiration does not take place at low temperature  
 (4) There is mechanical loss of tissues and drought condition prevails  
 (SSC Section Officer (Commercial Audit) Exam. 25.09.2005)
- 100.** For a body moving with non-uniform velocity and uniform acceleration  
 (1) Displacement – Time graph is linear  
 (2) Displacement – Time graph is non-linear  
 (3) Velocity – Time graph is non-linear  
 (4) Velocity – Time graph is linear  
 (SSC Section Officer (Commercial Audit) Exam. 25.09.2005)
- 101.** The fourth state of matter is known as  
 (1) Gas (2) Vapour  
 (3) Plasma (4) Electrons  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (First Sitting))
- 102.** Lamberts law is related to  
 (1) Reflection  
 (2) Refraction  
 (3) Interference  
 (4) Illumination  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (First Sitting))
- 103.** Which of the following laws validates the statement that matter can neither be created nor destroyed ?  
 (1) Law of conservation of energy  
 (2) Le Chatelier's Principle  
 (3) Law of conservation of mass  
 (4) Law of osmosis  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (First Sitting))
- 104.** Decibel is the unit used for  
 (1) Speed of light  
 (2) Intensity of heat  
 (3) Intensity of sound  
 (4) Radio wave frequency  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (First Sitting))
- 105.** The term 'Isoneph' indicates the lines of equal  
 (1) cloudiness (2) salinity  
 (3) rainfall (4) pressure  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (First Sitting))
- 106.** The atmospheric layer reflecting radio waves is called  
 (1) Ozonosphere  
 (2) Ionosphere  
 (3) Stratosphere  
 (4) Mesosphere  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (Second Sitting))
- 107.** 'Cryogenics' is a science dealing with  
 (1) high temperatures  
 (2) low temperatures  
 (3) friction and wear  
 (4) growth of crystals  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (Second Sitting))
- 108.** The mass-energy relation is the outcome of  
 (1) quantum theory  
 (2) general theory of relativity  
 (3) field theory of energy  
 (4) special theory of relativity  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (Second Sitting))
- 109.** Which of the following are used for accurately measuring very small time intervals ?  
 (1) Pulsars  
 (2) Quartz clocks  
 (3) Atomic clocks  
 (4) White dwarfs  
 (SSC Combined Graduate Level Prelim Exam. 13.11.2005 (Second Sitting))
- 110.** Why does bleeding occur through the nose in high mountainous regions ?  
 (1) The pressure of blood in capillaries is greater than the outside pressure  
 (2) The pressure at high altitudes is greater than that on the plains  
 (3) The blood pressure of a person increases at high altitudes  
 (4) The blood pressure fluctuates and finally decreases drastically  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)
- 111.** Danger signals are generally red as red light  
 (1) is least bright  
 (2) undergoes least deviation  
 (3) has lowest velocity  
 (4) gives comfort to eye  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)
- 112.** A simple microscope consists of :  
 (1) a short focus convex lens  
 (2) a long focus convex lens  
 (3) a short focus concave lens  
 (4) a long focus concave lens  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**113.** An oil drop spreads over water because

- (1) oil is lighter than water
- (2) oil is more viscous
- (3) oil does not mix with water
- (4) surface tension of oil is much smaller than that of water

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**114.** The device which converts AC to DC is

- (1) Oscillator (2) Amplifier
- (3) Rectifier (4) None of these

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**115.** Knot is a measure of

- (1) The speed of ship
- (2) The curvature of spherical objects
- (3) Solar radiation
- (4) Intensity of earthquake shock

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**116.** When the main switch of the house is put off it disconnects the

- (1) live wire only
- (2) live wire and the earth wire
- (3) live wire and the neutral wire
- (4) earth wire and the neutral wire

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**117.** Heat from the sun reaches earth by the process of

- (1) Conduction
- (2) Convection
- (3) Radiation
- (4) All of the above

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**118.** Boyle's law is a relationship between

- (1) Pressure and volume
- (2) Volume and temperature
- (3) Volume and density
- (4) Pressure and temperature

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 11.12.2005)

**119.** Which of the following produces more severe burns ?

- (1) Boiling water
- (2) Hot water
- (3) Steam
- (4) Melting iceberg

(SSC CPO Sub-Inspector Exam. 03.09.2006)

**120.** The sudden fall of atmospheric pressure indicates

- (1) fair weather (2) storm
- (3) rain (4) cold weather

(SSC CPO Sub-Inspector Exam. 03.09.2006)

**121.** Which of the following pairs of physical quantities have the same dimensions?

- (1) Force and Power
- (2) Work and Power
- (3) Work and Energy
- (4) Momentum and Power

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam. 06.12.2015 (1st Sitting) TF No. 1375232)

**122.** Magnetism in materials is due to

- (1) electrons at rest
- (2) circular motion of electrons
- (3) protons at rest
- (4) all neutrons at rest

(SSC CPO Sub-Inspector Exam. 03.09.2006)

**123.** 'Short-sight' in human eye can be corrected by using proper

- (1) convex lens
- (2) concave lens
- (3) cylindrical lens
- (4) bifocal lens

(SSC CPO Sub-Inspector Exam. 03.09.2006)

**124.** What is the reason for twinkling of stars ?

- (1) Dispersion of light
- (2) Total internal reflection
- (3) Atmospheric reflection
- (4) Atmospheric refraction

(SSC CPO Sub-Inspector Exam. 03.09.2006)

**125.** The instrument for measuring intensity of earthquakes is called

- (1) Ediograph (2) Pantagraph
- (3) Ergograph (4) Seismograph

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**126.** Which one of the following animals can hear ultrasonic sound ?

- (1) Rat (2) Squirrel
- (3) Cat (4) Bat

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**127.** The source of the sun's energy is the process of

- (1) photoelectric emission
- (2) nuclear fission
- (3) nuclear fusion
- (4) thermionic emission

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**128.** A multimeter is used to measure

- (1) current
- (2) voltage
- (3) resistance
- (4) All of the above

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**129.** Which of the following is used to split white light into different colours ?

- (1) Glass slab
- (2) Convex lens
- (3) Concave lens
- (4) Prism

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**130.** Nuclear reactors used to produce electricity are based on

- (1) nuclear fission
- (2) nuclear fusion
- (3) cold fusion
- (4) superconductivity

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**131.** Submerged objects can be located using

- (1) radar (2) sonar
- (3) quasar (4) pulsar

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**132.** Which one of the following instruments is used to study dispersion of light ?

- (1) Microscope
- (2) Telescope
- (3) Spectrometer
- (4) Photometer

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**133.** A fountain pen works on the principle of

- (1) flow of liquids from higher to lower potential
- (2) capillary action
- (3) Bernoulli's principle
- (4) Viscosity of liquids

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**134.** Pycnometer is an instrument used to measure the

- (1) density
- (2) intensity of solar radiation
- (3) intensity of earthquake
- (4) high temperatures

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 12.11.2006)

**135.** Fibre optics work on the principle of

- (1) scattering of light
- (2) total internal absorption
- (3) total internal reflection
- (4) optical rotation

(SSC Tax Assistant (Income Tax & Central Excise Exam. 12.11.2006)

**136.** A decibel is

- (1) a musical instrument
- (2) the wavelength of noise
- (3) a musical note
- (4) a measure of sound level

(SSC Tax Assistant (Income Tax & Central Excise Exam. 12.11.2006)

**137.** Remote-sensing device has an inbuilt source of

- (1) X-ray
- (2) g-ray
- (3) ultraviolet ray
- (4) infrared ray

(SSC Section Officer (Commercial Audit Exam. 26.11.2006)  
(Second Sitting)

**138.** The atmosphere is heated mainly by

- (1) Insolation
- (2) Conduction
- (3) Radiation
- (4) Convection

(SSC Section Officer (Audit) Exam. 10.12.2006)

**139.** A device used for converting a.c. into d.c. is called

- (1) transformer
- (2) rectifier
- (3) induction coil
- (4) dynamo

(SSC Section Officer (Audit) Exam. 10.12.2006)

**140.** Energy of Ultraviolet rays is great than

- (1) Infra-red rays
- (2) Gamma rays
- (3) X-rays
- (4) Cosmic rays

(SSC Section Officer (Audit) Exam. 10.12.2006)

**141.** The instrument used to measure the speed of the wind is

- (1) Altimeter
- (2) Anemometer
- (3) Chronometer
- (4) Dosimeter

(SSC Section Officer (Audit) Exam. 10.12.2006)

**142.** Who defined the law of gravitation ?

- (1) Newton
- (2) Archimedes
- (3) Galileo
- (4) Faraday

(SSC Section Officer (Audit) Exam. 10.12.2006)

**143.** The metal used to make lightning conductors is

- (1) Iron
- (2) Aluminium
- (3) Copper
- (4) Zinc

(SSC Section Officer (Audit) Exam. 10.12.2006)

**144.** A hydrogen balloon floats up because of

- (1) air pressure decreases with decrease in height
- (2) air pressure decreases with decrease in weight
- (3) weight of the balloon is less than the weight of air displaced by it.
- (4) the pressure inside the balloon is more than the pressure outside it

(SSC Section Officer (Audit) Exam. 10.12.2006)

**145.** In a rechargeable cell what kind of energy is stored within the cell?

- (1) Electrical energy
- (2) Potential energy
- (3) Chemical energy
- (4) Kinetic energy

(SSC Section Officer (Audit) Exam. 10.12.2006)

**146.** Which one of the following lenses should be used to correct the defect of astigmatism ?

- (1) Cylindrical lens
- (2) Concave lens
- (3) Convex lens
- (4) Bifocal lens

(SSC Combined Graduate Level Prelim Exam. 04.02.2007)  
(First Sitting)

**147.** Superconductors are those elements

- (1) Whose conductivity is intermediate between metals and insulators
- (2) Whose resistance falls almost to zero at very low temperatures
- (3) which turn into insulators at very low temperatures
- (4) which conduct electricity only at super-high temperatures

(SSC Combined Graduate Level Prelim Exam. 04.02.2007)  
(First Sitting)

**148.** In a Laser (say neon laser) all the atoms emit the light waves of

- (1) Same frequency
- (2) Same amplitude
- (3) Same phase
- (4) All of the above

(SSC Combined Graduate Level Prelim Exam. 04.02.2007)  
(Second Sitting)

**149.** Which of the following has got more heat capacity ?

- (1) Iron piece
- (2) Water
- (3) Gold piece
- (4) Benzene

(SSC Combined Graduate Level Prelim Exam. 04.02.2007)  
(Second Sitting)

**150.** If the temperature of a place increases suddenly, the relative humidity

- (1) Increases
- (2) Decreases
- (3) Remains constant
- (4) Fluctuates

(SSC Combined Graduate Level Prelim Exam. 04.02.2007)  
(Second Sitting)

**151.** Fleming's right hand rule is used to find the direction of the

- (1) Alternate current
- (2) Direct current
- (3) Induced current
- (4) Actual current

(SSC CGL Tier-I Exam. 19.10.2014)  
TF No. 022 MH 3)

**152.** What is the full form of 'AM' regarding radio broadcasting?

- (1) Amplitude Movement
- (2) Anywhere Movement
- (3) Amplitude Matching
- (4) Amplitude Modulation

(SSC Section Officer (Commercial Audit) Exam. 30.09.2007)  
(Second Sitting)

**153.** Which colour is the complementary colour of yellow ?

- (1) Blue
- (2) Green
- (3) Orange
- (4) Red

(SSC Section Officer (Commercial Audit) Exam. 30.09.2007)  
(Second Sitting)

**154.** During washing of clothes, we use indigo due to its

- (1) better cleaning action
- (2) proper pigmental composition
- (3) high glorious nature
- (4) very low cost

(SSC Section Officer (Commercial Audit) Exam. 30.09.2007)  
(Second Sitting)



- 155.** The energy stored in a watch spring is  
 (1) kinetic energy  
 (2) potential energy  
 (3) heat energy  
 (4) chemical energy  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 156.** The sensation of weightlessness in a spacecraft in an orbit is due to the  
 (1) absence of gravity outside  
 (2) acceleration in the orbit which is equal to the acceleration due to gravity outside  
 (3) presence of gravity outside but not inside the spacecraft  
 (4) fact that spacecraft in the orbit has no energy  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 157.** 'Therm' is the unit of  
 (1) power (2) heat  
 (3) light (4) distance  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 158.** Newton's first law of motion gives the concept of  
 (1) energy  
 (2) work  
 (3) momentum  
 (4) inertia  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 159.** A pond of water appears less deep due to  
 (1) reflection (2) diffraction  
 (3) refraction (4) polarisation  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 160.** The oldest type of energy known to man is  
 (1) wind power  
 (2) solar power  
 (3) tidal energy  
 (4) geothermal energy  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 161.** Energy that is produced commercially from coal is called  
 (1) Light energy  
 (2) Kinetic energy  
 (3) Thermal energy  
 (4) Potential energy  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)

- 162.** We always see the same face of the moon, because  
 (1) it is smaller than the earth  
 (2) it revolves on its axis in a direction opposite to that of the earth  
 (3) it takes equal time for revolution around the earth and rotation on its own axis  
 (4) it rotates at the same speed as the earth around the sun  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 163.** Water pipes in hilly areas often burst on a cold frosty night, because  
 (1) the material of which pipes are made contracts due to cold and so breaks  
 (2) water in the pipes freezes and on freezing water expands, so pipes break  
 (3) frost makes the pipes rusty, so they break  
 (4) None of these  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 164.** A parachute descends slowly whereas a stone dropped from the same height falls rapidly, because  
 (1) stone is heavier than parachute  
 (2) special mechanisms are present in parachute  
 (3) a parachute has a larger surface area and air resistance is more  
 (4) None of these  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 165.** Which of the following instruments is used to measure humidity?  
 (1) Kata Thermometer  
 (2) Anemometer  
 (3) Sling Psychrometer  
 (4) Clinical Thermometer  
 (SSC Tax Assistant (Income Tax & Central Excise) Exam. 25.11.2007)
- 166.** The type of mirrors used in the headlamp of cars is  
 (1) parabolic concave  
 (2) plane  
 (3) spherical convex  
 (4) cylindrical concave  
 (SSC CPO Sub-Inspector Exam. 16.12.2007)

- 167.** The reason for a swimming pool to appear less deep than the actual depth is  
 (1) refraction  
 (2) light scattering  
 (3) reflection (4) interference  
 (SSC CPO Sub-Inspector Exam. 16.12.2007)
- 168.** Alternating current is converted into direct current by a  
 (1) transformer (2) dynamo  
 (3) oscillator (4) rectifier  
 (SSC CPO Sub-Inspector Exam. 16.12.2007)
- 169.** Which of the following is most elastic?  
 (1) Rubber (2) Wet clay  
 (3) Steel (4) Plastic  
 (SSC Section Officer (Audit) Exam. 06.01.2008)
- 170.** When a person walking in bright Sunlight enters a dark room, he is not able to see clearly for a little while because  
 (1) the eye muscles cannot immediately adjust the focal length of the eye lens.  
 (2) the retina retains the bright images for sometime and becomes momentarily insensitive.  
 (3) the iris is unable to contract the pupil immediately.  
 (4) the iris is unable to dilate the pupil immediately.  
 (SSC Section Officer (Audit) Exam. 06.01.2008)
- 171.** The swing of a spinning cricket ball in air can be explained on the basis of  
 (1) Sudden change in wind direction.  
 (2) Buoyancy of air.  
 (3) Turbulence caused by wind.  
 (4) Bernoulli's theorem.  
 (SSC Section Officer (Audit) Exam. 06.01.2008)
- 172.** Why two thin shirts can keep us warmer than a single thick shirt in winter?  
 (1) Two thin shirts become thicker so prevent transmission of heat  
 (2) Air layer between two shirts works as good conductor  
 (3) Air layer between two shirts behaves like insulating media  
 (4) No radiation of heat takes place  
 (SSC Combined Graduate Level Prelim Exam. 27.07.2008 (First Sitting))

**173.** Which layer of the earth's atmosphere reflect back the radio waves to the earth's surface ?

- (1) ionosphere
- (2) stratosphere
- (3) mesosphere
- (4) exosphere

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(First Sitting))

**174.** Sound cannot pass through

- (1) water
- (2) steel
- (3) air
- (4) vacuum

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(First Sitting))

**175.** In a photocell light energy is converted into

- (1) potential energy
- (2) chemical energy
- (3) heat energy
- (4) electrical energy

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(First Sitting))

**176.** A storm is predicted if atmospheric pressure

- (1) rises suddenly
- (2) rises gradually
- (3) falls suddenly
- (4) falls gradually

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(Second Sitting))

**177.** An egg sinks in soft water but floats in a concentrated solution of salt because

- (1) egg absorbs salt from the solution and expands
- (2) albumin dissolves in salt solution and egg becomes lighter
- (3) the density of salt solution exceeds the density of eggs
- (4) water has high surface tension

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(Second Sitting))

**178.** What should a person on a freely rotating turn table do to decrease his (angular) speed ?

- (1) Bring his hands together
- (2) Raise his hands up
- (3) Spread his hands outwards
- (4) Sit down with raised hands

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(Second Sitting))

**179.** Which of the following celestial bodies contains abundant quantities of helium-3, a potential source of energy ?

- (1) Earth
- (2) Moon
- (3) Venus
- (4) Saturn

(SSC Combined Graduate Level  
Prelim Exam. 27.07.2008  
(Second Sitting))

**180.** Smog is a combination of

- (1) Air and water vapours
- (2) Water and smoke
- (3) Fire and water
- (4) smoke and fog

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**181.** Which of the following circuit elements is used to 'block' DC in an electronic circuit ?

- (1) Resistances
- (2) Capacitance
- (3) Inductance
- (4) Diode

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**182.** Spectacles used for viewing 3D films have

- (1) Bifocal lens
- (2) Convex lens
- (3) Concave lens
- (4) Polaroids

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**183.** A boy sitting in an open car moving with the constant speed throws a ball straight up into the air. The ball falls

- (1) behind him
- (2) in front of him
- (3) into his hand
- (4) by his side

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**184.** The process involved in making soap is

- (1) saponification
- (2) hydrolysis
- (3) condensation
- (4) polymerisation

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**185.** A kilowatt-hour is unit of

- (1) Energy
- (2) Power
- (3) Electric charge
- (4) Electric current

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**186.** Ventilators are provided near the ceiling of the room because

- (1) the exhaled warmer air rises up and goes out
- (2) these provide cross ventilation in the room
- (3) these provide some sunlight in the room
- (4) these do not look nice in the lower part

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**187.** The hair of shaving brush clings together when removed from water due to

- (1) Surface tension
- (2) Viscosity
- (3) Elasticity
- (4) Friction

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**188.** In severe winter, in cold countries water pipes burst because

- (1) water expands on freezing
- (2) contraction of water pipes
- (3) high atmospheric pressure
- (4) combined effect of all the above three

(SSC CPO Sub-Inspector  
Exam. 09.11.2008)

**189.** In the process of magnetisation of a bar

- (1) The entire bulk of the bar gets magnetised
- (2) Only the surface of the bar gets magnetised
- (3) Only the ends of the bar get magnetised
- (4) Only some parts of the outer layers of the bar get magnetised

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

**190.** A falling drop of rain water acquires the spherical shape due to

- (1) Viscosity
- (2) Surface Tension
- (3) Atmospheric pressure
- (4) Gravitational force

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

**191.** The weakest of all fundamental forces is

- (1) Gravitational force
- (2) Electrostatic force
- (3) Magnetic force
- (4) Nuclear force

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

- 192.** Velocity of sound in air does not change with the change of  
 (1) Temperature of air  
 (2) Pressure of air  
 (3) Moisture content in air  
 (4) Wind in the direction of propagation of sound

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

- 193.** The density of a gas is maximum at  
 (1) Low temperature, low pressure  
 (2) Low temperature, high pressure  
 (3) High temperature, low pressure  
 (4) High temperature, high pressure

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

- 194.** The cause for the Tsunami, as deduced by the seismologists, is  
 (1) gravitational pull of the moon  
 (2) low pressure trough in the ocean  
 (3) deformation of sea floor and vertical displacement of water  
 (4) sudden change in the monsoon wind

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

- 195.** Which one of the following wavelengths of light is most effective in photosynthesis ?

- (1) Blue      (2) Green  
 (3) Orange    (4) Yellow

(SSC Section Officer (Audit)  
Exam. 30.11.2008)

- 196.** Why is it difficult to breathe at higher altitudes?

- (1) Due to low air pressure  
 (2) Due to low temperature  
 (3) Due to ozone  
 (4) Due to high humidity

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 197.** The strongest force in nature is

- (1) electrical force  
 (2) gravitational force  
 (3) nuclear force  
 (4) magnetic force

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 198.** According to the theory of relativity, which of the following always remains constant ?

- (1) Length of an object  
 (2) Time  
 (3) Space  
 (4) Velocity of light

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 199.** The spoon dropped by an astronaut in a satellite will

- (1) fall to the floor  
 (2) remain stationary  
 (3) continue to follow the motion of the satellite  
 (4) move tangentially away

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 200.** A colour-blind person cannot

- (1) see distant objects  
 (2) see black colour  
 (3) distinguish between certain colours  
 (4) have persistence of vision

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 201.** Pipelines in cold countries often burst in winter, because

- (1) water freezes and expands in its volume  
 (2) temperature of ice is less than that of water  
 (3) pipelines contract in their volume  
 (4) pipelines expand due to freezing

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 202.** When a body is taken from earth to moon

- (1) mass changes but weight remains same  
 (2) weight changes but mass remains same  
 (3) both weight and mass change  
 (4) both weight and mass remain same

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 203.** A mirage occurs because of

- (1) reflection by hot ground  
 (2) total internal reflection by layers of air  
 (3) interference of light  
 (4) diffraction of light

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 204.** Atomic power plant works on the principle of

- (1) fission  
 (2) fusion  
 (3) thermal combustion  
 (4) combined effect of all the above three

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 14.12.2008)

- 205.** Bolometer is used to measure

- (1) Frequency (2) Temperature  
 (3) Velocity (4) Wavelength

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 206.** ATM stands for

- (1) Automatic Teller Machine  
 (2) Automated Teller Machine  
 (3) Automatic Tally Machine  
 (4) Automated Tally Mechanism

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 207.** A person is hurt on kicking a stone due to

- (1) Inertia (2) Velocity  
 (3) Reaction (4) Momentum

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 208.** The fuse in our domestic electric circuit melts when there is a high rise in

- (1) Inductance (2) Current  
 (3) Resistance (4) Capacitance

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 209.** Which of the following is an example for cantilever beam?

- (1) Diving board  
 (2) Bridge  
 (3) See-saw  
 (4) Common balance

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 210.** It is difficult to cook rice

- (1) at the top of a mountain  
 (2) at the sea level  
 (3) under a mine  
 (4) same anywhere

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 211.** A dynamo is a device which

- (1) creates mechanical energy  
 (2) creates electrical energy  
 (3) converts mechanical energy into electrical energy  
 (4) converts electrical energy into mechanical energy

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 212.** A soap bubble shows colours when illuminated with white light. This is due to

- (1) Diffraction  
 (2) Polarisation  
 (3) Interference  
 (4) Reflection

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 213.** The instrument used to see the distant objects on the Earth is
- (1) Terrestrial telescope
  - (2) Astronomical telescope
  - (3) Compound microscope
  - (4) Simple microscope

(SSC Tax Assistant (Income Tax & Central Excise) Exam. 29.03.2009)

- 214.** Global warming is expected to result in

- (1) increase in level of sea
- (2) change in crop pattern
- (3) change in coast line
- (4) All of the above

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 215.** Which of the following liquids has the least density ?

- (1) Fresh water
- (2) Salt water
- (3) Petrol
- (4) Mercury

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 216.** Which of the following principle is used to produce 'low-temperatures' ?

- (1) Super conductivity
- (2) Joule-Kelvin effect
- (3) Thermo-electric effect
- (4) Adiabatic demagnetisation

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 217.** A photo-electric cell converts
- (1) mechanical energy to electric energy

- (2) heat energy to mechanical energy
- (3) light energy to chemical energy
- (4) light energy to electrical energy

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 218.** Two stones of different masses are dropped simultaneously from the top of a building

- (1) Smaller stone reaches the ground earlier
- (2) Larger stone reaches the ground earlier
- (3) Both the stones reach the ground at the same time
- (4) Depends on the composition of the stone

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 219.** The ozone hole that has been detected lies in the atmosphere above

- (1) Arctic Ocean
- (2) Antarctica
- (3) India
- (4) Alaska

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 220.** The device used to change the speed of an electric fan is

- (1) Amplifier
- (2) Regulator
- (3) Switch
- (4) Rectifier

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 221.** Fog is an example of

- (1) Gas dispersed in gas
- (2) Liquid dispersed in gas
- (3) Solid dispersed in gas
- (4) Solid dispersed in liquid

(SSC CPO Sub-Inspector Exam. 06.09.2009)

- 222.** A concave lens always forms an image which is

- (1) real and erect
- (2) virtual and erect
- (3) real and inverted
- (4) virtual and inverted

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 223.** The modulus of rigidity is the ratio of

- (1) longitudinal stress to longitudinal strain
- (2) Volume stress to volume strain
- (3) shearing stress to shearing strain
- (4) tensile stress to tensile strain

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 224.** The propagation of sound waves in a gas involves

- (1) adiabatic compression and rarefaction
- (2) isothermal compression and rarefaction
- (3) isochoric compression and rarefaction
- (4) isobaric compression and rarefaction

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 225.** Which of the following is **not** a property of heavy water ?

- (1) Boiling point of heavy water is lower than that of ordinary water

- (2) Density of heavy water is higher than that of ordinary water

- (3) Freezing point of heavy water is higher than that of ordinary water

- (4) It produces corrosion

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 226.** In which of the following processes is energy released ?

- (1) Respiration
- (2) Photosynthesis
- (3) Ingestion
- (4) Absorption

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 227.** If input frequency of a full wave rectifier be  $n$ , then output frequency would be

- (1)  $\frac{n}{2}$
- (2)  $n$
- (3)  $\frac{3n}{2}$
- (4)  $2n$

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 228.** Heat transfer horizontally within the atmosphere is called

- (1) Conduction
- (2) Convection
- (3) Absorption
- (4) Advection

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 229.** Noise is measured in

- (1) Watt
- (2) REM
- (3) Centigrade
- (4) Decibel

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

- 230.** The bats can fly in the dark because

- (1) they can see the objects in darkness
- (2) they have weak legs and are likely to be attacked by predators
- (3) they generate flashes of light
- (4) they generate ultrasonic sound waves

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

**231.** What changes will happen to a bowl of ice and water kept at exactly zero degree Celsius ?

- (1) All ice will melt
- (2) All water will become ice
- (3) No change will happen
- (4) Only some ice will melt

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (First Sitting))

**232.** Curie point is the temperature at which

- (1) Matter becomes radioactive
- (2) A metal loses magnetic properties.
- (3) A metal loses conductivity
- (4) Transmutation of metal occurs.

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (Second Sitting))

**233.** Angle of friction and angle of repose are

- (1) equal to each other
- (2) not equal to each other
- (3) proportional to each other
- (4) None of the above

(SSC Combined Graduate Level Tier-I Exam. 16.05.2010 (Second Sitting))

**234.** If a boy sitting in a train, which is moving at a constant velocity, throws a ball straight up into the air, the ball will

- (1) fall in front of him
- (2) fall behind him
- (3) fall into his hand
- (4) None of the above

(SSC SAS Exam. 26.06.2010 (Paper-1))

**235.** Intensity of gravitational field of earth is maximum at

- (1) Poles
- (2) Equator
- (3) Centre of earth
- (4) Surface

(SSC SAS Exam. 26.06.2010 (Paper-1))

**236.** The spokes used in the wheel of a bicycle increase its

- (1) Moment of inertia
- (2) Velocity
- (3) Acceleration
- (4) Momentum

(SSC SAS Exam. 26.06.2010 (Paper-1))

**237.** A transformer works on the principle of

- (1) Self induction
- (2) Mutual induction
- (3) Generator
- (4) Inverter

(SSC SAS Exam. 26.06.2010 (Paper-1))

**238.** The sky appears blue because

- (1) all colours interfere to produce blue
- (2) in white light, the blue component dominates
- (3) the atmosphere scatters blue colour more than the others
- (4) it is actually blue

(SSC CISF ASI Exam. 29.08.2010 (Paper-1))

**239.** When a ship enters the sea from a river

- (1) it rises a little
- (2) it sinks a little
- (3) it remains at the same level
- (4) it rises or sinks depending on the material it is made of

(SSC CISF ASI Exam. 29.08.2010 (Paper-1))

**240.** Two stones of unequal masses are thrown vertically up with the same velocity. Which of the following will happen?

- (1) The heavier mass will reach greater height
- (2) The lighter mass will reach greater height
- (3) Both will reach the same height
- (4) Any of them may reach greater height

(SSC CISF ASI Exam. 29.08.2010 (Paper-1))

**241.** The unit of electrical power is

- (1) Bolt
- (2) Watt
- (3) Kilowatt hour
- (4) Ampere

(SSC CGL Tier-I Exam. 19.10.2014 TF No. 022 MH 3)

**242.** The scientist who first sent electromagnetic waves to distant places is

- (1) James Clerk Maxwell
- (2) Heinrich Hertz
- (3) Thomas Alva Edison
- (4) John Logie Baird

(SSC CISF ASI Exam. 29.08.2010 (Paper-1))

**243.** The centre of gravity of a sprinter during the race lies

- (1) ahead of his feet
- (2) behind his feet
- (3) at the centre of the body
- (4) to the left side of the body

(SSC (South Zone) Investigator Exam. 12.09.2010)

**244.** Cloudy nights are warmer compared nights, because clouds mainly

- (1) absorb heat from the atmosphere send it towards earth
- (2) prevent cold waves from the sky descending on earth
- (3) reflect back the heat given by earth
- (4) produce heat and radiate it toward earth

(SSC (South Zone) Investigator Exam. 12.09.2010)

**245.** A metal plate with a circular hole at the centre is heated. What will happen to the area of the hole ?

- (1) Increase
- (2) Decrease
- (3) Remain constant
- (4) Will increase first and then decrease

(SSC CPO Sub-Inspector

Exam. 12.12.2010 (Paper-1))

**246.** The period of revolution of a geostationary satellite is

- (1) 365 days
- (2) 30 days
- (3) 24 hours
- (4) changing continuously

(SSC CPO Sub-Inspector

Exam. 12.12.2010 (Paper-1))

**247.** A piece of paper and a cricket ball are dropped from the same height. Under which of the following conditions do both reach the surface simultaneously ?

- (1) They must have the same volume
- (2) They must have the same density
- (3) They must have the same mass
- (4) They must be dropped in vacuum

(SSC CPO Sub-Inspector

Exam. 12.12.2010 (Paper-1))

**248.** The frequency of ultrasound wave is typically

- (1) Above 20 kHz
- (2) Above 20,000 kHz
- (3) Below 20 kHz
- (4) Below 02 kHz

(SSC CPO Sub-Inspector

Exam. 12.12.2010 (Paper-1))

**249.** Which type of reaction produces the most harmful radiation ?

- (1) Fusion reaction
- (2) Fission reaction
- (3) Chemical reaction
- (4) Photo-Chemical reaction

(SSC Combined Graduate Level  
Tier-I Exam. 19.06.2011  
(First Sitting))

**250.** Optical fibres are based on the phenomenon of

- (1) Interference
- (2) Dispersion
- (3) Diffraction
- (4) Total Internal Reflection

(SSC Combined Graduate Level  
Tier-I Exam. 19.06.2011  
(Second Sitting))

**251.** 'Mirage' is an example of

- (1) refraction of light only
- (2) total internal, reflection of light only
- (3) refraction and total internal reflection of light
- (4) dispersion of light only

(SSC Combined Graduate Level  
Tier-I Exam. 19.06.2011  
(Second Sitting))

**252.** The phenomenon of light associated with the appearance of blue colour of the sky is

- (1) Interference
- (2) Reflection
- (3) Refraction
- (4) Scattering

(SSC Combined Graduate Level  
Tier-I Exam. 19.06.2011  
(Second Sitting))

**253.** Lens is made up of

- (1) Pyrex glass
- (2) Flint glass
- (3) Ordinary glass
- (4) Cobalt glass

(SSC Combined Graduate Level  
Tier-I Exam. 19.06.2011  
(Second Sitting))

**254.** The time period of a pendulum when taken to the Moon would:

- (1) remain the same
- (2) decrease
- (3) become zero
- (4) increase

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(First Sitting))

**255.** The atmospheric air is held to the Earth by :

- (1) gravity
- (2) winds
- (3) clouds
- (4) rotation of the Earth

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(First Sitting))

**256.** The function of ball bearings in a wheel is :

- (1) to increase friction
- (2) to convert kinetic friction into rolling friction
- (3) to convert static friction into kinetic friction
- (4) just for convenience

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(First Sitting))

**257.** 'Shock-absorbers' are usually made of steel as it :

- (1) is not brittle
- (2) has lower elasticity
- (3) has higher elasticity
- (4) has no ductile property

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(First Sitting))

**258.** Among the following materials sound travels fastest in

- (1) Steel
- (2) Air
- (3) Vacuum
- (4) Water

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(Second Sitting))

**259.** Lambert's law is related to

- (1) Reflection
- (2) Refraction
- (3) Interference
- (4) Illumination

(SSC Combined Graduate Level  
Tier-I Exam. 26.06.2011  
(Second Sitting))

**260.** One can distinguish a telescope from a microscope by observing

- (1) length
- (2) colour
- (3) size of the lens
- (4) length and size of the lens

(SSC CPO(SI, ASI & Intelligence  
Officer) Exam. 28.08.2011  
(Paper-1))

**261.** The sound produced by a bat is-

- (1) audible
- (2) subsonic
- (3) infrasonic
- (4) ultrasonic

(SSC CPO(SI, ASI & Intelligence  
Officer) Exam. 28.08.2011 (Paper-1))

**262.** When a bar magnet is cut into two equal halves, the pole strength of each piece -

- (1) becomes double
- (2) becomes half
- (3) becomes zero
- (4) remains the same

(SSC CPO(SI, ASI & Intelligence  
Officer) Exam. 28.08.2011 (Paper-1))

**263.** A new technology which provides the ability to create an artificial world and have people interact with it is called :

- (1) Televirtuality
- (2) Virtual reality
- (3) Alternate reality
- (4) 3-D reality

(SSC CPO(SI, ASI & Intelligence  
Officer) Exam. 28.08.2011 (Paper-1))

**264.** Electrostatic precipitator is used to control -

- (1) Air pollution
- (2) Water pollution
- (3) Solid waste
- (4) Noise pollution

(SSC CPO(SI, ASI & Intelligence  
Officer) Exam. 28.08.2011 (Paper-1))

**265.** The time period of a seconds pendulum is

- (1) 1 second
- (2) 2 seconds
- (3) 0.5 second
- (4) 1.5 seconds

(FCI Assistant Grade-II  
Exam. 22.01.2012 (Paper-1))

**266.** Lakes freeze in cold countries in winter, leaving the water underneath at

- (1) 0°C
- (2) 0°F
- (3) 4°C
- (4) 4°F

(FCI Assistant Grade-II  
Exam. 22.01.2012 (Paper-1))

**267.** Which one of the following determines the sharpness of image in a camera ?

- (1) The aperture
- (2) The exposure time
- (3) The focal length of the lens
- (4) Size of the camera

(FCI Assistant Grade-II  
Exam. 22.01.2012 (Paper-1))

**268.** In MRI machine, which one of the following is used?

- (1) Sound wave
- (2) 'X'-ray
- (3) Ultra-sound wave
- (4) Magnetic wave

(FCI Assistant Grade-II  
Exam. 22.01.2012 (Paper-1))

**269.** For a person having hypermetropia, the near point is

- (1) greater than 25 cm
- (2) greater than 50 cm
- (3) less than 25 cm
- (4) infinity

(FCI Assistant Grade-II  
Exam. 22.01.2012 (Paper-1))

**270.** Amount of water vapour in the atmosphere is measured in terms of

- (1) Humidity
- (2) Droplets
- (3) Smog
- (4) All of the above

(FCI Assistant Grade-II)

Exam. 22.01.2012 (Paper-1)

**271.** Name the process of production of energy in the Sun

- (1) Nuclear fission
- (2) Radioactivity
- (3) Nuclear fusion
- (4) Ionization

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**272.** A spherical ball made of steel when dropped in mercury container will

- (1) sink in mercury
- (2) will be on the surface of mercury
- (3) will be partly immersed mercury
- (4) will dissolve in mercury

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**273.** The sounds having a frequency of 20 Hertz to 20,000 Hertz are known as

- (1) Audible sounds
- (2) Ultrasonics
- (3) Infrasonics
- (4) Megasonics

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**274.** Eclipses occur due to which optical phenomena?

- (1) Reflection (2) Refraction
- (3) Rectilinear propagation
- (4) Diffraction

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**275.** Pure water is bad conductor of electricity because it is

- (1) feebly ionized
- (2) not volatile
- (3) a very good solvent
- (4) a non-polar solvent

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**276.** Gamma rays have greatest similarity with

- (1)  $\alpha$ -rays (2)  $\beta$ -rays
- (3) X-rays (4) U.V.-rays

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**277.** In the absence of ozone layer, which rays will enter into atmosphere?

- (1) Infrared (2) Visible
- (3) Ultraviolet (4) X-rays

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**278.** The filament of electric bulb is made up of :

- (1) Copper (2) Nichrome
- (3) Lead (4) Tungsten

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**279.** When a vibrating tuning fork is placed on a table, a loud sound is heard. This is due to :

- (1) reflection
- (2) refraction
- (3) forced vibrations
- (4) damped vibrations

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**280.** Light houses are places with powerful lights to :

- (1) guide and resolve traffic jams in crowded metro-cities during nights.
- (2) guide and help large crowds at religious gathering during nights.
- (3) indicate to the incoming war-ships, the location of a harbour during night.
- (4) guide and warn the ships coming from different directions in the ocean.

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**281.** A piece of wood is held under water. The upthrust on it will be:

- (1) equal to the weight of the wood
- (2) less than weight of the wood
- (3) more than weight of the wood
- (4) Zero

(FCI Assistant Grade-III)

Exam. 5.02.2012 (Paper-1)

**282.** Persistence of vision is the principle behind

- (1) Camera (2) Spectroscope
- (3) Cinema (4) Periscope

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**283.** In a nuclear reactor, one of the following is used as a fuel.

- (1) Coal (2) Uranium
- (3) Radium (4) Diesel

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**284.** The density of the liquid when heated

- (1) decreases
- (2) increases
- (3) does not change
- (4) may increase or decrease depending on pressure

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**285.** The distance between node and adjacent antinode is 30 cm. The wavelength is

- (1) 30 cm. (2) 90 cm.
- (3) 120 cm. (4) 60 cm.

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**286.** The nature of fuse wire is

- (1) high resistance and low melting point.
- (2) high resistance and high melting point.
- (3) low resistance and high melting point.
- (4) low resistance and low melting point.

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**287.** In a railway track, two rails are joined end to end with a gap in between them because

- (1) steel can be saved
- (2) accidents due to contraction in winter can be avoided
- (3) air-gaps are necessary for bearing the weight of running train
- (4) accidents due to expansion in summer can be avoided.

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**288.** Vehicle tyres are inflated properly

- (1) to ensure smooth running.
- (2) to allow the vehicle to take more load.
- (3) to avoid skidding and to minimise friction
- (4) to go fast and save fuel.

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

**289.** Refrigeration is a process which

- (1) kills bacteria
- (2) slows down the bacterial growth
- (3) Inactivates the bacteria
- (4) Plasmolyses the bacteria

(SSC Combined Matric Level (PRE))

Exam. 24.10.1999 (1st Sitting)

- 290.** Air coolers are more suitable for  
 (1) hot and humid climate  
 (2) hot and dry climate  
 (3) cool and humid climate  
 (4) cool and dry climate  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 291.** A transformer  
 (1) converts DC to AC  
 (2) is used to decrease or increase AC voltage  
 (3) converts AC voltage to D.C. voltage  
 (4) converts electrical energy into mechanical energy  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 292.** When hot-water is sprinkled on a hotter glass tumbler, it breaks because  
 (1) glass suddenly expands  
 (2) glass suddenly contracts  
 (3) water evaporates  
 (4) glass reacts chemically with water  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 293.** Electricity is transmitted over long distances  
 (1) it is fast  
 (2) there is less wastage of energy  
 (3) it is safer  
 (4) it is cheaper  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 294.** The material used in the fabrication of a transistor is  
 (1) Aluminium (2) Copper  
 (3) Silicon (4) Silver  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 295.** If there is a circular hole in a metal plate, what happens to the radius of the hole when the plate is heated?  
 (1) Increases (2) Decreases  
 (3) Unchanged  
 (4) Depends upon the metal  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 296.** The velocity of sound in air  
 (1) decreases with increase of temperature  
 (2) increases with decrease of temperature  
 (3) does not depend on temperature  
 (4) decreases with decrease of temperature  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 297.** Electric current in a metal wire is due to the flow of—  
 (1) Electrons (2) Protons  
 (3) Ions (4) Holes  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 298.** The device which converts sound energy into electrical energy is called  
 (1) Amplifier (2) Speaker  
 (3) Microphone (4) Transmitter  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 299.** The light rays used for eliminating bacteria  
 (1) X-rays  
 (2) infrared rays  
 (3) microwave radiation  
 (4) ultra-violet radiation  
 (SSC Combined Matric Level (PRE)  
 Exam. 24.10.1999 (IInd Sitting))

- 300.** Mud houses are cooler in summers and warmer in winters as compared to brick houses because  
 (1) mud is a good conductor  
 (2) mud is a bad conductor  
 (3) mud is a poor insulator  
 (4) evaporation of water causes cooling in summers and sunlight coming through holes causes warming in winters  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (East Zone))

- 301.** After long periods of use, a grey spot develops on the inside of a bulb. This is because  
 (1) the tungsten filament evaporates and collects there  
 (2) the heat of the bulb scorches the glass at the top  
 (3) dust inside the bulb condenses on the top  
 (4) glass undergoes a change due to the heat  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (East Zone))

- 302.** Should cars have bumpers that collapse under impact?  
 (1) Yes, since the offending car should get damaged and pay for the mistake  
 (2) No, since it would be very expensive to get the car repaired  
 (3) No, since the colliding car would then ram into the occupants and kill them

- (4) Yes, since they help to absorb the impact of a collision and keep the occupants safe  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (East Zone))

- 303.** Ice cubes are added to a glass of pure water and a glass of pure alcohol. The ice would be  
 (1) at a higher level in water  
 (2) at a higher level in alcohol  
 (3) at the same level in both  
 (4) floating in alcohol and sinking in water  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (East Zone))

- 304.** A person wears spectacles with concave lenses. It means that normally (when not using glasses), the image of distant objects is focussed in his eyes  
 (1) behind the retina  
 (2) in front of the retina  
 (3) on the retina  
 (4) on the blind spot  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (Riapur, Madhya Pradesh))

- 305.** What is the principle of a 'Life Jacket'?  
 (1) It provides oxygen to a drowning person  
 (2) It increases the volume of the person to keep him afloat  
 (3) It decreases the volume of the person to keep him afloat  
 (4) The person can sit on it like a raft  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (Riapur, Madhya Pradesh))

- 306.** Myopia is the same as  
 (1) Near sightedness  
 (2) Astigmatism  
 (3) Presbyopia  
 (4) Long sightedness  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (Riapur, Madhya Pradesh))

- 307.** Sun's heat reaches us by  
 (1) Conduction  
 (2) Convection  
 (3) Radiation  
 (4) Reflection  
 (SSC Combined Matric Level (PRE) Exam. 21.05.2000 (Ist Sitting) (Riapur, Madhya Pradesh))



- 308.** A sphere rolls down on two inclined planes of different angles but same height, it does so  
 (1) in the same time  
 (2) with the same speed  
 (3) in the same time with the same speed  
 (4) in the same time with the same kinetic energy

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Riapur, Madhya Pradesh))

- 309.** In heating frozen foods in sealed pouches in a microwaves, why do you first poke holes in the pouch?

- (1) To prevent the steam pressure from bursting open the pouch  
 (2) To allow the heat to get into the food through the hole  
 (3) To allow the microwaves to get into the food through the holes  
 (4) To allow the aroma of the food to come out through the holes

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 310.** A vacuum cleaner works on the principle of pressure difference. On the moon it will

- (1) work as efficiently as on the earth  
 (2) not work at all  
 (3) work with reduced efficiency  
 (4) work with increased efficiency

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 311.** After reflection from a plane mirror  $\text{ƎCNAJUBMA}$  the word will look like.

- (1) AMBULANCE  
 (2) ECNALUBMA  
 (3) AMBULANCE  
 (4) AWBULANCE

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 312.** A rubber ball is dropped from a height of 2 metres. To what height will it rise if there is no loss of energy/velocity after rebounding?

- (1) 4 metres (2) 3 metres  
 (3) 2 metres (4) 1 metre

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 313.** When a pail of water is swung in a vertical circle, the water does not fall out at the top of the loop when the speed is

- (1) below a certain minimum value irrespective of amount of water in the pail  
 (2) above a certain minimum value irrespective of amount of water in the pail  
 (3) above a certain minimum value depending on amount of water in the pail  
 (4) below a certain minimum value depending on amount of water in the pail

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 314.** Who enunciated the laws of planetary motion?

- (1) Nicolaus Copernicus  
 (2) Johannes Kepler  
 (3) Isaac Newton  
 (4) Galileo

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 315.** The radiant energy having lowest energy is

- (1) gamma rays  
 (2) UV rays  
 (3) visible light  
 (4) microwave radiation

(SSC Combined Matric Level (PRE) Exam. 21.05.2000 (1st Sitting) (Middle Zone))

- 316.** Which one of the following has the highest value of specific heat?

- (1) Glass (2) Copper  
 (3) Lead (4) Water

(SSC Combined Matric Level (PRE) Exam. 13.05.2001 (1st Sitting))

- 317.** A microscope used in pathological laboratories forms

- (1) magnified, virtual, erect image  
 (2) diminished, real and erect image  
 (3) magnified, virtual and inverted image  
 (4) diminished, virtual and erect image

(SSC Combined Matric Level (PRE) Exam. 13.05.2001 (1st Sitting))

- 318.** The velocity of sound is more in

- (1) water (2) air  
 (3) steel (4) wood

(SSC Combined Matric Level (PRE) Exam. 13.05.2001 (1st Sitting))

- 319.** The magnifying power of an astronomical telescope can be decreased by

- (1) decreasing the focal length of the eyepiece  
 (2) increasing the focal length of the eyepiece  
 (3) increasing the focal length of the objective  
 (4) None of these

(SSC Combined Matric Level (PRE) Exam. 27.05.2001 (1st Sitting) (East Zone))

- 320.** Necessary element of change in solar energy to electric energy

- (1) Berillium (2) Silicon  
 (3) Tantalum (4) Pure Copper  
 (SSC Combined Matric Level (PRE) Exam. 05.05.2002 (1st Sitting) (Eastern Zone, Guwahati))

- 321.** Which of the following events occurred first?

- (1) Albert Einstein propounded the General Theory of Relativity  
 (2) Max Planck unveiled the Quantum Theory  
 (3) Marconi first transmitted a wireless signal  
 (4) Madame Marie Curie became the first woman Nobel Prize winner

(SSC Combined Matric Level (PRE) Exam. 05.05.2002 (1st Sitting) (Eastern Zone, Guwahati))

- 322.** The audio signals of TV are

- (1) Amplitude modulated  
 (2) Frequency modulated  
 (3) Unmodulated  
 (4) Velocity modulated

(SSC Combined Matric Level (PRE) Exam. 05.05.2002 (1st Sitting) (Eastern Zone, Guwahati))

- 323.** Red light is used for signals because it has

- (1) long wavelength  
 (2) high intensity  
 (3) high frequency  
 (4) low refraction in the medium

(SSC Combined Matric Level (PRE) Exam. 05.05.2002 (1st Sitting) (Eastern Zone, Guwahati))

**324.** Woollen cloth protects the body from cold because

- (1) it is a good conductor of heat
- (2) it is a poor conductor of heat
- (3) external heat rays enter into the body through the woollen cloth
- (4) it reflects heat

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**325.** The owl can see most clearly in total darkness because

- (1) it has squint eyes
- (2) it has large eyes with orbs directed forward, giving it binocular sight
- (3) it has light bulbs in its eyes provided by nature
- (4) it produces infrasonic sounds

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**326.** Damp clothes are dried in spin dryers by the action of

- (1) centripetal forces
- (2) centrifugal forces
- (3) central forces
- (4) non central forces

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**327.** Which colour of light shows maximum deviation when passed through a prism ?

- (1) Red      (2) Green
- (3) Violet    (4) Yellow

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**328.** Tape recorder should **not** be kept near one of the following things :

- (1) Clock      (2) Magnet
- (3) Electrical switchboard
- (4) Radio

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**329.** When a person sitting on a swing stands up on the swing, the frequency of oscillation

- (1) decreases
- (2) increases
- (3) becomes infinite
- (4) does not change

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**330.** Night photography and photography in mist and fog are possible using

- (1) ultra-violet radiation
- (2) infra-red radiation
- (3) microwave radiation
- (4) gamma radiation

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**331.** The blue colour of water in the sea is due to

- (1) absorption of other colours except blue by water molecules
- (2) scattering of blue light by water molecules
- (3) reflection of blue light by impurities in sea water
- (4) reflection of blue sky by sea water

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**332.** Which of the following is a good conductor of heat but a bad conductor of electricity ?

- (1) Celluloid    (2) Rubber
- (3) Asbestos    (4) Mica

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**333.** An aircraft can perform aerobatic manoeuvres in a vertical loop because of

- (1) gravity
- (2) centripetal force
- (3) weight
- (4) centrifugal force

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**334.** A photostat machine works on

- (1) electromagnetic image making
- (2) electrostatic image making
- (3) magnetic image making
- (4) thermal image making

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**335.** Steam at 100°C causes more severe burns than water at 100°C because

- (1) steam has no specific heat capacity
- (2) steam has latent heat of vaporisation

(3) water has no specific heat capacity

(4) water has latent heat of fusion

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**336.** To measure the speed of an approaching car a police officer shines

- (1) light waves on it
- (2) microwaves on it
- (3) radio waves on it
- (4) ultra high frequency waves on it

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**337.** During hot weather, the fan produces a feeling of comfort. This is because

- (1) fan supplies cool air
- (2) fan cools the air
- (3) our perspiration evaporates rapidly
- (4) conductivity of air increases

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**338.** Forged documents are detected by

- (1) ultraviolet rays
- (2) infra-red rays
- (3) beta rays
- (4) gamma rays

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**339.** Rainbow is seen after rain because of hanging molecules of water which act as

- (1) lenses      (2) mirrors
- (2) prisms    (4) slabs

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**340.** Which of the following is a result of Surface tension ?

- (1) Gravitational pull
- (2) Viscosity
- (3) Capillary action
- (4) Radiation

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(Eastern Zone, Guwahati)

**341.** Lightning is caused due to

- (1) electric power
- (2) electric discharge
- (3) electric leak
- (4) electric pressure

(SSC Combined Matric Level (PRE)  
Exam. 05.05.2002 (1st Sitting)  
(North Zone, Delhi)

- 342.** Sprayer functions on  
 (1) Bernouli's principle  
 (2) Archemede's principle  
 (3) Pascal's law  
 (4) Floatation principle  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 343.** The device which transfer the signal from low resistance region to high resistance region is  
 (1) diode (2) transistor  
 (3) capacitor (4) inductor  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 344.** A bird sitting on a high tension electric wire does not get electrocuted because  
 (1) it has high resistance  
 (2) the body is earthed  
 (3) it does not form a closed path for the flow of current  
 (4) its feet are good insulators  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 345.** The wall of a dam is broader at the base  
 (1) because streamlining is required  
 (2) to withstand pressure that increases with depth  
 (3) to withstand pressure that increases in a horizontal plane  
 (4) to withstand pressure that is increased with atmospheric pressure  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 346.** Which of the following is arranged in order of decreasing conductivity?  
 (1) Copper, Aluminium, Steel, Silver  
 (2) Aluminium, Silver, Copper, Steel  
 (3) Copper, Silver, Aluminium, Steel  
 (4) Silver, Copper, Aluminium, Steel  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 347.** Which of the following liquids is most viscous?  
 (1) Oil (2) Milk  
 (3) Water (4) Petrol  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 348.** Radio activity is due to  
 (1) unstable nucleus  
 (2) stable nucleus  
 (3) stable electronic configuration  
 (4) stable electronic configuration  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 349.** Which conservation principle is applicable in the case of the motion of a rocket?  
 (1) Conservation of mass  
 (2) Conservation of charge  
 (3) Conservation of momentum  
 (4) Conservation of energy  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 350.** It is easier to carry two buckets of water in one hand each, than to carry only one in one hand because  
 (1) weights of buckets are balanced  
 (2) centre of gravity falls within the body  
 (3) centre of gravity and centre of equilibrium fall within the feet  
 (4) resultant weight of buckets is zero  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 351.** The surface tension of water on adding detergent to it  
 (1) increases  
 (2) decreases  
 (3) no change  
 (4) becomes zero  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 352.** In a refrigerator, the cooling system should always be  
 (1) at the top  
 (2) at the bottom  
 (3) at the middle  
 (4) can be anywhere  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 353.** Which of the following is optical illusion?  
 (1) Rainbow (2) Earthshine  
 (3) Halo (4) Mirage  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 354.** An athlete runs before long jump to get advantage on  
 (1) Inertia of motion  
 (2) Frictional force  
 (3) Moment of a force  
 (4) Principle of moments  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 355.** In sunlight a rose appears red. In green light, the same rose appears  
 (1) red (2) black  
 (3) green (4) yellow  
 (SSC Combined Matric Level (PRE)  
 Exam. 05.05.2002 (1st Sitting)  
 (North Zone, Delhi)
- 356.** The sparkling of a diamond is due to  
 (1) total internal reflection of light  
 (2) interference of light  
 (3) polarisation of light  
 (4) refraction of light  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (1st Sitting)
- 357.** Ocean currents are an example of  
 (1) convection  
 (2) conduction  
 (3) insulation  
 (4) radiation  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (1st Sitting)
- 358.** If a copper wire is increased to double its length, its resistance will become  
 (1) four times (2) one-fourth  
 (3) double (4) half  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (1st Sitting)
- 359.** In a diesel engine the high temperature needed to ignite the fuel is achieved by  
 (1) using heat from exhaust  
 (2) the battery  
 (3) compressing air in the cylinders  
 (4) an electrical spark  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (1st Sitting)
- 360.** Waves that are required for long distance wireless communication are  
 (1) Infrared rays  
 (2) Ultraviolet rays  
 (3) Radio waves  
 (4) Microwaves  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (1st Sitting)

- 361.** Rise of oil a wick is due to  
 (1) density of the oil  
 (2) viscosity of the oil  
 (3) surface tension of the oil  
 (4) pressure of the oil  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (Ist Sitting))
- 362.** The radiation initially produced in fluorescent tube is  
 (1) infrared  
 (2) ultraviolet  
 (3) microwaves  
 (4) X-rays  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (Ist Sitting))
- 363.** The 'four stroke petrol engine' is based on  
 (1) Carnot-cycle  
 (2) Otto-cycle  
 (3) Diesel-cycle  
 (4) Boyle's-cycle  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 364.** It is dangerous to observe Solar eclipse with naked eyes because  
 (1) Infrared radiations from sun burn our retina  
 (2) Ultraviolet radiations from Sun burn our retina  
 (3) All radiations from sun initiate chemical reactions in eyes  
 (4) Cosmic rays reach eyes more during the eclipse  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 365.** These waves cannot be transmitted through vacuum  
 (1) Light  
 (2) Sound  
 (3) Heat  
 (4) Electromagnetic  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 366.** A gap is left between two rails of a railway track to accommodate..... of the metal.  
 (1) areal expansion  
 (2) volume expansion  
 (3) liner expansion  
 (4) apparent expansion  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 367.** If an ordinary glass tube and a glass capillary tube are both dipped in a beaker of water, water rises in  
 (1) both  
 (2) only the glass tube  
 (3) only the capillary tube  
 (4) neither  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 368.** 'Hydraulic brakes' work on the principle of  
 (1) Pascal's law  
 (2) Thomson's law  
 (3) Newton's law  
 (4) Bernoulli's theorem  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 369.** Stars in the sky appear to twinkle due to  
 (1) a series of refractions  
 (2) a series of reflections  
 (3) a surface tension phenomenon  
 (4) multiple diminishing brightness  
 (SSC Combined Matric Level (PRE)  
 Exam. 12.05.2002 (IInd Sitting))
- 370.** A pilot has to release the bomb to hit a target  
 (1) right above the target  
 (2) beyond the target  
 (3) before the target  
 (4) None of these  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 371.** Parabolic mirrors are used in  
 (1) Car headlights  
 (2) Driving mirrors  
 (3) Dentists mirrors  
 (4) Shaving mirrors  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 372.** Red is used as an emergency or danger signal as  
 (1) it is a striking colour  
 (2) its wavelength is the longest  
 (3) it is scattered  
 (4) it has very high energy  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 373.** Bats can sense obstacles because they produce  
 (1) supersonic sound waves  
 (2) ultrasonic sound waves  
 (3) infrasonic sound waves  
 (4) micro sound waves  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 374.** The resistance of the human body (dry condition) is of the order of  
 (1)  $10^1$  Ohm (2)  $10^2$  Ohm  
 (3)  $10^3$  Ohm (4)  $10^4$  Ohm  
 (SSC CGL Tier-I Exam. 19.10.2014  
 TF No. 022 MH 3)
- 375.** The sharpness of a television image is termed as its  
 (1) Clarity (2) Colour  
 (3) Resolution (4) Graphics  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 376.** Small bubbles are perfectly spherical because of  
 (1) Gravity  
 (2) Pressure  
 (3) Viscosity  
 (4) Surface tension  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 377.** The final image in a simple microscope is  
 (1) real, diminished and inverted  
 (2) real, magnified and erect  
 (3) virtual, magnified and erect  
 (4) virtual, diminished and erect  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 378.** Two rods, one of copper and other of steel, experience the same upthrust when placed in water. Thus, both have  
 (1) equal volume  
 (2) equal weight  
 (3) equal density  
 (4) equal mass  
 (SSC Combined Matric Level (PRE)  
 Exam. 16.06.2002 (Re-Exam))
- 379.** A single fixed pulley is used to draw water from a well because  
 (1) efficiency is 100%  
 (2) velocity ratio is low  
 (3) mechanical advantage is high  
 (4) force is applied in a convenient direction  
 (SSC Combined Matric Level (PRE) Exam. 30.07.2006  
 (Ist Sitting (East Zone)))
- 380.** A light year is a measure of :  
 (1) Speed (2) Velocity  
 (3) Distance (4) Time  
 (SSC Combined Matric Level (PRE) Exam. 30.07.2006  
 (Ist Sitting (East Zone)))
- 381.** A device which is used to limit the current in an electrical circuit is called a  
 (1) Grid (2) Fuse  
 (3) Hub (4) Conductor  
 (SSC Combined Matric Level (PRE) Exam. 30.07.2006  
 (Ist Sitting (East Zone)))

**382.** Hypermetropia or longsight can be corrected by using :

- (1) Bifocal lenses
- (2) Cylindrical lenses
- (3) Concave lenses
- (4) Convex lenses

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**383.** Stars appear twinkling because of ..... of light.

- (1) Reflection (2) Scattering
- (3) Emission (4) Absorption

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**384.** Speed of sound in air is unaffected by change in :

- (1) Pressure (2) Humidity
- (3) Temperature (4) Volume

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**385.** The audio signals of TV are :

- (1) Amplitude modulated
- (2) Frequency modulated
- (3) Unmodulated
- (4) Velocity modulated

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**386.** In mirrors the back surface is coated with a thin layer of :

- (1) Mercury (2) Silver
- (3) Red oxide (4) Silver nitrate

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**387.** A bomb at rest explodes into a large number of tiny fragments. The total momentum of all the fragments

- (1) is zero
- (2) depends on the total mass of all the fragments
- (3) depends on the speeds of various fragments
- (4) is infinity

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (1st Sitting (East Zone))

**388.** An optically plane surface reflects a beam of light

- (1) as a parallel beam in one direction
- (2) as diffused beams in all directions

- (3) as parallel beams in all directions
- (4) as a diffused beam in one direction

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**389.** The slope of a velocity-time graph represents

- (1) acceleration
- (2) displacement
- (3) distance
- (4) speed

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**390.** The earth-wire of a cable is connected to

- (1) the outer metallic body of the appliance
- (2) the fuse of the appliance
- (3) the filament of the appliance
- (4) short circuitry of the appliance

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**391.** Water is used in car radiator because of its

- (1) low density
- (2) easy availability
- (3) high specific heat capacity
- (4) low boiling point

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**392.** How much mechanical work must be done to completely melt 1 gram of ice at 0°C ?

- (1) 4.2 J (2) 80 J
- (3) 336 J (4) 2268 J

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**393.** A bullet is fired from a rifle which recoils after firing. The ratio of kinetic energy of the rifle to that of the bullet is

- (1) zero (2) one
- (3) less than one
- (4) more than one

(SSC Combined Matric Level (PRE) Exam. 30.07.2006 (IInd Sitting (Central Zone))

**394.** Heat stored in water vapour is

- (1) specific heat
- (2) latent heat
- (3) absolute heat
- (4) relative heat

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**395.** The layer of atmosphere used for radio-wave transmission is

- (1) chromosphere
- (2) troposphere
- (3) ionosphere
- (4) stratosphere

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**396.** Negative feedback in amplifiers

- (1) increases bandwidth and decreases noise
- (2) decreases bandwidth and decreases noise
- (3) increases bandwidth and increases noise
- (4) decreases bandwidth and increases noise

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**397.** Water cannot be used to extinguish fire caused by electric current, because

- (1) it may cause electrocution
- (2) it may cause hydrolysis
- (3) it may cause electrolysis
- (4) it may spoil the wiring

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**398.** A periscope works on the principle of

- (1) refraction
- (2) total internal reflection
- (3) diffraction
- (4) reflection

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**399.** A copper disc has a hole. If the disc is heated, the size of the hole

- (1) increases
- (2) decreases
- (3) No change
- (4) first increases and then decreases

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**400.** A rear-view mirror for driving is

- (1) plain (2) concave
- (3) convex (4) inverted

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

**401.** The important unit of a micro-processor is

- (1) ALU
- (2) array of registers
- (3) control unit
- (4) All of the above

(SSC Combined Matric Level (PRE) Exam. 30.03.2008 (1st Sitting))

- 402.** Anemometer is used to measure  
 (1) wind direction  
 (2) wind velocity  
 (3) pressure gradient  
 (4) wind speed and time

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 403.** Which one of the following has the highest value of specific heat?

- (1) Glass      (2) Copper  
 (3) Lead      (4) Water

(SSC Data Entry Operator Exam.  
Held on : 31.08.2008)

- 404.** The device used for locating submerged objects under sea is.

- (1) sonar      (2) radar  
 (3) laser      (4) maser

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 405.** The metal whose electrical conductivity is more, is

- (1) copper      (2) aluminium  
 (3) silver      (4) lead

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 406.** What happens to a liquid, when the vapour pressure equals the atmospheric pressure?

- (1) The liquid cools  
 (2) The liquid boils  
 (3) No change  
 (4) The liquid evaporates

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 407.** In nuclear reactor, heavy water is used as

- (1) coolant      (2) fuel  
 (3) moderator  
 (4) atomic smasher

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 408.** Tear gas used by the police to disperse the mob contains

- (1) carbon dioxide  
 (2) chlorine      (3) ammonia  
 (4) hydrogen sulphide

(SSC Data Entry Operator  
Exam. 31.08.2008)

- 409.** Water boils at a lower temperature on the hills because

- (1) it is cold on the hills  
 (2) there is less carbon dioxide on the hills  
 (3) there is a decrease in air pressure on the hills  
 (4) There is less oxygen

(SSC Data Entry Operator  
Exam. 02.08.2009)

- 410.** Why do birds not have respiratory trouble at the time of flying at high altitude ?

- (1) Their lungs are very large  
 (2) They fly inactive  
 (3) They have extra air sacs  
 (4) They use less oxygen

(SSC Data Entry Operator  
Exam. 02.08.2009)

- 411.** The temperature which has the same reading on both Fahrenheit and Celsius scales is

- (1) 40°      (2) -40°  
 (3) -34°      (4) -140°

(SSC Data Entry Operator  
Exam. 02.08.2009)

- 412.** Kilowatt -hour is the unit of :

- (1) Energy      (2) Power  
 (3) Force      (4) Momentum  
 (SSC Stenographer (Grade 'C' & 'D')  
Exam. 26.09.2010)

- 413.** The part of the eye having the largest refractive index is :

- (1) cornea  
 (2) aqueous humor  
 (3) lens  
 (4) vitreous humor

(SSC Stenographer (Grade 'C' & 'D')  
Exam. Held on : 26.09.2010)

- 414.** Conversion of heat into electrical energy is achieved by using :

- (1) Ammeter  
 (2) Hydrometer  
 (3) Voltmeter  
 (4) Thermocouple  
 (SSC Stenographer (Grade 'C' & 'D')  
Exam. 26.09.2010)

- 415.** Ball pen functions on the principle of :

- (1) Viscosity  
 (2) Boyle's Law  
 (3) Gravitational force  
 (4) Surface tension  
 (SSC Stenographer (Grade 'C' & 'D')  
Exam. 26.09.2010)

- 416.** A man cannot see clearly beyond 10 meters. The disease he suffers from :

- (1) Far sight  
 (2) Myopia  
 (3) Cataract  
 (4) Hypermetropia  
 (SSC Stenographer (Grade 'C' & 'D')  
Exam. 26.09.2010)

- 417.** When milk is churned, the cream separates from it due to:

- (1) Frictional force  
 (2) Centrifugal force  
 (3) Gravitational force  
 (4) Viscous forces

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 418.** Moving electric charge produces :

- (1) magnetic field  
 (2) sound waves  
 (3) light rays  
 (4) heat waves

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 419.** The S.I. unit of electric charge is :

- (1) ampere      (2) coulomb  
 (3) e.s.u      (4) kelvin

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 420.** Light beam which is highly directional is called:

- (1) eraser      (2) grazer  
 (3) maser      (4) laser

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 421.** Permissible noise level at Residential area during night time is :

- (1) 45 dB (A)      (2) 55 dB (A)  
 (3) 75 dB (A)      (4) 80 dB (A)

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 422.** Energy in reflected light :

- (1) does not depend on the angle of incidence  
 (2) increases with the increase in angle  
 (3) decreases with the increase in angle of incidence  
 (4) becomes maximum for angle of incidence equal to 45°

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 27.11.2010)

- 423.** Which colour of light shows maximum deviation when passed through a prism ?

- (1) White      (2) Red  
 (3) Violet      (4) Green

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (1st Sitting))

- 424.** The best material for the core of a transformer is

- (1) stainless steel  
 (2) mild steel  
 (3) hard steel  
 (4) soft iron

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (1st Sitting))

- 425.** In AC circuits, AC meters measure  
 (1) mean values  
 (2) rms values  
 (3) peak values  
 (4) mean square values

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (IInd Sitting))

- 426.** When a light wave is reflected from a mirror, there is a change in its

- (1) frequency (2) amplitude  
 (3) wavelength (4) velocity

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (IInd Sitting))

- 427.** Solar energy is due to

- (1) fusion reactions  
 (2) fission reactions  
 (3) combustion reactions  
 (4) chemical reactions

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (IInd Sitting))

- 428.** The width of depletion layer of a P-N junction

- (1) decreases with light doping  
 (2) increases with heavy doping  
 (3) is independent of applied voltage  
 (4) is increased under reverse bias

(SSC Higher Secondary Level  
Data Entry Operator & LDC  
Exam. 28.11.2010 (IInd Sitting))

- 429.** A body absorbs heat most if it is

- (1) black and rough  
 (2) black and smooth  
 (3) white and rough  
 (4) white and smooth

(SSC Stenographer (Grade 'C' & 'D')  
Exam. 09.01.2011)

- 430.** Safety fuse wire used in domestic electrical appliances is made of metal of low

- (1) Resistance  
 (2) Melting point  
 (3) Specific gravity  
 (4) Conductance

(SSC Stenographer (Grade 'C' & 'D')  
Exam. 09.01.2011)

- 431.** The following particles move with same kinetic energy. Which of them has maximum momentum?

- (1) Electron (2) Proton  
 (3) Deuteron  
 (4) Alpha Particle

(SSC Stenographer (Grade 'C' & 'D')  
Exam. 09.01.2011)

- 432.** A bottle of sodalime is grasped by the neck and swung briskly in a vertical circle. Near which portion of the bottle do the bubbles collect?

- (1) Near the bottom  
 (2) In the middle of the bottom  
 (3) Near the neck  
 (4) Bubbles remain distributed uniformly

(SSC Stenographer (Grade 'C' & 'D')  
Exam. 09.01.2011)

- 433.** Water from soil enters into the root hairs owing to :

- (1) Atmospheric pressure  
 (2) Capillary pressure  
 (3) Root pressure  
 (4) Osmotic pressure

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 20.02.2011)

- 434.** The angle in which a cricket ball should be hit to travel maximum horizontal distance is :

- (1) 60° with horizontal  
 (2) 45° with horizontal  
 (3) 30° with horizontal  
 (4) 15° with horizontal

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 20.02.2011)

- 435.** The minimum number of geostationary satellites needed for uninterrupted global coverage is :

- (1) 3 (2) 2  
 (3) 4 (4) 1

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 20.02.2011)

- 436.** The best conductor of electricity among the following is :

- (1) Copper  
 (2) Iron  
 (3) Aluminium  
 (4) Silver

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 20.02.2011)

- 437.** Flight Recorder is technically called :

- (1) Dark box  
 (2) Blind box  
 (3) Black box  
 (4) Altitude meter

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 20.02.2011)

- 438.** Which type of mirror is used in the head lights of vehicles?

- (1) Plane mirror  
 (2) Concave mirror  
 (3) Convex mirror  
 (4) Parabolic mirror

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 27.02.2011)

- 439.** The height of a geo-stationary satellite from the Earth's surface is approximately :

- (1) 36,000 km  
 (2) 42,000 km  
 (3) 30,000 km  
 (4) None of these

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 27.02.2011)

- 440.** Decibel is a term connected with :

- (1) air (2) water  
 (3) sound (4) soil

(SSC Multi-Tasking (Non-Technical)  
Staff Exam. 27.02.2011)

- 441.** As we go from Equator to North pole the value of 'g', the acceleration due to gravity

- (1) remains the same  
 (2) decreases  
 (3) increases  
 (4) None of the above

(SSC CISF Constable (GD)  
Exam. 05.06.2011)

- 442.** Shaving mirror is

- (1) Convex (2) Concave  
 (3) Plane (4) Parabolic

(SSC CISF Constable (GD)  
Exam. 05.06.2011)

- 443.** Magnifying Glass is basically a

- (1) Plano-concave lens  
 (2) Concave lens  
 (3) Convex lens  
 (4) Cylindrical lens

(SSC Stenographer Grade  
'C' & 'D' Exam. 16.10.2011)

- 444.** Water will **not** be vapourised if

- (1) the temperature is 0°C  
 (2) the humidity is 0%  
 (3) the humidity is 100%  
 (4) the temperature is 100°C

(SSC Stenographer Grade  
'C' & 'D' Exam. 16.10.2011)

- 445.** Which of the following is **not** a part of a CRT?

- (1) Phosphor screen  
 (2) Shadow mask  
 (3) Electron gun  
 (4) Gas plasma

(SSC Stenographer Grade  
'C' & 'D' Exam. 16.10.2011)

- 446.** Railway tracks are banked on curves so that

- (1) Necessary centrifugal force may be obtained from the horizontal component of the weight of the train  
 (2) No frictional force may be produced between the tracks and the wheels of the train

- (3) Necessary centripetal force may be obtained from the horizontal component of the weight of the train  
(4) The train may not fall down inwards  
(SSC Stenographer Grade 'C' & 'D' Exam. 16.10.2011)
- 447.** The pitch of sound depends on its  
(1) Frequency (2) Intensity  
(3) Velocity (4) Amplitude  
(SSC Stenographer Grade 'C' & 'D' Exam. Held on : 16.10.2011)
- 448.** Which of the following is a conductor of electricity ?  
(1) Rubber (2) Pure water  
(3) Salt water (4) Benzene  
(SSC Stenographer Grade 'C' & 'D' Exam. 16.10.2011)
- 449.** The working of a rocket is based on the principle of:  
(1) Conservation of momentum  
(2) Conservation of mass  
(3) Conservation of energy  
(4) Conservation of angular momentum  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 450.** A fuse wire is made of:  
(1) an alloy of tin and copper  
(2) an alloy of tin and lead  
(3) an alloy of tin and aluminium  
(4) an alloy of nickel and chromium  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 451.** The energy that can harness heat stored below the earth's surface is known as ;  
(1) thermal energy  
(2) nuclear energy  
(3) tidal energy  
(4) geo-thermal energy  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 452.** The temperature of boiling water in a steam engine may be high because :  
(1) there are dissolved substances in water  
(2) there is low pressure inside the boiler  
(3) there is high pressure inside the boiler  
(4) the fire is at very high temperature  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 453.** An instrument used to measure humidity is:  
(1) Anemometer  
(2) Hygrometer  
(3) Thermometer  
(4) Pyrheliometer  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 454.** Fat can be separated from milk in a cream separator because of:  
(1) Cohesive force  
(2) Gravitational force  
(3) Centripetal force  
(4) Centrifugal force  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (North Zone))
- 455.** A transformer works with  
(1) alternating current only  
(2) direct current only  
(3) both AC and DC  
(4) any signal  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (North Zone))
- 456.** In the Earth, the weight of a body is maximum at the  
(1) North Pole (2) South Pole  
(3) Equator (4) Surface  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (North Zone))
- 457.** The technique of collecting information about an object from a distance without making physical contact with it is  
(1) Remote sensing  
(2) Remote control  
(3) Remote accessing  
(4) Space shuttle  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (North Zone))
- 458.** The head mirror used by ENT doctors is  
(1) Concave (2) Convex  
(3) Plane (4) Plano-convex  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (North Zone))
- 459.** Direct conversion of solar energy with the use of a photo voltaic cell results in the production of  
(1) Optical energy  
(2) Electrical energy  
(3) Thermal energy  
(4) Mechanical energy  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (East Zone))
- 460.** A man inside an artificial satellite feels weightlessness because the force of attraction due to earth is  
(1) zero at that place  
(2) is balanced by the force of attraction due to moon  
(3) equal to the centripetal force  
(4) non-effective due to particular design of the satellite  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (East Zone))
- 461.** When a detergent is added to pure water, its surface tension  
(1) increases  
(2) decreases  
(3) remains constant  
(4) becomes infinite  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (East Zone))
- 462.** Ultra violet light of Sun's radiation is prevented from reaching the earth's atmosphere by the layer of  
(1) Oxygen (2) Hydrogen  
(3) Ozone (4) Helium  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (Ist Sitting) (East Zone))
- 463.** White clothes are cooler than black ones because they  
(1) absorb all the light that reaches them  
(2) reflect all the light that reaches them  
(3) will not allow the light to penetrate  
(4) cool the sunlight completely  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (East Zone))
- 464.** The primary colours in photography are  
(1) Red, Blue, Yellow  
(2) Red, Yellow, Green  
(3) Red, Blue, Green  
(4) Blue, Yellow, Green  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (East Zone))
- 465.** A concave lens always forms  
(1) a real image  
(2) a virtual image  
(3) an image type which depends on object characteristics  
(4) an image type which depends on lens curvature  
(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting) (East Zone))



- 466.** The blue colour of sky is due to  
 (1) reflection of sunlight  
 (2) refraction of sunlight  
 (3) scattering of shorter wavelengths of sunlight in the atmosphere  
 (4) scattering of longer wavelengths of sunlight in the atmosphere

(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting (East Zone))

- 467.** Metal tea pots have wooden handles because  
 (1) wood is a bad conductor of heat  
 (2) it prevents electric shock  
 (3) it gives beauty to the pots  
 (4) it is hygienic

(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting (East Zone))

- 468.** Ozone layer above the surface of Earth provides a shield against  
 (1) X-rays  
 (2) Ultra-violet rays  
 (3) Gamma rays  
 (4) Infra-red rays

(SSC (10+2) Level Data Entry Operator & LCD Exam. 04.12.2011 (IInd Sitting (East Zone))

- 469.** The Newton's First Law is also called as  
 (1) Law of moments  
 (2) Law of inertia  
 (3) Law of energy  
 (4) Law of momentum

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (Delhi Zone))

- 470.** If we want to calculate the pressure of a liquid at the bottom of a vessel, the quantity which is not required to determine it, is  
 (1) Height of the liquid column  
 (2) Surface area of the bottom of the vessel  
 (3) Density of the liquid  
 (4) Acceleration due to gravity at the bottom of the vessel

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (Delhi Zone))

- 471.** The water from a hand pump is warm in winter because  
 (1) Our body is cold in winter and the water appears to be warm  
 (2) The temperature inside the earth is higher than the atmospheric temperature  
 (3) The pumping process causes friction which warms up the water

- (4) Inside water comes out and absorbs heat from the environment

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (Delhi Zone))

- 472.** A water tank appears shallower when it is viewed from top due to  
 (1) rectilinear propagation of light  
 (2) reflection

(3) total internal reflection  
 (4) refraction  
 (SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (Delhi Zone))

- 473.** For a ray of light to suffer total internal reflection it has to pass from :

- (1) glass to water  
 (2) water to glass  
 (3) air to water  
 (4) air to glass

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (Delhi Zone))

- 474.** A stone is dropped from the roof of a house towards the ground. The kinetic energy of the stone will be maximum:

- (1) just after it is dropped  
 (2) when it is just on the half-way  
 (3) just before it touches the ground  
 (4) when it touches the ground

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (Delhi Zone))

- 475.** A black body can absorb radiations of ;

- (1) lower wavelengths only  
 (2) intermediate wavelengths only  
 (3) higher wavelengths only  
 (4) all wavelengths

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (Delhi Zone))

- 476.** Hydraulic machines work under the Principle of :

- (1) Newton's Law  
 (2) Joules Law  
 (3) Pascal's Law  
 (4) Floatation Law

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (Delhi Zone))

- 477.** The Newton's First Law is also called as

- (1) Law of moments  
 (2) Law of inertia  
 (3) Law of energy  
 (4) Law of momentum

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (East Zone))

- 478.** If we want to calculate the pressure of a liquid at the bottom of a vessel, the quantity which is **not** required to determine it, is

- (1) Height of the liquid column  
 (2) Surface area of the bottom of the vessel  
 (3) Density of the liquid  
 (4) Acceleration due to gravity at the bottom of the vessel

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (East Zone))

- 479.** The water from a hand pump is warm in winter because

- (1) Our body is cold in winter and the water appears to be warm  
 (2) The temperature inside the earth is higher than the atmospheric temperature  
 (3) The pumping process causes friction which warms up the water  
 (4) Inside water comes out and absorbs heat from the environment

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (East Zone))

- 480.** A water tank appears shallower when it is viewed from top due to  
 (1) rectilinear propagation of light

- (2) reflection  
 (3) total internal reflection  
 (4) refraction

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (Ist Sitting (East Zone))

- 481.** Ozone layer in the outer atmosphere helps us in

- (1) reflecting radio waves and makes radio communication possible  
 (2) regulating the temperature of atmosphere  
 (3) absorbing cosmic ray particles  
 (4) absorbing U-V radiations

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**482.** Water is used in hot water bags because

- (1) It is easily obtained
- (2) It is cheaper and is not harmful
- (3) It has high specific heat
- (4) It is easy to heat water

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**483.** Water drops cannot stick to the oily surface due to

- (1) lack of adhesive force
- (2) surface tension
- (3) cannot mix each other
- (4) water is lighter than oil

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**484.** Which of the following properties is generally found in non-metals?

- (1) Brittleness
- (2) Conductivity
- (3) Ductility
- (4) Malleability

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**485.** Match the following:

Process		Changes	
a. Evaporation	1. Liquid into gas		
b. Sublimation	2. Gas into liquid		
c. Freezing	3. Solid into gas		
d. Melting	4. Solid into liquid		
a	b	c	d
(1) 1	2	4	3
(2) 3	1	2	4
(3) 2	1	4	3
(4) 2	1	3	4

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**486.** Electro-static precipitator is used to control

- (1) Chemical Pollutants
- (2) Radio-active Pollutants
- (3) Water Pollutants
- (4) Air Pollutants

(SSC (10+2) Level Data Entry Operator & LCD Exam. 11.12.2011 (IInd Sitting (East Zone))

**487.** A micron is equal to

- (1) 0.1 mm
- (2) 0.01 mm
- (3) 0.001 mm
- (4) 0.0001 mm

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (1st Sitting))

**488.** Persons suffering from myopia are advised to use

- (1) convex lens
- (2) concave lens
- (3) plano-convex lens
- (4) plano-concave lens

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (1st Sitting))

**489.** A light year is a unit of

- (1) time
- (2) distance
- (3) speed of light
- (4) intensity of light

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (1st Sitting))

**490.** An instrument that records earthquakes is

- (1) Ergograph
- (2) Ediograph
- (3) Thermograph
- (4) Seismograph

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (IInd Sitting))

**491.** Velocity of sound in air does not depend on

- (1) Density of air
- (2) Temperature of air
- (3) Pressure of air
- (4) Humidity of air

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (IInd Sitting))

**492.** A dynamo is used to convert

- (1) mechanical energy into electrical energy
- (2) electrical energy into mechanical energy
- (3) electrical energy into magnetic energy
- (4) magnetic energy into mechanical energy

(SSC Constable (GD) & Rifleman (GD) Exam. 22.04.1912 (IInd Sitting))

**493.** Conversion of sound energy into electrical energy is done by

- (1) Solar cell
- (2) Gramophone
- (3) Microphone
- (4) Loudspeaker

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (1st Sitting))

**494.** A small gap is left at the joints of rails in a railway track to

- (1) avoid the tracks being distorted due to seasonal temperature variation
- (2) avoid the heating of tracks to high temperature

- (3) control the speed of train
- (4) keep the rails equidistant

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (1st Sitting))

**495.** Which of the following criterion is used for any metal to be used as a cooking material ?

- (1) More specific heat
- (2) More thermal conductivity
- (3) Less thermal conductivity
- (4) Less electrical conductivity

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (1st Sitting))

**496.** Least audible sound for most of the human ear is :

- (1) 10.0  $\mu$  bar
- (2) 0.0002  $\mu$  bar
- (3) 0.005  $\mu$  bar
- (4) 5.0  $\mu$  bar

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**497.** Amount of water vapour (gaseous) in a given volume of air (cubic metre) is known as:

- (1) Mixing ratio
- (2) Relative humidity
- (3) Absolute humidity
- (4) Specific humidity

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**498.** When a running car stops suddenly, the passengers tends to lean forward because of:

- (1) centrifugal force
- (2) inertia of rest
- (3) inertia of motion
- (4) gravitational force

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**499.** Which of the following is a good conductor of heat but bad conductor of electricity ?

- (1) mica
- (2) asbestos
- (3) celluloid
- (4) paraffin wax

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**500.** For which of the following substances, the resistance decreases with increase in temperature?

- (1) Pure silicon
- (2) Copper
- (3) Nichrome
- (4) Platinum

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**501.** A solid needle placed horizontally on the surface of the water floats due to

- (1) capillary action
- (2) water pressure
- (3) surface tension of water
- (4) viscosity of water

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**502.** When hot liquid is poured into a thick glass tumbler, it cracks because glass :

- (1) is a bad conductor of heat so only inner surface expands
- (2) has high temperature coefficient of expansion
- (3) has a very low specific heat
- (4) has low temperature coefficient of expansion

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**503.** Hydro-electric power is a:

- (1) non-renewable natural resource
- (2) a mixture of renewable and non-renewable natural resource
- (3) neither renewable nor non renewable resource
- (4) renewable natural resource

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**504.** The oil in the wick of an oil lamp rises up due to:

- (1) capillary action
- (2) low viscosity of oil
- (3) gravitational force
- (4) pressure difference

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**505.** A drop of liquid assumes spherical shape because:

- (1) Intermolecular forces are strong in liquids
- (2) A sphere has the least surface area for a given volume
- (3) A sphere has the largest surface area for a given volume
- (4) Inter molecular forces are weak in liquids

(SSC (10+2) Level Data Entry Operator & LDC Exam. 21.10.2012 (2nd Sitting))

**506.** If cream is removed from milk, its density

- (1) Increases
- (2) Decreases
- (3) Remains the same
- (4) May increase or decrease

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**507.** Convex mirrors are used as a rear view mirror in motor cycles because

- (1) it forms real image
- (2) it forms erect (upright) image
- (3) it forms smaller image as compared with object
- (4) All of the above

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**508.** The wall of a dam is made thicker at the bottom than at the top because the pressure exerted by the water on the wall

- (1) depends on the thickness of the wall
- (2) increases with height of the wall
- (3) increases with depth of the wall
- (4) depends on the area of the wall

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**509.** Full form of CFL used in place of electric bulbs is

- (1) compact fluorescent lamp
- (2) constantan filament lamp
- (3) closed filament lamp
- (4) closed fluorescent lamp

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**510.** Indicate the false statement about the resistance of a wire

- (1) it depends on material of wire
- (2) it is directly proportional to the length of wire
- (3) it is directly proportional to the area of cross-section of wire
- (4) resistance of metallic wire increases with increase in temperature

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**511.** Which electromagnetic radiation is used for satellite communication ?

- (1) Ultraviolet
- (2) Infrared
- (3) Microwave
- (4) Millimeter wave

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**512.** Solar cells work on the principle of

- (1) photovoltaic effect
- (2) photoelectric effect
- (3) photoconductive effect
- (4) photosynthesis

(SSC (10+2) Level Data Entry Operator & LDC Exam. 28.10.2012 (1st Sitting))

**513.** Materials for rain proof coats and tents owe their water proof properties to

- (1) Surface tension
- (2) Viscosity
- (3) Specific gravity
- (4) Elasticity

(SSC (10+2) Level Data Entry Operator & LDC Exam. 04.11.2012 (2nd Sitting))

**514.** X-rays region lies between

- (1) Ultraviolet and visible region
- (2) Visible and infra-red region
- (3) Gamma-rays and ultraviolet region
- (4) Short radio waves and long radio waves

(SSC (10+2) Level Data Entry Operator & LDC Exam. 04.11.2012 (2nd Sitting))

**515.** A star appears twinkling in the sky because of

- (1) scattering of light by atmosphere
- (2) reflection of light by atmosphere
- (3) refraction of light by atmosphere
- (4) diffraction of light by atmosphere

(SSC (10+2) Level Data Entry Operator & LDC Exam. 04.11.2012 (2nd Sitting))

**516.** When two ice cubes are pressed together, they join to form one cube. Which one of the following helps to hold them together?

- (1) Hydrogen bond formation
- (2) Vander waals forces
- (3) Covalent attraction
- (4) Dipole interaction

(SSC Graduate Level Tier-I Exam. 11.11.2012 (1st Sitting))

**517.** Microphone is a device which transforms the

- (1) sound signal into current signal
- (2) current signal into sound signal
- (3) sound signal into light signal
- (4) light signal into sound signal

(SSC Graduate Level Tier-I Exam. 11.11.2012 (1st Sitting))

**518.** Pressure Cooker cooks faster because

- (1) boiling point decreases with rise of pressure
- (2) it cooks the food at low pressure
- (3) higher temperature is attained for cooking
- (4) the material of the cooker is a good conductor

(SSC Graduate Level Tier-I Exam. 11.11.2012 (1st Sitting))

**519.** When a strong beam of light is passed through a colloidal solution, the light will

- (1) be scattered
- (2) pass unchanged
- (3) be absorbed
- (4) be reflected

(SSC Graduate Level Tier-I Exam. 11.11.2012 (1st Sitting))

**520.** The dynamo converts

- (1) mechanical energy into electrical energy
- (2) electrical energy into mechanical energy
- (3) mechanical energy into magnetic energy
- (4) magnetic energy into mechanical energy

(SSC Delhi Police Sub-Inspector (SI) Exam. 19.08.2012)

**521.** It is easier for a man to swim in sea water, than in river water because

- (1) the density of sea water is less than the density of river water
- (2) the density of sea water is more than the density of river water
- (3) the sea is deeper than the river
- (4) the sea is wider than the river

(SSC Delhi Police Sub-Inspector (SI) Exam. 19.08.2012)

**522.** In the remote control of television, electromagnetic waves used are

- (1) ultraviolet
- (2) microwave
- (3) radiowave
- (4) infrared

(SSC Delhi Police Sub-Inspector (SI) Exam. 19.08.2012)

**523.** The waveform of a certain signal can be studied by

- (1) Spectrometer
- (2) Cathode ray oscilloscope
- (3) p – n junction diode
- (4) Sonometer

(SSC Multi-Tasking Staff Exam. 10.03.2013, 1st Sitting : Patna)

**524.** A wire carrying current is

- (1) positively charged
- (2) negatively charged
- (3) neutral
- (4) charged with a type depending upon current strength

(SSC Multi-Tasking Staff Exam. 10.03.2013, 1st Sitting : Patna)

**525.** A light ray travelling from denser to rarer medium at an angle of incidence more than critical angle of concerned media pair suffers.

- (1) reflection
- (2) refraction
- (3) diffraction
- (4) total internal reflection

(SSC Multi-Tasking Staff Exam. 10.03.2013)

**526.** The characteristic invalid for heat radiation is that it travels :

- (1) in a straight line
- (2) in all directions
- (3) with the speed of light
- (4) heating the medium through which it passes

(SSC Multi-Tasking Staff Exam. 10.03.2013)

**527.** The method of magnetisation is:

- (1) hammering a magnet
- (2) heating a magnet
- (3) passing direct current through it
- (4) passing alternating current through it

(SSC Multi-Tasking Staff Exam. 10.03.2013)

**528.** Water is not suitable as a calorimetric substance because it :

- (1) has high specific heat
- (2) is a good conductor
- (3) has high boiling point
- (4) low latent heat of vapourization

(SSC Multi-Tasking Staff Exam. 10.03.2013)

**529.** When a body falls from an aeroplane, there is increase in its

- (1) Kinetic energy
- (2) Mass
- (3) Acceleration
- (4) Potential energy

(SSC Multi-Tasking Staff Exam. 17.03.2013, 1st Sitting)

**530.** In a water lifting electric pump, we convert

- (1) Electrical energy into Potential energy
- (2) Kinetic energy into Electrical energy
- (3) Kinetic energy into Potential energy
- (4) Electrical energy into Kinetic energy

(SSC Multi-Tasking Staff Exam. 17.03.2013, 1st Sitting)

**531.** The type of mirror used in automobiles to see the traffic on the rear side is

- (1) Concave
- (2) Plano-Convex
- (3) Plane
- (4) Convex

(SSC Multi-Tasking Staff Exam. 17.03.2013, 1st Sitting)

**532.** Which, of the following radiations has the least wavelength ?

- (1) X-rays
- (2) a-rays
- (3) g-rays
- (4) b-rays

(SSC Multi-Tasking Staff Exam. 17.03.2013, 1st Sitting)

**533.** The earth is a

- (1) good reflector of heat
- (2) non-absorber of heat
- (3) good absorber and good radiator of heat
- (4) bad absorber and bad radiator of heat

(SSC Multi-Tasking Staff Exam. 17.03.2013, 1st Sitting)

**534.** Magnetic keepers are pieces of

- (1) Nickel
- (2) Cobalt
- (3) Steel
- (4) Soft iron

(SSC Multi-Tasking Staff Exam. 17.03.2013, IInd Sitting)

**535.** When a piece of stone is immersed in water, it displaces water of equal

- (1) Density
- (2) Specific gravity
- (3) Mass
- (4) Volume

(SSC Multi-Tasking Staff Exam. 17.03.2013, IInd Sitting)

**536.** The motion of a body that repeats itself after a regular interval of time is

- (1) a periodic motion
- (2) a simple harmonic motion
- (3) an aperiodic motion
- (4) an oscillatory motion

(SSC Multi-Tasking Staff Exam. 17.03.2013, IInd Sitting)

**537.** A radioactive substance does not undergo any change (in mass or charge) during

- (1) gamma-emission
- (2) oxidation
- (3) alpha-emission
- (4) beta-emission

(SSC Multi-Tasking Staff Exam. 17.03.2013, IInd Sitting)

**538.** One bar is equal to

- (1)  $10^3$  Pa      (2) 100 Pa
- (3)  $10^5$  Pa      (4)  $10^4$  Pa

(SSC Multi-Tasking Staff Exam. 17.03.2013, Kolkata Region)

**539.** Specific gravity is defined as the ratio of

- (1) density of the substance to the density of water
- (2) density of the substance to the density of water at  $0^\circ\text{C}$
- (3) density of water at  $4^\circ\text{C}$  to the density of the substance
- (4) density of the substance to the density of water at  $4^\circ\text{C}$

(SSC Multi-Tasking Staff Exam. 17.03.2013, Kolkata Region)

**540.** A barometer is kept inside a bell jar. Air is slowly pumped out of the jar.

- (1) The mercury level starts rising
- (2) The mercury level starts falling
- (3) The mercury level does not change
- (4) The bell jar breaks up

(SSC Multi-Tasking Staff Exam. 17.03.2013, Kolkata Region)

**541.** The wavelength at which the peak of intensity of blackbody radiation occurs

- (1) increases with increase in temperature
- (2) decreases with increase in temperature
- (3) is the same at all temperatures
- (4) does not follow any pattern as temperature changes

(SSC Multi-Tasking Staff Exam. 17.03.2013, Kolkata Region)

**542.** Man perceives sound vibrations in the frequency ranges of

- (1) 0 – 5 Hz      (2) 6 – 10 Hz
- (3) 11 – 15 Hz
- (4) 20 – 20000 Hz

(SSC Multi-Tasking Staff Exam. 17.03.2013, Kolkata Region)

**543.** Certain substances lose their electrical resistance completely at super low temperature. Such substances are called.

- (1) Super conductors
- (2) Semi conductors

- (3) Dielectrics
- (4) Perfect conductors

(SSC CGL Tier-I Exam. 19.10.2014 TF No. 022 MH 3)

**544.** A metal ball and a rubber ball, both having the same mass, strike a wall normally with the same velocity. The rubber ball rebounds and the metal ball does not rebound. It can be concluded that

- (1) The rubber ball suffers greater change in momentum
- (2) The metal ball suffers greater change in momentum
- (3) Both suffer the same change in momentum
- (4) The initial momentum of the rubber ball is greater than that of the metal ball

(SSC CHSL (10+2) DEO & LDC Exam. 16.11.2014, 1st Sitting TF No. 333 LO 2)

**545.** The oil in the wick of lamp rises due to

- (1) Pressure difference
- (2) Phenomenon of capillarity
- (3) Low viscosity of oil
- (4) Force of cohesion

(SSC Multi-Tasking Staff Exam. 24.03.2013, 1st Sitting)

**546.** Kepler's law of planetary motion states that the square of the time period is proportional to the

- (1) semi-major axis
- (2) square of the semi-major axis
- (3) cube of the semi-major axis
- (4) fourth power of the semi-major axis

(SSC Multi-Tasking Staff Exam. 24.03.2013, 1st Sitting)

**547.** Radioactive elements can be traced out in living cell through a technique called

- (1) Centrifugation
- (2) Chromatography
- (3) Auto radiography
- (4) All the above

(SSC Multi-Tasking Staff Exam. 24.03.2013, 1st Sitting)

**548.** A NOT gate can be implemented by:

- (1) a single diode
- (2) two diodes
- (3) a single resistor
- (4) a single transistor

(SSC Graduate Level Tier-I Exam. 21.04.2013, 1st Sitting)

**549.** Persistence of vision is the Principle behind:

- (1) Binocular      (2) Cinema
- (3) Periscope      (4) Camera

(SSC Graduate Level Tier-I Exam. 21.04.2013, 1st Sitting)

**550.** Time of exposure required for taking photograph of an object depends upon the

- (1) brightness of the object
- (2) skill of photographer
- (3) proximity of object
- (4) size of the object

(SSC Graduate Level Tier-I Exam. 21.04.2013, 1st Sitting)

**551.** The ordinary and maximum tolerance limit of sound by human being is

- (1) 50 db to 70 db (decibel)
- (2) 60 db to 80 db (decibel)
- (3) 65 db to 75 db (decibel)
- (4) 70 db to 85 db (decibel)

(SSC Graduate Level Tier-I Exam. 21.04.2013, IInd Sitting)

**552.** Which one of the following is responsible for the working of Newton's colour disc experiment ?

- (1) Formation of pure spectra
- (2) Formation of impure spectra
- (3) Persistence of vision
- (4) Principle of complementary colour

(SSC Graduate Level Tier-I Exam. 21.04.2013, IInd Sitting)

**553.** The dimension  $\text{MLT}^{-2}$  corresponds to

- (1) force      (2) work done
- (3) acceleration      (4) velocity

(SSC Graduate Level Tier-I Exam. 21.04.2013, IInd Sitting)

**554.** Fiber optics cable used in communication, works on the principle of

- (1) regular reflection of light
- (2) diffuse reflection of light
- (3) refraction of light
- (4) total internal reflection of light

(SSC Graduate Level Tier-I Exam. 21.04.2013, IInd Sitting)

**555.** 'Farad' is the unit of :

- (1) Capacitance      (2) Inductance
- (3) Resistance      (4) Conductance

(SSC Graduate Level Tier-I Exam. 21.04.2013)

**556.** Steel is more elastic than rubber because it :

- (1) requires larger deforming force
- (2) is never deformed
- (3) is deformed very easily
- (4) is harder than rubber

(SSC Graduate Level Tier-I  
Exam. 21.04.2013)

**557.** Solids which conduct electricity at higher temperature but not at lower temperature are called

- (1) super-conductor
- (2) metallic-conductor
- (3) semi-conductor
- (4) insulator

(SSC Graduate Level Tier-I  
Exam. 21.04.2013)

**558.** A television channel is characterised by

- (1) frequency of transmitted signal
- (2) velocity of transmitted signal
- (3) physical dimension of television screen
- (4) size of picture tube

(SSC Graduate Level Tier-I  
Exam. 21.04.2013)

**559.** The density of water is 1 g/cc. This is strictly valid at

- (1) 0°C
- (2) 4°C
- (3) 25°C
- (4) 100°C

(SSC Graduate Level Tier-I  
Exam. 21.04.2013)

**560.** In radio-communication, the signals emitted by transmitting antenna are reflected on

- (1) stratosphere (2) ozonosphere
- (3) ionosphere (4) troposphere

(SSC Graduate Level Tier-I  
Exam. 21.04.2013)

**561.** Outside of cooking utensils are generally left black from below because

- (1) it is difficult to clean daily.
- (2) black surface is a good conductor of heat.
- (3) black surface is a poor conductor of heat.
- (4) black surface is a good absorber of heat.

(SSC Constable (GD)  
Exam. 12.05.2013, 1st Sitting)

**562.** The colour of sky appears blue due to

- (1) reflection (2) refraction
- (3) scattering of shorter wave lengths
- (4) dispersion

(SSC Constable (GD)  
Exam. 12.05.2013, 1st Sitting)

**563.** What is a compound microscope?

- (1) A microscope that has one lens.
- (2) A microscope that has two sets of lenses : an ocular lens and an eyepiece.
- (3) A microscope whose lenses are concave.
- (4) A microscope whose lenses are convex.

(SSC Constable (GD)  
Exam. 12.05.2013)

**564.** Sensitivity of the human eye is maximum in the

- (1) Violet region (2) Green region
- (3) Blue region (4) Red region

(SSC Constable (GD)  
Exam. 12.05.2013)

**565.** The speed of light in air is

- (1)  $3 \times 10^8$  m/s (2)  $3 \times 10^{-8}$  cm/s
- (3)  $8 \times 10^3$  m/s (4) Infinity

(SSC Constable (GD)  
Exam. 12.05.2013)

**566.** Photon is the fundamental unit/quantum of

- (1) gravitation (2) electricity
- (3) magnetism (4) light

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**567.** A liquid disturbed by stirring comes to rest due to

- (1) density
- (2) surface tension
- (3) viscosity
- (4) centripetal force

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**568.** In Astrophysics, what name is given to a hypothetical hole in outer space from which stars and energy emerge?

- (1) Black hole (2) Ozone hole
- (3) Asteroid belt (4) White hole

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**569.** Light scattering takes place in

- (1) Colloidal solutions
- (2) Acidic solutions
- (3) Electrolyte solutions
- (4) Basic solutions

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**570.** The term reactor referred to in waste water treatment is

- (1) Vessel (2) Settling tank
- (3) Clarifier (4) Aeration tank

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**571.** A good conductor while carrying current is

- (1) alternately charged positive and negative
- (2) negatively charged
- (3) positively charged
- (4) electrically neutral

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**572.** The device used for measuring the wavelength of X-rays is

- (1) G.M. Counter
- (2) Cyclotron
- (3) Bragg Spectrometer
- (4) Mass Spectrometer

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**573.** Alpha particle is the nucleus of an atom of

- (1) Lithium (2) Hydrogen
- (3) Helium (4) Oxygen

(SSC Graduate Level Tier-I  
Exam. 19.05.2013)

**574.** Which of the following supports particle nature of photons ?

- (1) Diffraction (2) Polarization
- (3) Photoelectric effect
- (4) Interference

(SSC CAPFs SI & CISF ASI  
Exam. 23.06.2013)

**575.** Indicate the correct arrangement for electromagnetic radiation in order of their increasing wavelength.

- (1) Microwave, infrared, visible, X-rays
- (2) X - rays, visible, infrared, microwave
- (3) Visible, infrared, microwave, X-rays
- (4) X - rays, infrared, visible, microwave.

(SSC CAPFs SI & CISF ASI  
Exam. 23.06.2013)

**576.** Instrument used to study the behaviour of a vibrating string is :

- (1) Barometer (2) Hydrometer
- (3) Hygrometer (4) Sonometer

(SSC CAPFs SI & CISF ASI  
Exam. 23.06.2013)

**577.** What is a neuron ?

- (1) Basic unit of energy
- (2) Particle released during radio-activity
- (3) The anti-particle of neutron
- (4) Basic unit of nervous system

(SSC (10+2) Level Data Entry  
Operator & LDC Exam. 20.10.2013)

**578.** Which of the following is **not** caused by atmospheric refraction of light ?

- (1) Sun appearing red at sunset
- (2) Twinkling of stars at night
- (3) Sun appearing higher in the sky than it actually is
- (4) Sun becoming visible two or three minutes before actual sunrise

(SSC (10+2) Level Data Entry Operator & LDC Exam. 20.10.2013)

**579.** Matter waves are

- (1) de Broglie waves
- (2) Electromagnetic waves
- (3) Transverse waves
- (4) Longitudinal waves

(SSC (10+2) Level Data Entry Operator & LDC Exam. 20.10.2013)

**580.** When the milk is churned vigorously the cream from it is separated out due to

- (3) Centripetal force
- (2) Gravitational force
- (3) Frictional force
- (4) Centrifugal force

(SSC (10+2) Level Data Entry Operator & LDC Exam. 20.10.2013)

**581.** Gas thermometers are more sensitive than the liquid thermometers because the gases

- (1) have large coefficient of expansion
- (2) are lighter
- (3) have low specific heat
- (4) have high, specific heat

(SSC (10+2) Level Data Entry Operator & LDC Exam. 20.10.2013)

**582.** A man standing on a edge of a cliff throws a stone vertically upwards with a certain speed. He then throws another stone downwards with the same speed. Find the ratio of the speeds of the two stones when they hit the ground.

- (1) 1 : 1
- (2) 1 : 2
- (3) 1 : 4
- (4) Cannot be found from the given information.

(SSC (10+2) Level Data Entry Operator & LDC Exam. 27.10.2013)

**583.** Dioptre is the unit of

- (1) power of a lens
- (2) focal length of a lens
- (3) light intensity
- (4) sound intensity

(SSC (10+2) Level Data Entry Operator & LDC Exam. 27.10.2013)

**584.** When a stone is thrown in the calm water of a pond the waves produced on the surface of water in the pond are

- (1) longitudinal
- (2) transverse
- (3) both longitudinal and transverse
- (4) waves are not produced

(SSC (10+2) Level Data Entry Operator & LDC Exam. 27.10.2013)

**585.** In a filament type light bulb most of the electric power consumed appears as

- (1) visible light
- (2) infra-red rays
- (3) ultra-violet rays
- (4) fluorescent light

(SSC (10+2) Level Data Entry Operator & LDC Exam. 27.10.2013)

**586.** A white and smooth surface is

- (1) good absorber and good reflector of heat
- (2) bad absorber and good reflector of heat
- (3) good absorber and bad reflector of heat
- (4) bad absorber and bad reflector of heat

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**587.** When a body is immersed in a liquid, the force acting on it is

- (1) Upthrust
- (2) Weight
- (3) Mass
- (4) Both (1) and (2)

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**588.** When two semiconductors of p- and n-type are brought in contact, they form p-n junction which acts like a/an

- (1) Conductor
- (2) Oscillator
- (3) Rectifier
- (4) Amplifier

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**589.** The mass of a body measured by a physical balance in a lift at rest is found to be m. If the lift is going up with an acceleration a, its mass will be measured as

- (1)  $m \left( 1 - \frac{a}{g} \right)$
- (2)  $m \left( 1 + \frac{a}{g} \right)$
- (3) m
- (4) zero

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**590.** Ohm's law is valid in case of

- (1) semiconductor
- (2) conductor
- (3) superconductor
- (4) insulator

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**591.** The Laser is a beam of radiations which are

- (1) Non-coherent and monochromatic
- (2) Coherent and monochromatic
- (3) Non-coherent and non-monochromatic
- (4) Coherent and non-monochromatic

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**592.** Centigrade and Fahrenheit temperatures are the same at

- (1) 32°
- (2) 40°
- (3) -273°
- (4) -40°

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**593.** The dimensional formula for universal gravitational constant is

- (1)  $M^{-1} L^3 T^{-2}$
- (2)  $M L^2 T^{-2}$
- (3)  $M^{-2}$
- (4)  $M^{-1} L^3 T^{-2}$

(SSC (10+2) Level Data Entry Operator & LDC Exam. 10.11.2013, 1st Sitting)

**594.** Rocket works on the principle of

- (1) Newton's Third Law
- (2) Newton's First Law
- (3) Newton's Second Law
- (4) Archimedes Principle

(SSC Multi-Tasking Staff (Patna) Exam. 16.02.2014)

**595.** The weight of a body acts through the centre of

- (1) gravity
- (2) mass
- (3) both (1) and (2)
- (4) buoyancy

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 23.02.2014, 1st Sitting)

**596.** A wheel-barrow is an example of

- (1) class III lever
- (2) pulley system
- (3) class I lever
- (4) class II lever

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 23.02.2014, 1st Sitting)

**597.** Magnetic keepers are used to protect magnets from :

- (1) Earth's magnetic field
- (2) effect of other magnets
- (3) self-demagnetization
- (4) demagnetization due to heating

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 16.02.2014)

**598.** An object which absorbs all colours and reflects none appears:

- (1) white
- (2) grey
- (3) blue
- (4) black

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 16.02.2014)

**599.** The locomotion of insects to the source of light is called :

- (1) Phototropic
- (2) Hydrotropic
- (3) Phototactic
- (4) Thermotactic

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 16.02.2014)

**600.** The splitting of white light into its components is due to:

- (1) reflection
- (2) refraction
- (3) transmission
- (4) dispersion

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 16.02.2014)

**601.** A small drop of oil spreads over water because :

- (1) oil has a higher surface tension
- (2) water has a higher surface tension
- (3) oil has a higher viscosity
- (4) water has a higher viscosity

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 16.02.2014)

**602.** Which one among the following doesn't have any effect on velocity of sound ?

- (1) Pressure
- (2) Temperature
- (3) Humidity
- (4) Density

(SSC Multi-Tasking Staff (Patna) Exam. 16.02.2014)

**603.** The motion of a body around a circular path is an example of

- (1) Uniform velocity, variable acceleration
- (2) Uniform speed, uniform velocity
- (3) Uniform speed, variable velocity

- (4) Uniform speed, variable acceleration

(SSC Multi-Tasking Staff (Patna) Exam. 16.02.2014)

**604.** A current carrying conductor is associated with

- (1) a magnetic field
- (2) an electric field
- (3) an electro-magnetic field
- (4) an electrostatic field

(SSC Multi-Tasking Staff (Patna) Exam. 16.02.2014)

**605.** Green house effect is the heating up of the Earth's atmosphere which is due to

- (1) the ultraviolet rays
- (2)  $\gamma$ -rays
- (3) the infra-red rays
- (4) X-rays

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 23.02.2014, IInd Sitting)

**606.** If the phase difference between two points is  $120^\circ$  for a wave with velocity of 360 m/ and frequency 500 Hz, then path difference between the two points is

- (1) 1 cm
- (2) 6 cm
- (3) 12 cm
- (4) 24 cm

(SSC CHSL (10+2) DEO & LDC Exam. 16.11.2014, 1st Sitting TF No. 333 LO 2)

**607.** Clouds float in the atmosphere because of their

- (1) low pressure
- (2) low density
- (3) low viscosity
- (4) low temperature

(SSC Multi-Tasking (Non-Tech.) Staff Exam. 23.02.2014, IInd Sitting)

**608.** The threshold frequency is the frequency below which :

- (1) photo current increases with voltage
- (2) photo current decreases with voltage
- (3) photo electric emission is not possible
- (4) photo current is constant

(SSC CGL Tier-I Re-Exam-2013, 27.04.2014)

**609.** Tesla is a unit of magnetic :

- (1) flux
- (2) induction
- (3) moment
- (4) field

(SSC CGL Tier-I Re-Exam-2013, 27.04.2014)

**610.** The damage of the human body due to radiation (X-rays or  $\gamma$ -rays etc.) is measured in :

- (1) Rems
- (2) Roentgen
- (3) Curie
- (4) Rads

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**611.** Transition ions absorb light in :

- (1) infrared region
- (2) ultraviolet region
- (3) microwave region
- (4) visible region

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**612.** Flywheel is an important part of a steam engine because it :

- (1) accelerates the speed of the engine
- (2) helps the engine in keeping the speed uniform
- (3) decreases the moment of inertia
- (4) gives strength to the engine

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**613.** The freezing point of fresh water is \_\_\_\_\_.

- (1)  $4^\circ\text{C}$
- (2)  $3^\circ\text{C}$
- (3)  $5^\circ\text{C}$
- (4)  $0^\circ\text{C}$

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**614.** The unit of noise pollution (level) is :

- (1) decibel
- (2) decimal
- (3) ppm
- (4) None of these

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**615.** Relative humidity is expressed as

- (1) Grams
- (2) Kilograms
- (3) Percentage
- (4) Ratio

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)

**616.** A real gas can act as an ideal gas in

- (1) high pressure and low temperature
- (2) low pressure and high temperature
- (3) high pressure and high temperature
- (4) low pressure and low temperature

(SSC CGL Tier-I

Re-Exam-2013, 27.04.2014)



- 617.** According to special theory of relativity the mass of a particle
- (1) increases with increase in velocity with respect to an observer.
  - (2) decreases with increase in velocity.
  - (3) decreases with decrease in velocity.
  - (4) is independent of its velocity.

(SSC CGL Tier-I  
Re-Exam-2013, 27.04.2014)

- 618.** The motion of the wheels of a bullock-cart while moving on the road is an example of

- (1) Oscillatory and rotatory motion
- (2) Oscillatory and translatory motion
- (3) Translatory and rotatory motion
- (4) Translatory motion only

(SSC CGL Tier-I  
Re-Exam-2013, 27.04.2014)

- 619.** Purity of a metal can be determined with the help of

- (1) Pascal's law
- (2) Boyle's law
- (3) Archimedes principle
- (4) Conservation of mass principle

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 620.** If both the mass and the velocity of a body is increased to twice of their magnitude, the kinetic energy will increase by

- (1) 2 times      (2) 4 times
- (3) 8 times      (4) 16 times

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 621.** Two bodies kept at a certain distance feel a gravitational force  $F$  to each other. If the distance between them is made double the former distance, the force will be

- (1)  $2F$                       (2)  $\frac{1}{2}F$
- (3)  $4F$                       (4)  $\frac{1}{4}F$

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 622.** Stationary wave is formed by
- (1) a transverse wave superposing a longitudinal wave
  - (2) two waves of the same speed superposing
  - (3) two waves of same frequency travelling in the same direction
  - (4) two waves of same frequency travelling in the opposite direction

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 623.** The work done by the string of a simple pendulum during one complete oscillation is equal to

- (1) Total energy of the pendulum
- (2) Kinetic energy of the pendulum
- (3) Potential energy of the pendulum
- (4) Zero

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 624.** The minimum number of forces to keep a particle in equilibrium is

- (1) 1                      (2) 2
- (3) 3                      (4) 4

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 625.** A system exhibiting S.H.M. must possess

- (1) Elasticity as well as inertia
- (2) Elasticity, inertia and an external force
- (3) Elasticity only
- (4) Inertia only

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 626.** A needle or a pin floats on the surface of water because of

- (1) Surface tension
- (2) Surface energy
- (3) Viscosity
- (4) Adhesive force

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam. 22.06.2014)

- 627.** Super conductors are substances that

- (1) offer minimum resistance to flow of electric current
- (2) conduct electricity at low temperature
- (3) conduct electricity at high temperature
- (4) offer high resistance to the flow of electric current

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 628.** A thin oil film on a water surface appears coloured because of
- (1) reflection    (2) interference
  - (3) diffraction    (4) polarization

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 629.** The 'Greenhouse effect' is mainly due to increase in atmospheric

- (1) Ozone
- (2) Nitrogen
- (3) Sulphur dioxide
- (4) Carbon dioxide

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 630.** In a conductor

- (1) there is no conduction band
- (2) the forbidden energy gap is very wide
- (3) the forbidden energy gap is very narrow
- (4) the valence band and the conduction band overlap each other

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 631.** The moment of inertia of a body does not depend upon its

- (1) axis of rotation
- (2) angular velocity
- (3) form of mass
- (4) distribution of mass

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 632.** To open a door easily, the handle should be fixed

- (1) near the hinges
- (2) away from mid-point opposite to hinges
- (3) in the middle
- (4) None of these

(SSC CGL Tier-I Re-Exam. (2013)  
20.07.2014, 1st Sitting)

- 633.** Optical fibre works on the principle of

- (1) refraction
- (2) scattering
- (3) interference
- (4) total internal reflection

(SSC GL Tier-I Exam.  
19.10.2014, 1st Sitting)

- 634.** The colours of stars depend on their

- (1) temperature
- (2) distance
- (3) radius
- (4) atmospheric pressure

(SSC GL Tier-I Exam.  
19.10.2014, 1st Sitting)

- 635.** The sky appears blue due to  
 (1) Rayleigh scattering  
 (2) Mie scattering  
 (3) Back scattering  
 (4) None of the above

(SSC GL Tier-I Exam. 19.10.2014)

- 636.** A particle is moving in a uniform circular motion with constant speed  $v$  along a circle of radius  $r$ . The acceleration-of the particle is

- (1) zero (2)  $\frac{V}{r}$   
 (3)  $\frac{V}{r^2}$  (4)  $\frac{V^2}{r}$

(SSC GL Tier-I Exam. 19.10.2014)

- 637.** Which of the following devices can be used to detect radiant heat ?

- (1) Liquid thermometer  
 (2) Six's maximum and minimum thermometer  
 (3) Constant volume air thermometer  
 (4) Thermopile

(SSC GL Tier-I Exam. 19.10.2014)

- 638.** In which one of the following the phenomenon of total internal reflection of light is used ?

- (1) Formation of mirage  
 (2) Working of binoculars  
 (3) Formation of rainbow  
 (4) Twinkling of stars

(SSC GL Tier-I Exam. 19.10.2014)

- 639.** Period of oscillation of 3 cm microwaves in seconds is

- (1)  $1 \times 10^{10}$  (2)  $1 \times 10^{-10}$   
 (3) 0.01 (4) 0.001

(SSC GL Tier-I Exam. 19.10.2014)

- 640.** The device used to convert solar energy into electricity is

- (1) Photovoltaic cell  
 (2) Daniell cell  
 (3) Electrochemical cell  
 (4) Galvanic cell

(SSC GL Tier-I Exam. 26.10.2014)

- 641.** Light year is a unit of

- (1) Light (2) Current  
 (3) Distance (4) Time

(SSC GL Tier-I Exam. 26.10.2014)

- 642.** The word 'insolation' means

- (1) matters which insulate  
 (2) incoming solar radiation  
 (3) insoluble matters  
 (4) None of the above

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, Patna Region : Ist Sitting)

- 643.** While ascending a hill, the driver of the vehicle keeps the gear ratio

- (1) equal to 1  
 (2) less than 1  
 (3) greater than 1  
 (4) either equal to or greater than 1

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, Patna Region : Ist Sitting)

- 644.** A wire of resistance  $R$  is cut into 'n' equal parts. These parts are then connected in parallel. The equivalent resistance of the combination will be

- (1)  $nR$  (2)  $\frac{R}{n}$   
 (3)  $\frac{n}{R}$  (4)  $\frac{R}{n^2}$

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, Patna Region : Ist Sitting)

- 645.** A moving neutron collides with a stationary  $\alpha$  - particle. The fraction of the kinetic energy lost by the neutron is

- (1)  $\frac{1}{4}$  (2)  $\frac{1}{16}$   
 (3)  $\frac{9}{25}$  (4)  $\frac{16}{25}$

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, IInd Sitting)

- 646.** Which of these waves can be polarized ?

- (1) Sound waves in air  
 (2) Longitudinal waves on a string  
 (3) Transverse waves on a string  
 (4) Light waves

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, IInd Sitting)

- 647.** The unit of Planck's constant is

- (1) Js (2)  $Js^{-2}$   
 (3) J/s (4)  $Js^2$

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, IInd Sitting)

- 648.** If a wire of resistance  $R$  is melted and recast to half of its length, then the new resistance of the wire will be

- (1)  $\frac{R}{4}$  (2)  $\frac{R}{2}$   
 (3)  $R$  (4)  $2R$

(SSC CHSL (10+2) DEO & LDC Exam. 02.11.2014, IInd Sitting)

- 649.** Golden view of sea shell is due to

- (1) Diffraction (2) Dispersion  
 (3) Polarization (4) Reflection

(SSC CHSL (10+2) DEO & LDC Exam. 09.11.2014)

- 650.** An object covers distance which is directly proportional to the square of the time. Its acceleration is

- (1) increasing (2) decreasing  
 (3) zero (4) constant

(SSC CHSL (10+2) DEO & LDC Exam. 09.11.2014)

- 651.** If the horizontal range of a projectile is four times its maximum height, the angle of projection is

- (1)  $30^\circ$  (2)  $45^\circ$   
 (3)  $\sin^{-1}\left(\frac{1}{4}\right)$  (4)  $\tan^{-1}\left(\frac{1}{4}\right)$

(SSC CHSL (10+2) DEO & LDC Exam. 09.11.2014)

- 652.** Rainbow is formed due to

- (1) refraction and dispersion  
 (2) scattering and refraction  
 (3) diffraction and refraction  
 (4) refraction and reflection

(SSC CHSL (10+2) DEO & LDC Exam. 09.11.2014)

- 653.** The boiling point of water decreases at higher altitudes is due to

- (1) low temperature  
 (2) low atmospheric pressure  
 (3) high temperature  
 (4) high atmospheric pressure

(SSC CHSL (10+2) DEO & LDC Exam. 09.11.2014)

**654.** Which of the following have the same unit ?

- (1) Work and power
- (2) Torque and moment of inertia
- (3) Work and torque
- (4) Torque and angular momentum

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014,  
Patna Region : Ist Sitting)

**655.** In a particular system, the units of length, mass and time are chosen to be 10 cm, 10 g and 0.1 s respectively. The unit of force in this system will be equivalent to

- (1) 0.1 N
- (2) 1 N
- (3) 10 N
- (4) 100 N

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014,  
Patna Region : Ist Sitting)

**656.** Distances of stars are measured in

- (1) Galactic unit
- (2) Stellar mile
- (3) Cosmic kilometre
- (4) Light year

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014,  
Patna Region : Ist Sitting)

**657.** Loudness of sound depends on

- (1) Frequency
- (2) Wavelength
- (3) Amplitude
- (4) Pitch

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014,  
Patna Region : Ist Sitting)

**658.** A man standing at the top of a tower has two spheres A and B. He drops sphere A downwards and throws sphere B horizontally at the same time. Which of the following is correct ?

- (1) Both the spheres will reach the ground simultaneously.
- (2) A will reach the ground first.
- (3) B will reach the ground first.
- (4) The question is incomplete because the masses of the spheres are not given.

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014)

**659.** The dimensional formula  $ML^{-1}T^{-2}$  corresponds to

- (1) Modulus of elasticity
- (2) Viscosity
- (3) Moment of a force
- (4) Thrust

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014)

**660.** 1 Micron is equal to

- (1)  $10^{-9}$  m
- (2)  $10^{-12}$  m
- (3)  $10^{-6}$  m
- (4)  $10^{-15}$  m

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014)

**661.** A wavelength of 0.3 m is produced in air and it travels at a speed of 300 m/s. Then it will be an

- (1) Audible wave
- (2) Infrasonic wave
- (3) Ultrasonic wave
- (4) Microwave

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014)

**662.** Water has maximum density at

- (1)  $100^{\circ}\text{C}$
- (2)  $0^{\circ}\text{C}$
- (3)  $4^{\circ}\text{C}$
- (4)  $273^{\circ}\text{C}$

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014)

**663.** If a body moves with a constant speed in a circle

- (1) no work is done on it
- (2) no force acts on it
- (3) no acceleration is produced in it
- (4) its velocity remains constant

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 333 LO 2)

**664.** The waves used in sonography are

- (1) Micro waves
- (2) Infra-red waves
- (3) Sound waves
- (4) Ultrasonic waves

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 333 LO 2)

**665.** Which of the following is a scalar quantity ?

- (1) Velocity
- (2) Force
- (3) Angular momentum
- (4) Electrostatic potential

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 545 QP 6)

**666.** Which of the following is not a vector quantity ?

- (1) Speed
- (2) Velocity
- (3) Torque
- (4) Displacement

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 545 QP 6)

**667.** An object with a constant speed

- (1) is not accelerated
- (2) might be accelerated
- (3) is always accelerated
- (4) also has a constant velocity

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 545 QP 6)

**668.** A man in a train moving with a constant velocity drops a ball on the platform. The path of the ball as seen by an observer standing on the platform is

- (1) A straight line
- (2) A circle
- (3) A parabola
- (4) None of these

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 545 QP 6)

**669.** Which of the following is responsible for permanent hardness of water ?

- (1) magnesium bicarbonate
- (2) sodium chloride
- (3) calcium sulphate
- (4) calcium bicarbonate

(SSC CHSL (10+2) DEO & LDC  
Exam. 16.11.2014, Ist Sitting  
TF No. 545 QP 6)

**670.** An electron microscope gives higher magnifications than an optical microscope because :

- (1) The velocity of electrons is smaller than that of light
- (2) The wavelength of electrons is smaller as compared to the wavelength of visible light
- (3) The electrons have more energy than the light particles
- (4) The electron microscope uses more powerful lenses

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam, 21.06.2015  
(Ist Sitting) TF No. 8037731)

**671.** The first law of thermodynamics is simply the case of

- (1) Charles's law
- (2) Newton's law of cooling
- (3) The law of heat exchange
- (4) The law of conservation of energy

(SSC CAPFs SI, CISF ASI & Delhi  
Police SI Exam, 21.06.2015  
(Ist Sitting) TF No. 8037731)

- 672.** Total internal reflection can not take place when light goes from :  
 (1) glass to water  
 (2) water to glass  
 (3) water to air  
 (4) glass to air

(SSC CAPFs SI, CISF ASI & Delhi Police SI Exam, 21.06.2015 (Ist Sitting) TF No. 8037731)

- 673.** Hertz is a unit for measuring  
 (1) Intensity of waves  
 (2) Frequency of waves  
 (3) Wavelength  
 (4) Clarity of waves

(SSC CAPFs SI, CISF ASI & Delhi Police SI Exam, 21.06.2015 (IInd Sitting))

- 674.** Vehicles use \_\_\_\_\_ to see the objects coming from behind.

- (1) Concave lens  
 (2) Convex lens  
 (3) Convex mirror  
 (4) Concave mirror

(SSC CAPFs SI, CISF ASI & Delhi Police SI Exam, 21.06.2015 (IInd Sitting))

- 675.** The rice is cooked more quickly in a pressure cooker because  
 (1) it is covered.  
 (2) less quantity of water is used.  
 (3) None of these  
 (4) water boils at a higher temperature under pressure.

(SSC CAPFs SI, CISF ASI & Delhi Police SI Exam, 21.06.2015 (IInd Sitting))

- 676.** It is easy to burst a gas-filled balloon with a needle than with a nail. It is because  
 (1) nail is more longer than needle.  
 (2) nail exerts more pressure than needle on the balloon.  
 (3) needle exerts more pressure than nail on the balloon.  
 (4) gas is reactive with the needle.

(SSC CGL Tier-I Exam, 09.08.2015 (Ist Sitting) TF No. 1443088)

- 677.** Ice is packed in saw dust because

- (1) saw dust will not get melted easily.  
 (2) saw dust is poor conductor of heat.  
 (3) saw dust is a good conductor of heat.  
 (4) saw dust does not stick to the ice.

(SSC CGL Tier-I Exam, 09.08.2015 (Ist Sitting) TF No. 1443088)

- 678.** The Dynamo converts

- (1) Electrical Energy into Mechanical Energy  
 (2) Mechanical Energy into Magnetic Energy  
 (3) None of these  
 (4) Mechanical Energy into Electrical Energy

(SSC CGL Tier-I Exam, 09.08.2015 (IInd Sitting) TF No. 4239378)

- 679.** A Fuse wire is characterised by  
 (1) High resistance and low melting point  
 (2) High resistance and high melting point  
 (3) Low resistance and high melting point  
 (4) Low resistance and low melting point

(SSC CGL Tier-I Exam, 09.08.2015 (IInd Sitting) TF No. 4239378)

- 680.** Burns caused by steam are much severe than those caused by boiling water because

- (1) Steam pierces through the pores of body quickly  
 (2) Steam has latent heat  
 (3) Steam is gas and engulfs the body quickly  
 (4) Temperature of steam is higher

(SSC CGL Tier-I Exam, 16.08.2015 (Ist Sitting) TF No. 3196279)

- 681.** Which of the following options correctly explains the term heat budget?

- (1) It is a mode of transfer of heat through matter by molecular activity.  
 (2) It is the balance between incoming and outgoing radiation  
 (3) It is the radiation from the earth in the form of long waves.  
 (4) It is the amount of heat which the surface of earth receives from the sun.

(SSC CGL Tier-I Exam, 16.08.2015 (Ist Sitting) TF No. 3196279)

- 682.** The purpose of choke in a fluorescent lamp is :

- (1) to increase the current flow  
 (2) to decrease the current flow  
 (3) to decrease the resistance  
 (4) to decrease the voltage momentarily

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

- 683.** The mercury and sodium street lamps light up because of :

- (1) Atomic emission  
 (2) Atomic absorption  
 (3) Electron emission  
 (4) Electron absorption

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

- 684.** A person can jump higher on the moon's surface than on the earth because :

- (1) the moon's surface is rough  
 (2) the acceleration due to gravity in moon is smaller than that on the earth.  
 (3) the moon is cooler than earth  
 (4) the moon has no atmosphere

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

- 685.** Which of the following colour of light deviates least through the prism?

- (1) yellow (2) green  
 (3) violet (4) red

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 20.12.2015 (Ist Sitting) TF No. 9692918)

- 686.** Hydraulic brakes work on the principle of

- (1) Thomson's law  
 (2) Newton's law  
 (3) Bernoulli's theorem  
 (4) Pascal's law

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 20.12.2015 (Ist Sitting) TF No. 9692918)

- 687.** Which one of the following is not a feature of Indifference Curve?

- (1) They do not intersect each other  
 (2) They slope downwards to the right  
 (3) They are parallel to each other  
 (4) They are concave to each other

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

- 688.** The apparent weight of a man in a lift is less the real weight when :

- (1) the lift is going up with an acceleration  
 (2) the lift is going down with uniform speed  
 (3) the lift is going up with uniform speed  
 (4) the lift is going down with an acceleration

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

**689.** Rainbows are produced when sunlight :

- (1) Incident on rain drops hanging in the atmosphere is dispersed after suffering refraction
- (2) Incident on rain drops hanging in the atmosphere is dispersed after suffering refraction and internal reflection.
- (3) Incident on raindrops hanging in the atmosphere is dispersed after suffering reflection.
- (4) None of the given statements is correct.

(SSC CGL Tier-I Exam, 16.08.2015 (IInd Sitting) TF No. 2176783)

**690.** Sound is heard over longer distances on rainy days because

- (1) sound travels slowly in moist air
- (2) sound travels faster in moist air
- (3) moist air does not absorb sound
- (4) moist air absorbs sound

(SSC CGL Tier-I Re-Exam, 30.08.2015)

**691.** X-rays are

- (1) positively charged particles
- (2) negatively charged particles
- (3) neutral particles
- (4) None of these

(SSC CGL Tier-I Re-Exam, 30.08.2015)

**692.** Railway tracks are banked on curves so that :

- (1) the train may not fall down inwards.
- (2) the weight of the train may be reduced.
- (3) necessary centripetal force may be obtained from the horizontal component of the normal reaction due to track.
- (4) no frictional force may be produced between the wheels and the track.

(SSC CGL Tier-I Re-Exam, 30.08.2015)

**693.** We feel cool when we sit near the fan, this is because

- (1) fan gives cool air.
- (2) fan cools surrounding air.
- (3) air vapourises the sweat on our body.
- (4) we feel cool when air touches the body.

(4) we feel cool when air touches the body.

(SSC CGL Tier-I Re-Exam, 30.08.2015)

**694.** The average kinetic energy of the molecules of an ideal gas is directly proportional to

- (1) Velocity of Molecules
- (2) Mass of Molecules
- (3) Absolute temperature of the gas
- (4) Temperature of environment

(SSC CGL Tier-I Re-Exam, 30.08.2015)

**695.** Which one of the following is a non-dimensional quantity?

- (1) Gas constant
- (2) Strain
- (3) Co-efficient of viscosity
- (4) Plank's constant

(SSC Constable (GD) Exam, 04.10.2015, Ist Sitting)

**696.** When water freezes its density

- (1) Decreases
- (2) Becomes Zero
- (3) Remains constant
- (4) Increases

(SSC Constable (GD) Exam, 04.10.2015, Ist Sitting)

**697.** Which of the following property of sound is affected by change in air temperature

- (1) Frequency (2) Intensity
- (3) Amplitude (4) Wavelength

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 01.11.2015, IInd Sitting)

**698.** A bullet of mass 'm' and velocity 'a' is fired in to a large block of wood of mass 'M'. The final velocity of the system is

- (1)  $\frac{M}{m+M} a$  (2)  $\frac{m}{m+M} a$
- (3)  $\frac{m+M}{m} a$  (4)  $\frac{m+M}{M} a$

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 01.11.2015, IInd Sitting)

**699.** The intensity ratio of waves is 25 : 9. What is the ratio of their amplitudes?

- (1) 50 : 18 (2) 25 : 9
- (3) 3 : 5 (4) 5 : 3

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 01.11.2015, IInd Sitting)

**700.** When number of turns in a coil is trippled, without any change in the length of coil, its self inductance becomes?

- (1) Nine times (2) Three times
- (3) Six times (4) One-third

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 01.11.2015, IInd Sitting)

**701.** The abbreviation LHC stands for which machine ?

- (1) Light Heat Collider
- (2) Large Hadron Collider
- (3) Long Heavy Collider
- (4) Large High Collider

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (Ist Sitting) TF No. 6636838)

**702.** Which of these travels in glass with minimum velocity ?

- (1) red light (2) violet light
- (3) green light (4) yellow light

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (Ist Sitting) TF No. 6636838)

**703.** The phenomenon which causes mirage is

- (1) Interference
- (2) Diffraction
- (3) Polarisation
- (4) Total internal reflection

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (Ist Sitting) TF No. 6636838)

**704.** Which of the following phenomenon helps to conclude that light is a transverse wave?

- (1) interference (2) diffraction
- (3) polarisation (4) refraction

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (IInd Sitting) TF No. 7203752)

**705.** Plank's constant has the dimensions of :

- (1) energy
- (2) linear momentum
- (3) angular momentum
- (4) force

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (IInd Sitting) TF No. 7203752)

**706.** Blowing Air with open pipe is an example of :

- (1) Isothermal process
- (2) Isochoric process
- (3) Isobaric process
- (4) Adiabatic process

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (IInd Sitting) TF No. 7203752)

**707.** The amount of matter in a ball of steel is its :

- (1) Weight (2) Mass  
(3) Density (4) Volume

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 15.11.2015 (IInd Sitting) TF No. 7203752)

**708.** Unit of resistance is :

- (1)  $\text{volt}^2 \times \text{ampere}$   
(2)  $\text{volt}/\text{ampere}$   
(3)  $\text{ampere}/\text{volt}$   
(4)  $\text{volt} \times \text{ampere}$

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (Ist Sitting) TF No. 1375232)

**709.** A cycle tyre bursts suddenly. This represents an :

- (1) Isothermal process  
(2) Adiabatic process  
(3) Isochoric process  
(4) Isobaric process

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (Ist Sitting) TF No. 1375232)

**710.** In which region of electromagnetic spectrum does the Lyman series of hydrogen atom lie ?

- (1) Visible (2) Infrared  
(3) Ultraviolet (4) X-ray

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (IInd Sitting) TF No. 3441135)

**711.** A light wave is incident over a plane surface with velocity  $x$ . After reflection the velocity becomes :

- (1)  $\frac{x}{2}$  (2)  $x$

- (3)  $2x$  (4)  $\frac{x}{4}$

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (IInd Sitting) TF No. 3441135)

**712.** Distant objects are visible as a little out of focus in this condition :

- (1) presbiopia  
(2) hypermetropia  
(3) astigmatism  
(4) myopia

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (IInd Sitting) TF No. 3441135)

**713.** The redness in atmosphere at Sunrise and Sunset is due to :

- (1) Refraction of light  
(2) Reflection of light  
(3) Dispersion of light  
(4) Scattering of light

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 06.12.2015 (IInd Sitting) TF No. 3441135)

**714.** If density of oxygen is 16 times that of hydrogen, what will be their corresponding ratio of velocity of sound?

- (1) 4 : 1 (2) 2 : 1  
(3) 1 : 16 (4) 1 : 4

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 20.12.2015 (Ist Sitting) TF No. 9692918)

**715.** S.I. unit of Magnetic flux is

- (1) weber (2)  $\text{weber}/\text{m}$   
(3)  $\text{weber}/\text{m}^4$  (4)  $\text{weber}-\text{m}^2$

(SSC CHSL (10+2) LDC, DEO & PA/SA Exam, 20.12.2015 (Ist Sitting) TF No. 9692918)

**716.** To prevent damage from lightning, lightning conductors are used on tall structures. The lightning conductor

- (1) should be made of a good conductor but can be of any shape  
(2) should be in the form of a vertical rod  
(3) can be of any shape  
(4) should be made of a good conductor like copper with sharp-pointed edges

(SSC (10+2) Stenographer Grade 'C' & 'D' Exam, 31.07.2016)

**717.** Beta rays emitted by a radioactive material are

- (1) The electrons orbiting around the nucleus  
(2) Charged particles emitted by nucleus  
(3) Neutral particles  
(4) Electromagnetic radiations

(SSC (10+2) Stenographer Grade 'C' & 'D' Exam, 31.07.2016)

**718.** 'Parsec' is the unit measurement of

- (1) Density of stars  
(2) Astronomical distance  
(3) Brightness of heavenly bodies  
(4) Orbital velocity of giant stars

(SSC CGL Tier-I (CBE) Exam, 10.09.2016)

**719.** The phenomenon of change in direction of light when it passes from one medium to another is called

- (1) Propagation  
(2) Reflection  
(3) Refraction  
(4) Dispersion

(SSC CGL Tier-I (CBE) Exam, 10.09.2016)

**720.** Super cooling stands for cooling of a liquid :

- (1) at freezing point  
(2) below freezing point  
(3) at melting point  
(4) above melting point

(SSC CGL Tier-I (CBE) Exam, 11.09.2016, (Ist Sitting))

**721.** Alcohol is more volatile than water because \_\_\_\_\_ is lower than water.

- (1) its boiling point  
(2) its density  
(3) its viscosity  
(4) its surface tension

(SSC CGL Tier-I (CBE) Exam, 11.09.2016, (Ist Sitting))

**722.** Which of the following is the second largest source of global energy?

- (1) Fossil fuel  
(2) Nuclear Energy  
(3) Renewable Energy  
(4) None of these

(SSC CPO SI, ASI Online Exam, 05.06.2016, (2nd Sitting))

**723.** A light year is a unit of:

- (1) Time  
(2) Distance in Space  
(3) Length of astronomical distances  
(4) Distance travelled by light

(SSC CPO SI, ASI Online Exam, 05.06.2016, (2nd Sitting))

**724.** The SI unit of luminous emittance is :

- (1) Lux (2) Candela  
(3) Lumen  
(4) Lumen second

(SSC CPO SI, ASI Online Exam, 05.06.2016, (2nd Sitting))

**725.** Which of the following is the unit of perceived loudness of sound ?

- (1) Decibel (2) Sone  
(3) Hertz (4) Phon

(SSC CPO Exam, 06.06.2016, (Ist Sitting))

**726.** Stress can be defined as \_\_\_\_\_ quantity.

- (1) Scalar (2) Vector  
(3) Phasor (4) Tensor

(SSC CPO Exam.  
06.06.2016, (1st Sitting))

**727.** Which of the following is indicated by the colour of a star ?

- (1) weight  
(2) distance  
(3) temperature  
(4) size

(SSC CHSL (10+2) Tier-I (CBE)  
Exam. 08.09.2016 (1st Sitting))

**728.** For which one of the following, 'Diodes' are generally used for?

- (1) Rectification  
(2) Amplification  
(3) Modulation  
(4) Filtration

(SSC CHSL (10+2) Tier-I (CBE)  
Exam. 08.09.2016 (1st Sitting))

**729.** Which term is not associated with sound wave?

- (1) Hertz (2) Decibel  
(3) Candela (4) Mach

(SSC CGL Tier-I (CBE) Exam.  
09.09.2016 (1st Sitting))

**730.** If an electron and a photon have the same wavelength, then they will have the same

- (1) velocity  
(2) linear momentum  
(3) angular momentum  
(4) energy

(SSC CGL Tier-I (CBE) Exam.  
09.09.2016 (1st Sitting))

**731.** When temperature difference between liquid and its surroundings is doubled, the rate of loss of heat will:

- (1) remain same  
(2) double  
(3) three times  
(4) four times

(SSC CAPFs (CPO) SI & ASI,  
Delhi Police SI Exam. 20.03.2016  
(2nd Sitting))

**732.** The period of revolution of a certain planet in an orbit of radius R is T. Its period of revolution in an orbit of radius 4R will be:

- (1) 8 T (2) 4 T  
(3)  $2\sqrt{2}$  T (4) 2 T

(SSC CAPFs (CPO) SI & ASI,  
Delhi Police SI Exam. 20.03.2016  
(2nd Sitting))

**733.** The weight of a body at the centre of earth is:

- (1) half the weight at the surface  
(2) zero  
(3) twice the weight at the surface  
(4) infinite

(SSC CAPFs (CPO) SI & ASI,  
Delhi Police SI Exam. 20.03.2016  
(2nd Sitting))

**734.** When a ship enters the sea from a river what will be the effect?

- (1) It lowers  
(2) It sways  
(3) It rises a little  
(4) It jolts

(SSC CAPFs (CPO) SI & ASI, Delhi  
Police SI Exam. 05.06.2016  
(1st Sitting))

**735.** Hydroscope is an instrument that shows changes in:

- (1) Sound under water  
(2) Atmospheric humidity  
(3) Density of liquid  
(4) Elevation of land

(SSC CAPFs (CPO) SI & ASI, Delhi  
Police SI Exam. 05.06.2016  
(1st Sitting))

**736.** Which one of the following reflects back more sunlight as compared to other three?

- (1) Sand desert  
(2) Land covered with fresh snow  
(3) Prairie land  
(4) Paddy crop land

(SSC CAPFs (CPO) SI & ASI, Delhi  
Police SI Exam. 05.06.2016  
(1st Sitting))

**737.** The magnitude of current flowing between two end points of a conductor is proportional to the potential difference between them and is called as:

- (1) Avogadro's law  
(2) Rault's law  
(3) Ohms law  
(4) Faraday's law

(SSC CAPFs (CPO) SI & ASI, Delhi  
Police SI Exam. 05.06.2016  
(1st Sitting))

**738.** Which Article of the Indian Constitution provides free and compulsory education to children?

- (1) 21-A (2) 46  
(3) 39 (4) 15

(SSC CAPFs (CPO) SI & ASI, Delhi  
Police SI Exam. 05.06.2016  
(1st Sitting))

**739.** The cooling by a desert Cooler is based on:

- (1) Hot air replacement  
(2) Air dehydration  
(3) Evaporative Cooling  
(4) Air Rehydration

(SSC CPO SI, ASI Online Exam.  
06.06.2016 (2nd Sitting))

**740.** Which of the following is an example of simple harmonic motion?

- (1) Earth spinning on its axis  
(2) Simple pendulum motion  
(3) Ball bouncing on floor  
(4) Motion of a ceiling fan

(SSC CPO SI, ASI Online Exam.  
06.06.2016 (2nd Sitting))

**741.** Which of the following are methods of heat transfer?

- (1) Convection  
(2) Evaporation  
(3) Revolution  
(4) Thermal Expansion

(SSC CPO SI, ASI Online Exam.  
06.06.2016 (2nd Sitting))

**742.** Which of the following was the first theory of super conductivity?

- (1) Ginzburg Landau theory  
(2) London theory  
(3) Resonating valence bond theory  
(4) Quantum field theory

(SSC CPO SI, ASI Online Exam.  
06.06.2016 (2nd Sitting))

**743.** Which of the following is the unit of Astronomical Distance ?

- (1) metre/sec. (2) Sec.  
(3) Para/sec. (4) Parsec

(SSC CPO SI, ASI Online Exam.  
06.06.2016 (2nd Sitting))

**744.** At boiling point of liquids, its

- (1) Temperature increases  
(2) Atmospheric pressure increases  
(3) Temperature remains constant  
(4) Vapour pressure decreases

(SSC CGL Tier-I (CBE) Exam.  
27.08.2016 (1st Sitting))

**745.** On a clean glass plate a drop of water spreads to form a thin layer whereas a drop of mercury remains almost spherical because

- (1) Mercury is a metal  
(2) Density of mercury is greater than that of water

- (3) Cohesion of mercury is greater than its adhesion with glass  
(4) Cohesion of water is greater than its adhesion with glass  
(SSC CGL Tier-I (CBE) Exam. 27.08.2016 (1st Sitting))
- 746.** Which of the following is an insulator?  
(1) Mercury (2) Carbon  
(3) Germanium  
(4) Glass  
(SSC CGL Tier-I (CBE) Exam. 27.08.2016 (2nd Sitting))
- 747.** Name the process by which bubbles from liquid are formed?  
(1) Effervescence  
(2) Surface Tension  
(3) Surface Energy  
(4) Degasification  
(SSC CGL Tier-I (CBE) Exam. 27.08.2016 (2nd Sitting))
- 748.** The boiling point of water depends upon the  
(1) atmospheric pressure  
(2) volume  
(3) density (4) mass  
(SSC CGL Tier-I (CBE) Exam. 27.08.2016 (2nd Sitting))
- 749.** What is the phenomenon which established the transverse nature of light ?  
(1) Reflection (2) Interference  
(3) Diffraction (4) Polarisation  
(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (2nd Sitting))
- 750.** What is the name of the device used to convert alternating current into direct current ?  
(1) Ammeter  
(2) Galvanometer  
(3) Rectifier (4) Transformer  
(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (2nd Sitting))
- 751.** Why does ice covered in sawdust not melt quickly ?  
(1) Sawdust does not allow the air to touch the ice  
(2) The water is absorbed by sawdust  
(3) Sawdust is a bad conductor of heat  
(4) Sawdust is good conductor of heat  
(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (2nd Sitting))
- 752.** The washing machine works on the principle of  
(1) Dialysis (2) Diffusion  
(3) Reverse osmosis  
(4) Centrifugation  
(SSC CGL Tier-I (CBE) Exam. 29.08.2016 (2nd Sitting))
- 753.** The 'Choke' used with a tube light is basically  
(1) an inductor  
(2) a capacitor  
(3) a transformer  
(4) a resistor  
(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (1st Sitting))
- 754.** Curie is an unit of  
(1) Radioactivity  
(2) energy of Gamma rays  
(3) intensity of Gamma rays  
(4) work function  
(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (1st Sitting))
- 755.** Energy travels from Sun to Earth through  
(1) conduction  
(2) convection  
(3) radiation  
(4) modulation  
(SSC CGL Tier-I (CBE) Exam. 31.08.2016 (1st Sitting))
- 756.** Heat is transmitted from higher temperature to lower temperature through the actual motion of the molecules in  
(1) Conduction  
(2) Convection  
(3) Radiation  
(4) Both conduction and convection  
(SSC CGL Tier-I (CBE) Exam. 31.08.2016 (1st Sitting))
- 757.** Which one among the following components is used as an amplifying device?  
(1) Transformer  
(2) Diode (3) Capacitor  
(4) Transistor  
(SSC CGL Tier-I (CBE) Exam. 01.09.2016 (1st Sitting))
- 758.** The unit of measurement of noise is  
(1) Decibel (2) Hertz  
(3) Amplifier (4) Acoustics  
(SSC CGL Tier-I (CBE) Exam. 01.09.2016 (1st Sitting))
- 759.** The commonly used coolant in refrigerators is  
(1) Ammonia (2) Nitrogen  
(3) Freon (4) Oxygen  
(SSC CGL Tier-I (CBE) Exam. 01.09.2016 (1st Sitting))
- 760.** A galvanometer can be converted into a voltmeter by connecting with it a  
(1) high resistance in parallel  
(2) low resistance on parallel  
(3) high resistance on series  
(4) low resistance in series  
(SSC CGL Tier-I (CBE) Exam. 02.09.2016 (1st Sitting))
- 761.** During which of the following operating conditions of an automobile, carbon monoxide content in exhaust gas is maximum?  
(1) Acceleration  
(2) Cruising  
(3) Idle running  
(4) Deacceleration  
(SSC CGL Tier-I (CBE) Exam. 02.09.2016 (1st Sitting))
- 762.** The least distance of distinct vision is  
(1) 35 cm (2) 25 cm  
(3) 45 cm (4) 15 cm  
(SSC CGL Tier-I (CBE) Exam. 02.09.2016 (2nd Sitting))
- 763.** The component used for tuning a radio is basically a variable  
(1) Resistor (2) Condenser  
(3) Inductor  
(4) Transformer  
(SSC CGL Tier-I (CBE) Exam. 03.09.2016 (2nd Sitting))
- 764.**  $0^{\circ}\text{K}$  is equivalent to  
(1)  $273^{\circ}\text{C}$  (2)  $-273^{\circ}\text{C}$   
(3)  $0^{\circ}\text{C}$  (4)  $100^{\circ}\text{C}$   
(SSC CGL Tier-I (CBE) Exam. 03.09.2016 (2nd Sitting))
- 765.** The term 'Higgs Boson' is associated with  
(1) Nano Technology  
(2) Oncology  
(3) God Particle  
(4) Stem Cell Research  
(SSC CGL Tier-I (CBE) Exam. 03.09.2016 (2nd Sitting))
- 766.** Addition of suitable impurities into semiconductor, is called  
(1) Doping (2) Mixing  
(3) Forming (4) Diluting  
(SSC CGL Tier-I (CBE) Exam. 04.09.2016 (1st Sitting))
- 767.** At low temperature, Lead behaves as a :  
(1) Semi conductor  
(2) Super conductor  
(3) Insulator  
(4) Conductor  
(SSC CGL Tier-I (CBE) Exam. 06.09.2016 (1st Sitting))



**768.** The absolute zero is a temperature at which \_\_\_\_\_

- (1) molecular motion in a gas would cease
- (2) water freezes
- (3) all gases become liquid
- (4) all gases become solid

(SSC CGL Tier-I (CBE) Exam. 06.09.2016 (1st Sitting))

**769.** Intensity of any wave is proportional to which of the following?

- (1) Amplitude
- (2) Square of amplitude
- (3) Square root of amplitude
- (4) Cube of amplitude

(SSC CGL Tier-I (CBE) Exam. 07.09.2016 (1st Sitting))

**770.** The large collection of stars, dust and gas held together by gravitational attraction between components is known as

- (1) Cluster
- (2) Atmosphere
- (3) Galaxy
- (4) Sun Family

(SSC CGL Tier-I (CBE) Exam. 07.09.2016 (1st Sitting))

**771.** Purpose of an optical filter is to

- (1) reflect lights of different colours
- (2) dispense light into component colours
- (3) refract light of different colours
- (4) transmit or absorb light of different colours

(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (2nd Sitting))

**772.** In the absence of the earth's atmosphere, sky would appear

- (1) blue
- (2) deep red
- (3) white
- (4) black

(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (2nd Sitting))

**773.** If electric resistance is to be decreased, then the number of resistances should be connected in \_\_\_\_\_

- (1) Series
- (2) Parallel
- (3) Mixed arrangement
- (4) None of these

(SSC CGL Tier-I (CBE) Exam. 31.08.2016 (2nd Sitting))

**774.** The material used in electric heater is

- (1) Tungsten
- (2) Nichrome
- (3) Brass
- (4) Steel

(SSC CGL Tier-I (CBE) Exam. 31.08.2016 (2nd Sitting))

**775.** Which one of the following processes is responsible for the glittering of air bubble rising through water?

- (1) Reflection of light
- (2) Refraction of light
- (3) Total internal reflection of light
- (4) Scattering of light

(SSC CGL Tier-I (CBE) Exam. 01.09.2016 (2nd Sitting))

**776.** In an optical fibre the signal is transmitted

- (1) in a straight line path
- (2) In a curved path
- (3) due to total internal reflection
- (4) Due to refraction

(SSC CGL Tier-I (CBE) Exam. 01.09.2016 (2nd Sitting))

**777.** What type of lens is used to correct vision of a person suffering from Myopia?

- (1) Convex lens
- (2) Concave lens
- (3) Crossed lens
- (4) Cylindrical lens

(SSC CGL Tier-I (CBE) Exam. 02.09.2016 (2nd Sitting))

**778.** A man standing close to the platform at a railway station experiences a pulling force towards a fast moving train because of \_\_\_\_\_

- (1) gravitational force between train and man
- (2) illusion of the man
- (3) the centripetal force
- (4) pressure difference due to fast moving air in between

(SSC CGL Tier-I (CBE) Exam. 02.09.2016 (2nd Sitting))

**779.** Water is used in a hot water bag because

- (1) It is easily available
- (2) It has high specific gravity
- (3) It has high specific heat
- (4) It is a liquid substance

(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (1st Sitting))

**780.** The temperature of a liquid is 32° F. What is its temperature in Celsius scale?

- (1) 32° C
- (2) 0° C
- (3) 100° C
- (4) 212° C

(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (1st Sitting))

**781.** The point where total mass of a body is supposed to be concentrated is known as

- (1) Dead centre
- (2) Centre of mass
- (3) Centre of gravity
- (4) Centre of motion

(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (1st Sitting))

**782.** Where do the electrical charges reside in a charged conductor?

- (1) at the core
- (2) throughout the body
- (3) depended upon the nature of the body
- (4) outer surface of the body

(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (1st Sitting))

**783.** The colour of the ocean appears to be blue because the sunlight falling on it is

- (1) reflected
- (2) refracted
- (3) diffracted
- (4) scattered

(SSC CGL Tier-I (CBE) Exam. 28.08.2016 (1st Sitting))

**784.** Which of the following is not true about X-rays?

- (1) have low penetrating power
- (2) travel with the speed of light
- (3) Can be reflected or refracted
- (4) can affect photographic plates

(SSC CGL Tier-I (CBE) Exam. 29.08.2016 (1st Sitting))

**785.** What type of force acts on a car moving around a curve?

- (1) Centrifugal force
- (2) Cohesive force
- (3) Centripetal force
- (4) Gravitational force

(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (IIIrd Sitting))

**786.** Which phenomenon is responsible for the echo of sound wave?

- (1) Reflection
- (2) Refraction
- (3) Interference
- (4) Polarisation

(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (IIIrd Sitting))

**787.** Which of the metals has the maximum thermal conductivity?

- (1) Iron
- (2) Aluminium
- (3) Silver
- (4) Copper

(SSC CGL Tier-I (CBE) Exam. 30.08.2016 (IIIrd Sitting))

**788.** Which of the following is the cleanest source of energy?

- (1) Biofuel
- (2) Fossil fuel
- (3) Nuclear power
- (4) Wind energy

(SSC CGL Tier-I (CBE) Exam.  
30.08.2016 (IIIrd Sitting))

**789.** Which one of the following is an ohmic conductor?

- (1) Germanium
- (2) Silicon
- (3) Carbon
- (4) Silver

(SSC CGL Tier-I (CBE) Exam.  
31.08.2016 (IIIrd Sitting))

**790.** The spring balance works on the principle of \_\_\_\_\_.

- (1) Boyle's Law
- (2) Hooke's Law
- (3) Bernoulli's principle
- (4) Pascal's Law

(SSC CGL Tier-I (CBE) Exam.  
31.08.2016 (IIIrd Sitting))

**791.** If there were no gravity, which of the following will not be there for a fluid?

- (1) Viscosity
- (2) Surface Tension
- (3) Pressure
- (4) Upward Thrust

(SSC CGL Tier-I (CBE) Exam.  
31.08.2016 (IIIrd Sitting))

**792.** Sun appears red in colour at sunrise and sunset due to

- (1) the fact that sun emits only red colour at that time
- (2) red light having longer wave length scatters away
- (3) that sun comes out of the mountains
- (4) that all other colours scatter away except red

(SSC CGL Tier-I (CBE) Exam.  
01.09.2016 (IIIrd Sitting))

**793.** At hill stations, the boiling point of water will be

- (1) same as at sea level
- (2) less than that at sea level
- (3) more than that at sea level
- (4) equal to the melting point of ice

(SSC CGL Tier-I (CBE) Exam.  
01.09.2016 (IIIrd Sitting))

**794.** When we see an object, the image formed on the retina is

- (1) Real and inverted
- (2) Real and erect
- (3) Virtual and erect
- (4) Virtual and inverted

(SSC CGL Tier-I (CBE) Exam.  
02.09.2016 (IIIrd Sitting))

**795.** Kinetic energy depends on

- (1) the velocity or speed of the moving body.
- (2) the mass of the moving body
- (3) the pressure of the moving body
- (4) both mass and velocity of the moving body

(SSC CGL Tier-I (CBE) Exam.  
02.09.2016 (IIIrd Sitting))

**796.** In which form is the supplied heat energy stored during change in temperature of substance?

- (1) Heat energy
- (2) Kinetic energy
- (3) Potential energy
- (4) Both kinetic and potential energy

(SSC CGL Tier-I (CBE) Exam.  
02.09.2016 (IIIrd Sitting))

**797.** If ice floating on water in a vessel melts, the water level in the vessel \_\_\_\_\_.

- (1) increases
- (2) does not change
- (3) first increases before decreasing
- (4) decreases

(SSC CHSL (10+2) Tier-I (CBE) Exam. 16.01.2017 (IIInd Sitting))

**798.** A galvanometer can be converted to a voltmeter by connecting

- (1) a high resistance in parallel
- (2) a high resistance in series
- (3) a low resistance in series
- (4) a low resistance in parallel

(SSC CGL Tier-I (CBE) Exam.  
03.09.2016 (IIIrd Sitting))

**799.** The frequency of direct current is \_\_\_\_\_

- (1) Zero
- (2) 50 HZ
- (3) 60 HZ
- (4) 100 HZ

(SSC CGL Tier-I (CBE) Exam.  
03.09.2016 (IIIrd Sitting))

**800.** For photoelectric effect to take place, the metal used as the cathode should have \_\_\_\_\_

- (1) high melting point
- (2) low melting point
- (3) low work function
- (4) low resistance

(SSC CGL Tier-I (CBE) Exam.  
04.09.2016 (IIIrd Sitting))

**801.** Flemings "Left hand Rule" is associated with the effect of

- (1) Electric field on current
- (2) Magnetic field on magnet
- (3) Electric field on magnet
- (4) Magnetic Field on current

(SSC CGL Tier-I (CBE) Exam.  
06.09.2016 (IIIrd Sitting))

**802.** The force which makes a vehicle to stop when break is applied is called

- (1) gravitational force
- (2) vanderwalls force
- (3) frictional force
- (4) covalant force

(SSC CGL Tier-I (CBE) Exam.  
07.09.2016 (IIIrd Sitting))

**803.** Why is weightlessness experienced while orbiting the earth in space ships ?

- (1) Inertia
- (2) Acceleration
- (3) Zero gravity
- (4) Orbital motion

(SSC CGL Tier-I (CBE) Exam.  
08.09.2016 (IIIrd Sitting))

**804.** Where is a transistor most likely to be found ?

- (1) Wrist watch
- (2) Fuse
- (3) Hearing aid
- (4) Fluorescent lamp

(SSC CGL Tier-I (CBE) Exam.  
08.09.2016 (IIIrd Sitting))

**805.** Every hot object emits \_\_\_\_\_

- (1) X-rays
- (2) Visible light
- (3) Infrared rays
- (4) Ultraviolet rays

(SSC CGL Tier-I (CBE) Exam.  
09.09.2016 (IIIrd Sitting))

**806.** In hydel power station, the motion produced in turbines is due to

- (1) flow of water
- (2) burning of coal
- (3) burning of diesel
- (4) production of steam

(SSC CGL Tier-I (CBE) Exam.  
10.09.2016 (IIIrd Sitting))

**807.** Two vectors are said to be equal if

- (1) only their magnitudes are same
- (2) only their directions are same
- (3) both magnitude and direction are same
- (4) magnitudes are same but directions are opposite

(SSC CGL Tier-I (CBE) Exam.  
11.09.2016 (IIIrd Sitting))

**808.** Fuse wire is made of an alloy of

- (1) Tin and Lead
- (2) Tin and Copper
- (3) Lead and Copper
- (4) Copper and Silver

(SSC CGL Tier-I (CBE) Exam.  
06.09.2016 (IIInd Sitting))

**809.** Which of the following has the lowest frequency?

- (1) Visible light
- (2) Gamma rays
- (3) Xrays
- (4) Ultra violet rays

(SSC CGL Tier-I (CBE) Exam.  
06.09.2016 (IInd Sitting))

**810.** A fresh egg when placed in salt water will

- (1) sink and go to the bottom
- (2) sink but will not go to the bottom
- (3) float
- (4) burst

(SSC CGL Tier-I (CBE) Exam.  
06.09.2016 (IInd Sitting))

**811.** Which one among the following is not an electromagnetic wave?

- (1) X-Ray
- (2) R-Ray
- (3) Cathode Ray
- (4) Infrared Ray

(SSC CGL Tier-I (CBE) Exam.  
07.09.2016 (IInd Sitting))

**812.** Which one of the following is a good electrical conductor?

- (1) Graphite
- (2) Diamond
- (3) Peat
- (4) Charcoal

(SSC CGL Tier-I (CBE) Exam.  
07.09.2016 (IInd Sitting))

**813.** Sending a frame to a group of stations is known as

- (1) Single casting
- (2) Spreading
- (3) Multicasting
- (4) Casting

(SSC CGL Tier-I (CBE) Exam.  
07.09.2016 (IInd Sitting))

**814.** Which one among the following components can not be developed within an "integrated circuit"?

- (1) Diode
- (2) Triode
- (3) Transformer
- (4) Transistor

(SSC CGL Tier-I (CBE) Exam.  
08.09.2016 (IInd Sitting))

**815.** A particle is thrown vertically upward. When it reaches the highest point, it has

- (1) a downward acceleration
- (2) an upward acceleration
- (3) a downward velocity
- (4) a horizontal velocity

(SSC CGL Tier-I (CBE) Exam.  
09.09.2016 (IInd Sitting))

**816.** The quality or tone of a musical sound produced by a stringed instrument depends on

- (1) frequency of vibration
- (2) length of the strings in the instrument
- (3) Amplitude of vibration
- (4) wave form of the sound

(SSC CGL Tier-I (CBE) Exam.  
09.09.2016 (IInd Sitting))

**817.** Why does a cannon recoil after firing ?

- (1) Conservation of energy
- (2) Backward thrust of gases produced
- (3) Newton's third law of motion
- (4) Newton's first law of motion

(SSC CGL Tier-I (CBE) Exam.  
10.09.2016 (IInd Sitting))

**818.** A bomb explodes on the moon. You will hear its sound on earth after \_\_\_\_\_

- (1) 20 minutes
- (2) 2 hours 20 minutes
- (3) 3.7 hours
- (4) You cannot hear the sound of explosion

(SSC CGL Tier-I (CBE) Exam.  
10.09.2016 (IInd Sitting))

**819.** Person who is colourblind cannot distinguish between

- (1) Black and yellow
- (2) Red and green
- (3) Yellow and white
- (4) Green and blue

(SSC CGL Tier-I (CBE) Exam.  
11.09.2016 (IInd Sitting))

**820.** During the motion of a projectile fired from the earth surface,

- (1) its kinetic energy remains constant
- (2) its momentum remains constant
- (3) vertical component of its velocity remains constant
- (4) horizontal component of its velocity remains constant

(SSC CGL Tier-I (CBE) Exam.  
11.09.2016 (IInd Sitting))

**821.** Which of the following waves cannot be polarised?

- (1) Radio
- (2) Ultra violet
- (3) Infrared
- (4) Ultrasonic

(SSC CGL Tier-I (CBE) Exam.  
11.09.2016 (IInd Sitting))

**822.** Absolute Zero is defined as

- (1) The temperature at which all molecular motion ceases
- (2) At which water boils at 298K
- (3) At which liquid Helium boils
- (4) At which the volume becomes zero

(SSC CGL Tier-I (CBE) Exam.  
11.09.2016 (IInd Sitting))

**823.** Electromagnet is constructed with which of the following ?

- (1) Steel
- (2) Soft Iron
- (3) Aluminium
- (4) Nickel

(SSC CGL Tier-I (CBE) Exam.  
27.10.2016 (Ist Sitting))

**824.** A body moving in a circular path with a constant speed has a

- (1) constant velocity
- (2) constant acceleration
- (3) constant kinetic energy
- (4) constant displacement

(SSC CGL Tier-I (CBE) Exam.  
27.10.2016 (Ist Sitting))

**825.** The Solar energy produced by

- (1) Fusion reaction
- (2) Fission reaction
- (3) Combustion reaction
- (4) None

(SSC CGL Tier-I (CBE) Exam.  
27.10.2016 (IInd Sitting))

**826.** On a cold day when the room temperature is 15°C, the metallic cap of a pen becomes much colder than its plastic body, though both are at the same temperature of 15°C, because :

- (1) metals have higher thermal capacity than plastics
- (2) plastics have a lower density than metals
- (3) metals are good conductors of heat
- (4) plastics have a higher thermal conductivity than metals

(SSC CGL Tier-I (CBE) Exam.  
27.10.2016 (IInd Sitting))

**827.** Copper wires are generally used for electrical power transmission instead of iron wire because :

- (1) copper is cheaper than iron
- (2) copper is lighter than iron
- (3) copper is a better conductor of electricity than iron
- (4) copper can take higher power than iron

(SSC CGL Tier-I (CBE) Exam.  
27.10.2016 (IInd Sitting))

**828.** Transformer is a device to convert

- (1) D.C. to A.C.
- (2) Low voltage D.C. into high voltage D.C.
- (3) Low voltage A.C. into high voltage A.C.
- (4) Mechanical energy into Electrical energy

(SSC CGL Tier-I (CBE) Exam.  
03.09.2016 (IInd Sitting))

**829.** Quality of a musical note depends on

- (1) Fundamental frequency
- (2) Amplitude of the wave
- (3) Harmonics present
- (4) Velocity of sound in the medium

(SSC CGL Tier-I (CBE) Exam.  
03.09.2016 (IInd Sitting))

**830.** The reverse effect of X-ray emission is

- (1) Raman effect
- (2) Compton effect
- (3) Zeeman effect
- (4) Photoelectric

(SSC CGL Tier-I (CBE)  
Exam. 04.09.2016) (IInd Sitting)

**831.** The group of solar cells joined together in a definite pattern is called a

- (1) Battery
- (2) Solar heater
- (3) Solar cooker
- (4) Solar cell panel

(SSC CGL Tier-I (CBE)  
Exam. 04.09.2016) (IInd Sitting)

**832.** One nanometer is equal to \_\_\_\_\_ meters.

- (1) 10 raised to the power (-3)
- (2) 10 raised to the power (-6)
- (3) 10 raised to the power (-9)
- (4) 10 raised to the power (-12)

(SSC CHSL (10+2) Tier-I (CBE)  
Exam. 15.01.2017) (IInd Sitting)

**833.** What is the unit of relative density?

- (1) kg/m
- (2) kg/m<sup>2</sup>
- (3) kg/m<sup>3</sup>
- (4) It has no unit

(SSC CHSL (10+2) Tier-I (CBE)  
Exam. 15.01.2017) (IInd Sitting)

**834.** Acceleration is

- (1) Inversely proportional to force
- (2) Inversely proportional to mass
- (3) Directly proportional to mass
- (4) Directly proportional to force

(SSC CHSL (10+2) Tier-I (CBE)  
Exam. 16.01.2017) (IInd Sitting)

**835.** Vegetables are cooked in lesser time by adding a pinch of salt while cooking because

- (1) boiling point of water increases
- (2) latent heat of vaporization of water decreases
- (3) latent heat of vaporization of water increases
- (4) boiling point of water decreases

(SSC Multi-Tasking Staff  
Exam. 30.04.2017 1st Sitting)

**836.** Hydraulic brakes in automobile work on

- (1) Poiseuille's principle
- (2) Pascal's principle
- (3) Archimedes' principle
- (4) Bernoulli's principle

(SSC Multi-Tasking Staff  
Exam. 30.04.2017 1st Sitting)

**837.** The fuse in an electric circuit is connected in

- (1) series with neutral
- (2) parallel to live
- (3) parallel to neutral
- (4) series with live

(SSC Multi-Tasking Staff  
Exam. 30.04.2017 1st Sitting)

## ANSWERS

1. (4)	2. (1)	3. (3)	4. (1)
5. (1)	6. (1)	7. (2)	8. (2)
9. (1)	10. (2)	11. (3)	12. (1)
13. (1)	14. (3)	15. (1)	16. (3)
17. (2)	18. (4)	19. (2)	20. (2)
21. (2)	22. (3)	23. (4)	24. (1)
25. (2)	26. (3)	27. (4)	28. (1)
29. (2)	30. (1)	31. (2)	32. (4)
33. (1)	34. (3)	35. (4)	36. (1)
37. (3)	38. (3)	39. (1)	40. (3)
41. (1)	42. (2)	43. (1)	44. (1)
45. (3)	46. (2)	47. (2)	48. (2)
49. (2)	50. (4)	51. (2)	52. (3)
53. (1)	54. (3)	55. (2)	56. (2)
57. (4)	58. (3)	59. (2)	60. (2)
61. (2)	62. (1)	63. (3)	64. (3)
65. (3)	66. (4)	67. (3)	68. (3)
69. (4)	70. (4)	71. (1)	72. (3)
73. (4)	74. (4)	75. (2)	76. (3)
77. (3)	78. (2)	79. (3)	80. (3)
81. (3)	82. (2)	83. (3)	84. (1)
85. (1)	86. (4)	87. (2)	88. (3)
89. (2)	90. (3)	91. (2)	92. (2)
93. (4)	94. (1)	95. (3)	96. (4)
97. (4)	98. (1)	99. (4)	100. (2)
101. (3)	102. (4)	103. (3)	104. (3)
105. (1)	106. (2)	107. (2)	108. (4)
109. (3)	110. (3)	111. (2)	112. (1)
113. (4)	114. (3)	115. (1)	116. (3)
117. (3)	118. (1)	119. (3)	120. (2)
121. (3)	122. (2)	123. (2)	124. (4)
125. (4)	126. (4)	127. (3)	128. (4)
129. (4)	130. (1)	131. (2)	132. (3)
133. (2)	134. (1)	135. (3)	136. (4)
137. (4)	138. (3)	139. (2)	140. (1)
141. (2)	142. (1)	143. (3)	144. (3)
145. (3)	146. (1)	147. (2)	148. (4)
149. (2)	150. (2)	151. (3)	152. (4)
153. (1)	154. (2)	155. (2)	156. (2)
157. (2)	158. (4)	159. (3)	160. (4)
161. (3)	162. (3)	163. (2)	164. (3)

165. (3)	166. (1)	167. (1)	168. (4)
169. (3)	170. (4)	171. (3)	172. (3)
173. (1)	174. (4)	175. (4)	176. (3)
177. (3)	178. (3)	179. (2)	180. (4)
181. (2)	182. (4)	183. (1)	184. (1)
185. (1)	186. (1)	187. (1)	188. (1)
189. (1)	190. (2)	191. (1)	192. (2)
193. (2)	194. (3)	195. (1)	196. (1)
197. (3)	198. (4)	199. (3)	200. (3)
201. (1)	202. (2)	203. (2)	204. (1)
205. (2)	206. (1)	207. (3)	208. (2)
209. (2)	210. (1)	211. (3)	212. (3)
213. (1)	214. (4)	215. (3)	216. (4)
217. (4)	218. (3)	219. (2)	220. (2)
221. (2)	222. (2)	223. (3)	224. (1)
225. (1)	226. (1)	227. (4)	228. (4)
229. (4)	230. (4)	231. (3)	232. (2)
233. (1)	234. (3)	235. (1)	236. (1)
237. (2)	238. (3)	239. (1)	240. (3)
241. (1)	242. (3)	243. (1)	244. (3)
245. (1)	246. (3)	247. (4)	248. (3)
249. (2)	250. (4)	251. (3)	252. (4)
253. (2)	254. (4)	255. (1)	256. (2)
257. (3)	258. (1)	259. (4)	260. (4)
261. (4)	262. (4)	263. (2)	264. (1)
265. (2)	266. (3)	267. (1)	268. (4)
269. (1)	270. (1)	271. (3)	272. (2)
273. (1)	274. (3)	275. (1)	276. (3)
277. (3)	278. (4)	279. (3)	280. (4)
281. (2)	282. (3)	283. (2)	284. (1)
285. (4)	286. (1)	287. (4)	288. (3)
289. (2)	290. (2)	291. (2)	292. (2)
293. (2)	294. (3)	295. (1)	296. (4)
297. (1)	298. (3)	299. (4)	300. (2)
301. (3)	302. (4)	303. (1)	304. (2)
305. (2)	306. (1)	307. (3)	308. (2)
309. (1)	310. (2)	311. (3)	312. (3)
313. (2)	314. (2)	315. (4)	316. (4)
317. (3)	318. (3)	319. (2)	320. (2)
321. (2)	322. (2)	323. (1)	324. (2)
325. (2)	326. (2)	327. (3)	328. (2)
329. (2)	330. (2)	331. (1)	332. (4)