

## (Physics)

### Objective Types Questions

**Q1.**

For which Diode is used ?

- (a) modulation
- (b) oscillation
- (c) amplification
- (d) purification

**Q2.**

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

- (a) Dr. Horn J. Bhabha
- (b) Dr. Vikram Sarabhai
- (c) Dr. Raja Ramanna
- (d) Dr. P. K. Iyengar

**Q3.**

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

- (a) Coal
- (b) Lignite
- (c) Anthracite
- (d) Pit

**Q4.**

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

- (a) Microwaves
- (b) Radio waves
- (c) A. M.
- (d) Frequency of 101 series

**Q5.**

What is found in frequency modulation?

- (a) Fixed frequency
- (b) Fixed dimension
- (c) Change In frequency and dimension
- (d) Change in dimension only

**Q6.**

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

- (a) four times
- (b) two times
- (c) half
- (d) one fourth

**Q7.**

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

- (a) Volume
- (b) Momentum
- (c) Torque
- (d) Change in the rate of momentum

**Q8.**

Which among the following is the fundamental quantity ?

- (a) Volume
- (b) Time
- (c) Velocity
- (d) Force

**Q9.**

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

- (a) two times
- (b) half
- (c) four times
- (d) no change

**Q10.**

Why the needle of iron swims on Water surface when it is kept gently ?

- (a) It will remain under the water when it will displace more water than its weight
- (b) the density of needle is less than that of water
- (c) due to surface tension
- (d) due to its shape

**Q11.**

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

- (a) Neutron Star
- (b) Black hole
- (c) White Dwarf
- (d) Red Giant

**Q12.**

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

- (a) they fall with that ultimate velocity which are different for different droplets
- (b) they fall with same ultimate velocity
- (c) their velocity increases and they fall With different velocity on the earth
- (d) their velocity increases and they fall with same velocity of the earth

**Q13.**

On which of the following techniques photo state machine works ?

- (a) Magnetic Imager Making
- (b) Thermal Image Making
- (c) Electrostatic Image Making
- (d) Electromagnetic Image Making

**Q14.**

One Kilowatt hour is equal

- (a) 6 Mega Joule
- (b) 8 Mega Joule
- (c) 2 Mega Joule
- (d) 0 Mega Joule

**Q15.**

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

- (A) 5 Km Sec.
- (b) 6 Km Sec.
- (c) 11 Km. Sec.
- (d) 15 Km. Sec.

**Q16.**

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

- (a) We face sun and raindrops
- (b) The Sun remains behind us and we face raindrops
- (c) In light rainfall we face Sun
- (d) The sky remains clear and the sun is at lower position in the sky

**Q17.**

The splitting of different colours of light in a prism is :

- (a) Reflection of light
- (b) Dispersion of light
- (c) Diffraction of light
- (d) Refraction of light

**Q18.**

A boat will submerge when it displaces water equal to its own

- (a) volume
- (b) weight
- (c) surface area
- (d) density

**Q19.**

Two waves each of amplitude 5 mm and frequency 10 Hz are travelling in opposite direction with a speed of 20 mms. The distance in mm between adjacent nodes is :

- (a) 0
- (b) 2

- (c) 5
- (d) 1

**Q20.**

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

- (a) it becomes very hard
- (b) it reflects most of the heat from the sun
- (c) it has a low specific heat capacity
- (d) it has a high latent heat of fusion

**Q21.**

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

- (a) the same in both cases in all respects
- (b) of higher intensity when train arrives
- (c) of higher pitch when train arrives
- (d) of higher pitch when train departs

**Q22**

Holography is a technique of

- (a) recording a permanent sharp two dimensional black and white or multicolor photograph
- (b) recording a permanent three dimensional multicolour photograph
- (c) recording a permanent three dimensional black and white photograph
- (d) recording a permanent three dimensional photograph of a given single colour or a multicolor

**Q23.**

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

- (a) Rises
- (b) Falls
- (c) Remains same
- (d) Falls first and then rises

**Q24.**

The velocity of heat radiation in vacuum is

- (a) Equal to that of light
- (b) Less than that of light
- (c) Greater than that of light
- (d) Equal to that of sound

**Q25.**

The plastic material commonly used for making gear wheels is

- (a) Polyesters
- (b) Nylons
- (c) Bakelite
- (d) Polystyrene

**Q26.**

Which of the following is used in oven ?

- (a) X-rays
- (b) UV rays
- (c) Microwaves
- (d) Radio waves

**Q27.**

When heated from  $0^\circ$  to  $10^\circ\text{C}$  volume of a given mass of water Will

- (a) Increase gradually
- (b) Decrease gradually
- (c) Increase and then will decrease
- (d) Decrease and then will increase

**Q28.**

Energy is continuously created in the sun due to:

- (a) nuclear fusion
- (b) nuclear fission
- (c) radioactivity
- (d) artificial radioactivity

**Q29.**

Coolis tube is used to produce

- (a) Radio waves
- (b) Microwaves
- (c) X-rays
- (d) Gama rays

**Q30**

Which of the following is used for regulated electric supply ?

- (a) Zener diode
- (b) Junction diode
- (c) Gun diode
- (d) Tunnel diode

**Q31.**

Gamma rays can cause

- (a) gene mutation
- (b) sneezing
- (c) burning
- (d) fever

**Q32.**

The substance which conducts current in the solid state is

- (a) diamond
- (b) graphite
- (c) iodine
- (d) sodium chloride

**Q33.**

Which set of conditions represents the easiest way to liquify a gas ?

- (a) Low temperature and high pressure
- (b) High temperature and low pressure
- (c) Low temperature and low pressure
- (d) High temperature and high pressure

**Q34.**

What is colour of light related to?

- (a) Amplitude
- (b) Frequency
- (c) Quality
- (d) Velocity

**Q35.**

What principle law explains the working of the hydraulic brakes in automobiles ?

- (a) Bernoulli's law
- (b) Posieulles principle
- (c) Pascal's law
- (d) Archimedes principle

**Q36.**

The best conductor of heat among the following is

- (a) alcohol
- (b) mercury
- (c) ether
- (d) Water

**Q37.**

What is viewed through an electron microscope?

- (a) Electrons and other elementary particles
- (b) Structure of bacteria and viruses
- (c) Inside of human stomach
- (d) Inside of the human eye

**Q38.** What apparatus is used to locate a submerged object?

- (a) (I) Radar
- (b) Sonar
- (c) Quasar
- (d) Pulsar

**Q39.**

Which combination of colour is the most convenient during day and night time ?

- (a) Orange and blue
- (b) White and black
- (c) Yellow and blue
- (d) Red and green

**Q40.**

The instrument that measures and records the relative humidity of air is

- (a) Hydrometer
- (b) Hygrometer
- (c) Lactometer

(d) Barometer

**Q41.**

The shape of our milky way galaxy is

- (a) circular
- (b) elliptical
- (c) spiral
- (d) None of the above

**Q42.**

The different colours of different stars are due to the variation of

- (a) temperature
- (b) pressure
- (c) density
- (d) radiation from them

**Q43.**

Wollen clothes keep the body warm because

- (a) Wool increases the temperature of the body
- (b) Wool is a bad conductor
- (c) Wool absorbs radiant heat from outer objects
- (d) Wool rejects heat from the outer objects

**Q44.**

If the length of a simple pendulum is halved then its period of oscillation is

- (a) doubled
- (b) halved
- (c) increased by a factor
- (d) decreased by a factor

**Q45.**

Mist is caused by

- (a) dry ice
- (b) ice at low temperature
- (c) water vapour at low temperature
- (d) carbon monoxide in solid form

**Q46.**

While catching a ball a player pulls down his hands to lower the

- (a) force
- (b) momentum
- (c) Impulse
- (d) catching time

**Q47.**

When a barometer reading suddenly recedes it indicates that climate

- (a) will be very warm
- (b) will be extremely stormy
- (c) will remain cold
- (d) incessant rain for at least 48 hours

**Q48.**

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 ?

- (a) Circle
- (b) Parabolic
- (c) Great circle
- (d) Hyper parabolic

**Q49.**

Electron microscope was invented by

- (a) Knoll and Ruska
- (b) Robert Koch
- (c) Leeuwenhoek
- (d) C.P. Swanson

**Q50.**

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:

- (a) evaporation
- (b) vaporization
- (c) diffusion
- (d) sublimation

**Q51.**

Clear nights are colder than cloudy nights because of

- (a) conduction
- (b) condensation
- (c) radiation
- (d) insulation

**Q52.**

A gas thermometer is more sensitive than a liquid thermometer because a gas :

- (a) is lighter than liquid
- (b) expands more than a liquid
- (c) is easy to obtain
- (d) does not change state easily

**Q53.**

Which one of the following is used for sun glasses?

- (a) Pyrex glass
- (b) Flint glass
- (c) Crooks glass
- (d) Crystal glass

**Q54.**

The speed of light with the rise in the temperature of the medium :

- (a) Increases
- (b) Decreases

- (c) Remains unaltered
- (d) Drops suddenly

**Q55.**

When the barometer reading dips suddenly it is an indication of

- (a) Hot weather
- (b) Calm weather
- (c) Storm
- (d) Dry weather

**Q56.**

Good conductor of electricity is

- (a) dry air
- (b) paper
- (c) kerosene
- (d) graphite

**Q57.**

Heat from the Sun reaches the Earth by

- (a) Reflection
- (b) Conduction
- (c) Radiation
- (d) Convection

**Q58.**

In which of the following cases kinetic energy is being used in performing work ?

- (a) Paddling the bicycle to cover a distance
- (b) Driving a car to cover a distance
- (c) Wind mill grinding wheat grain
- (d) Rowing a boat in the lake

**Q59.**

If the velocity time graph of a particle is represented by  $y = mt + c$  then the particle is moving with

- (a) constant speed
- (b) constant velocity
- (c) constant acceleration
- (d) varying acceleration

**Q60.**

Which of the following occurred first ?

- (a) Albert Einstein propounded the General Theory of Relativity
- (b) Max Planck unveiled the Quantum Theory
- (c) Guglielmo Marconi sent out the first wireless signals
- (d) Wright Brothers successfully flew an aircraft

**Q61.**

A passenger standing in a bus is thrown outward when the bus takes a sudden turn happens due to

- (a) Outward pull on him

- (b) Inertia of motion
- (c) Change in momentum
- (d) Change in acceleration

**Q62.**

When pressure is increased the melting point of ice

- (a) increases
- (b) does not change
- (c) decreases
- (d) depends on the impurities in the ice

**Q63.**

Longitudinal waves cannot travel through

- (a) Vacuum
- (b) Solid
- (c) Liquid
- (d) Gas

**Q64.**

Electrostatic precipitator is used to control the pollution of

- (a) air
- (b) water
- (c) noise
- (d) thermal

**Q65.**

The sky appears blue because of

- (a) Atmospheric water vapour
- (b) Scattering of light
- (c) Reflection on sea water
- (d) Emission of blue wavelength by the sun

**Q66.**

Dynamo is a device for converting

- (a) Heat energy into electrical energy
- (b) Mechanical energy into electrical energy
- (c) Magnetic energy into electrical energy
- (d) Chemical energy into electrical energy

**Q67.**

Oil rises up the wick in a lamp because

- (a) Oil is very light
- (b) Of the diffusion of oil through the wick
- (c) Of the surface tension phenomenon
- (d) Of the capillary action phenomenon

**Q68.**

In the atmosphere ultraviolet rays are absorbed by

- (a) Oxygen
- (b) Nitrogen
- (c) Ozone
- (d) Helium

**Q69.**

An electron microscope gives higher magnification than an optical microscope because:

- (a) it uses more powerful lenses
- (b) the velocity of electron is smaller than that of visible light
- (c) the electrons have more energy than the light particles
- (d) the wavelength of electrons is smaller as compared to the wavelength of visible light

**Q70.**

For a body moving with no uniform velocity and uniform acceleration

- (a) (X) Displacement Time graph is linear.
- (b) Displacement Time graph is nonlinear
- (c) Velocity Time graph is nonlinear
- (d) Velocity Time graph is linear

**Q71.**

Lamberts law is related to

- (a) Reflection
- (b) Refraction
- (c) Interference
- (d) illumination

**Q72.**

Which of the following laws validates the statement that matter can neither be created nor destroyed ?

- (a) Law of conservation of energy
- (b) Le Chateliers Principle
- (c) Law of conservation of mass
- (d) Law of osmosis

**Q73.**

Decibel is the unit used for

- (a) Speed of light
- (b) Intensity of heat
- (c) Intensity of sound
- (d) Radio wave frequency

**Q74.**

The term Isoneph indicates the lines of equal

- (a) cloudiness
- (b) salinity
- (c) rainfall
- (d) pressure

**Q75.**

The atmospheric layer reflecting radio waves is called

- (a) Ozonosphere
- (b) Ionosphere
- (c) Stratosphere

**(d) Mesosphere****Q76.**

Cryogenics is a science dealing with

- (a) high temperatures
- (b) low temperatures
- (c) friction and wear
- (d) growth of crystals

**Q77.**

The mass energy relation is the outcome of

- (a) quantum theory
- (b) general theory of relativity
- (c) field theory of energy
- (d) special theory of relativity

**Q78.**

Which of the following are used for accurately measuring very small time intervals ?

- (a) Pulsar
- (b) Quartz clocks
- (c) Atomic clocks
- (d) White dwarfs

**Q79.**

Danger signals are generally red as red light

- (a) is least bright
- (b) undergoes least deviation
- (c) has lowest velocity
- (d) gives comfort to eye

**Q80.**

A simple microscope consists of

- (a) a short focus convex lens
- (b) a long focus convex lens
- (c) a short focus concave lens
- (d) a long focus concave lens

**Q81.**

An oil drop spreads over water because

- (a) oil is lighter than water
- (b) oil is more viscous
- (c) oil does not mix with water
- (d) surface tension of oil is much smaller than that of water

**Q82.**

The device which convert AC to DC is :

- (a) Oscillator
- (b) Amplifier
- (c) Rectifier
- (d) None of these

**Q83.**

Knot is a measure of

- (a) The speed of ship
- (b) The curvature of spherical objects
- (c) Solar radiation
- (d) Intensity of earthquake shock

**Q84.**

When the main switch of the house is put off it disconnects the

- (a) live wire only
- (b) live wire and the earth wire
- (c) live wire and the neutral wire
- (d) earth wire and the neutral wire

**Q85.**

Heat from the sun reaches earth by the process of

- (a) Conduction
- (b) Convection
- (c) Radiation
- (d) All of the above

**Q86.**

Which of the following produces more severe burns ?

- (a) Boiling water
- (b) Hot water
- (c) Steam
- (d) Melting iceberg

**Q87.**

The sudden fall of atmospheric pressure indicates

- (a) fair weather
- (b) storm
- (c) rain
- (d) cold weather

**Q88.**

Magnetism in materials is due to

- (a) electrons at rest
- (b) circular motion of electrons
- (c) protons at rest
- (d) all neutrons at rest

**Q89.**

Short sight in human eye can be corrected by using proper

- (a) convex lens
- (b) concave lens
- (c) cylindrical lens
- (d) bifocal lens

**Q90.**

What is the reason for twinkling of stars ?

- (a) Dispersion of light
- (b) Total internal reflection

- (c) Atmospheric reflection
- (d) Atmospheric refraction

**Q91.**

The instrument for measuring intensity of earthquakes is called

- (a) Ideograph
- (b) Pantograph
- (c) Ergo graph
- (d) Seismograph

**Q92.**

A multimeter is used to measure

- (a) current
- (b) voltage
- (c) resistance
- (d) All of the above

**Q93.**

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

- (a) Glass slab
- (b) Convex lens
- (c) Concave lens
- (d) Prism

**Q94.**

Nuclear reactors used to produce electricity are based on

- (a) nuclear fission
- (b) nuclear fusion
- (c) Cold Fusion
- (d) superconductivity

**Q95.**

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

- (a) Microscope
- (b) Telescope
- (c) Spectrometer
- (d) Photometer

**Q96.**

A fountain pen works on the principle of

- (a) flow of liquids from higher to lower potential
- (b) capillary action
- (c) Bernoulli's principle
- (d) Viscosity of liquids

**Q97.**

Pycnometer is an instrument used to measure the

- (a) density
- (b) intensity of solar radiation
- (c) intensity of earthquake
- (d) high temperatures

**Q98.**

Fibre optics work on the principle of

- (a) scattering of light
- (b) total internal absorption
- (c) total internal reflection
- (d) optical rotation

**Q99.**

A decibel is

- (a) a musical instrument
- (b) the wavelength of noise
- (c) a musical note
- (d) a measure of sound level

**Q100.**

Remote sensing device has an Inbuilt source of

- (a) X-ray
- (b) gray
- (c) ultraviolet ray
- (d) infrared ray

**Q101.**

A device used for converting A.C. into D.C. is called

- (a) transformer
- (b) rectifier
- (c) induction coil
- (d) dynamo

**Q102.**

Energy of Ultraviolet rays is great than

- (a) Infrared rays
- (b) Gamma rays
- (c) X-rays
- (d) Cosmic rays

**Q103.**

The instrument used to measure the speed of the wind is

- (a) Altimeter
- (b) Anemometer
- (c) Chronometer
- (d) Dosimeter

**Q104.**

Who defined the law of gravitation?

- (a) Newton
- (b) Archimedes
- (c) Galileo
- (d) Faraday

**Q105.**

The metal used to make lightning conductors is

- (a) Iron
- (b) Aluminum

(c) Copper

(d) Zinc

**Q106.**

A hydrogen balloon floats up because of

- (a) air pressure decreases with decrease in height
- (b) air pressure decreases with decrease in weight
- (c) weight of the balloon is less than the weight of air displaced by it.
- (d) the pressure inside the balloon is more than the pressure outside it

**Q107.**

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

- (a) Cylindrical lens
- (b) Concave lens
- (c) Convex lens
- (d) Bifocal lens

**Q108.**

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

- (a) Same frequency
- (b) Same amplitude
- (c) Same phase
- (d) All of the above

**Q109.**

Which of the following has got more heat capacity ?

- (a) Iron piece
- (b) Water
- (c) Gold piece
- (d) Benzene

**Q110.**

If the temperature of a place Increases suddenly the relative humidity

- (a) Increases
- (b) Decreases
- (c) Remains constant
- (d) Fluctuates

**Q111.**

What Is the full form of AM regarding radio broadcasting?

- (a) Amplitude Movement
- (b) Anywhere Movement
- (c) Amplitude Matching
- (d) Amplitude Modulation

**Q112.**

Which colour is the complementary colour of yellow ?

- (a) Blue
- (b) Green
- (c) Orange
- (d) Red

**Q113.**

During washing of clothes we use indigo due to its

- (a) better cleaning action
- (b) proper pig mental composition
- (c) high glorious nature
- (d) very low cost

**Q114.**

The energy stored in a watch spring is

- (a) kinetic energy
- (b) potential energy
- (c) heat energy
- (d) chemical energy

**Q115.**

The sensation of weightlessness in a spacecraft in an orbit is due to the

- (a) absence of gravity outside
- (b) acceleration in the orbit which is equal to the acceleration due to gravity outside
- (c) presence of gravity outside but not inside the spacecraft
- (d) fact that spacecraft in the orbit has no energy

**Q116.**

Therm is the unit of

- (a) power
- (b) heat
- (c) light
- (d) distance

**Q117.**

Newtons first law of motion gives the concept of

- (a) energy
- (b) work
- (c) momentum
- (d) inertia

**Q118.**

A pond of water appears less deep due to

- (a) reflection
- (b) diffraction
- (c) refraction
- (d) polarization

**Q119.**

The oldest type of energy known to man is

- (a) wind power
- (b) solar power

- (c) tidal energy
- (d) geothermal energy

**Q120.**

Energy that is produced commercially from coal is called

- (a) Light energy
- (b) Kinetic energy
- (c) Thermal energy
- (d) Potential energy

**Q121.**

We always see the same face of the moon because

- (a) It is smaller than the earth
- (b) it revolves on its axis in a direction opposite to that of the earth
- (c) it takes equal time for revolution around the earth and rotation on its own axis
- (d) it rotates at the same speed as the earth around the sun

**Q122.**

Water pipes in hilly areas often burst on a cold frosty night because

- (a) the material of which pipes are made contracts due to cold and so breaks
- (b) water in the pipes freezes and on freezing water expands so pipes break
- (c) frost makes the pipes rusty so they break
- (d) None of these

**Q123.**

A parachute descends slowly whereas a stone dropped from the same Height falls rapidly because

- (a) stone is heavier than parachute
- (b) special mechanisms are present in parachute
- (c) a parachute has a larger surface area and air resistance is more
- (d) None of these

**Q124.**

Which of the following instruments is used to measure humidity?

- (a) Kata Thermometer
- (b) Anemometer
- (c) Sling Psychomotor
- (d) Clinical Thermometer

**Q125.**

The type of mirrors used in the headlamp of cars is

- (a) parabolic concave
- (b) plane
- (c) spherical convex

(d) cylindrical concave

**Q126.**

The reason for a swimming pool to appear less deep than the actual depth is

- (a) refraction
- (b) light scattering
- (c) reflection
- (d) interference

**Q127.**  
Alternating current is converted into direct current by a

- (a) transformer
- (b) dynamo
- (c) oscillator
- (d) rectifier

**Q128.**

Which of the following is most elastic?

- (a) Rubber
- (b) Wet clay
- (c) Steel
- (d) Plastic

**Q129.**

When a person walking in bright Sunlight enters a dark room he is not able to see clearly for a little while because

- (a) the eye muscles cannot immediately adjust the focal length of the eye lens.
- (b) the retina retains the bright images for sometime and becomes momentarily insensitive.
- (c) the iris is unable to contract the pupil immediately
- (d) the iris is unable to dilate the pupil immediately

**Q130.**

The swing of a spinning cricket ball in air can be explained on the basis of

- (a) Sudden change in wind direction.
- (b) Buoyancy of air.
- (c) Turbulence caused by wind.
- (d) Bernoulli's theorem.

**Q131.**

Why two thin shirts can keep us warmer than a single thick shirt in winter ?

- (a) Two thin shirts become thicker so prevent transmission of heat
- (b) Air layer between two shirts works as good conductor
- (c) Air layer between two shirts behaves like insulating media
- (d) No radiation of heat takes

place **Q132.**

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

- (a) ionosphere
- (b) stratosphere
- (c) mesosphere
- (d) exosphere

**Q133.**

Sound cannot pass through

- (a) water
- (b) steel
- (c) air
- (d) vacuum

**Q134.**

In a photocell light energy is converted into

- (a) potential energy
- (b) chemical energy
- (c) heat energy
- (d) electrical energy

**Q135.**

A storm is predicted if atmospheric pressure

- (a) rises suddenly
- (b) rises gradually
- (c) falls suddenly
- (d) falls gradually

**Q136.**

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

- (a) Bring his hands together
- (b) Raise his hands up
- (c) Spread his hands outwards
- (d) Sit down with raised hands

**Q137.**

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

- (a) Earth
- (b) Moon
- (c) Venus
- (d) Saturn

**Q138.**

Smog is a combination of

- (a) Air and water vapours
- (b) Water and smoke
- (c) Fire and water
- (d) smoke and fog

**Q139.**

Which of the following circuit elements is used to block DC in an electronic circuit ?

- (a) Resistances
- (b) Capacitance
- (c) Inductance
- (d) Diode

**Q140.**

Spectacles used for viewing 3D films have

- (a) Bifocal lens
- (b) Convex lens
- (c) Concave lens
- (d) Polaroid's

**Q141.**

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

- (a) behind him
- (b) in front of him
- (c) into his hand
- (d) by his side

**Q142.**

The process involved in making soap is

- (a) saponification
- (b) hydrolysis
- (c) condensation
- (d) polymerisation

**Q143.**

Kilowatt-hour is unit of

- (a) Energy
- (b) Power
- (c) Electric charge
- (d) Electric current

**Q144.**

Ventilators are provided near the ceiling of the room because

- (a) the exhaled warmer air rises up and goes out
- (b) these provide cross ventilation in the room
- (c) these provide some sunlight in the room
- (d) these do not look nice in the lower part

**Q145.**

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

- (a) Surface tension
- (b) Viscosity
- (c) Elasticity
- (d) Friction

**Q146.**

In severe winter in cold countries water pipes burst because

- (a) water expands on freezing
- (b) contraction of water pipes
- (c) high atmospheric pressure
- (d) combined effect of all the above three.

**Q147.**

In the process of magnetization of a bar

- (a) The entire bulk of the bar gets magnetised
- (b) Only the surface of the bar gets magnetised
- (c) Only the ends of the bar get magnetised
- (d) Only some parts of the outer layers of the bar get magnetized

**Q148.**

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

- (a) Viscosity
- (b) Surface Tension
- (c) Atmospheric pressure
- (d) Gravitational force

**Q149.**

The weakest of all fundamental forces is

- (a) Gravitational force
- (b) Electrostatic force
- (c) Magnetic force
- (d) Nuclear force

**Q150.**

Velocity of sound in air does not change with the change of

- (a) Temperature of air
- (b) Pressure of air
- (c) Moisture content in air
- (d) Wind in the direction of propagation of sound

**Q151.**

the density of gas is maximum at

- (a) Low temperature low pressure
- (b) Low temperature high pressure
- (c) High temperature low pressure
- (d) High temperature high pressure

**Q152.**

Why is it difficult to breathe at higher altitudes?

- (a) Due to low air pressure
- (b) Due to low temperature
- (c) Due to ozone
- (d) Due to high humidity

**Q153.**

The strongest force in nature is (a) electrical force (b) gravitational

force (c)nuclear force  
(d)magnetic force

**Q154.**

According to the theory of relativity which of the following alt ways remains constant ? (a)Length of an object

- (b)Time
- (c)Space
- (d)Velocity of light

**Q155.**

The spoon dropped by an astronaut in a satellite will

- (a)fall to the floor
- (b)remain stationary
- (c) continue to follow the motion of the satellite
- (d) move tangentially away

**Q156.**

Pipelines in cold countries often burst in winter because

- (a)water freezes and expands in its volume
- (b)temperature of ice is less than that of water
- (c)pipelines contract in their volume
- (d)pipelines expand due to freezing

**Q157.**

When a body is taken from earth to moon

- (a) mass changes but weight remains same
- (b)weight changes but mass remains same
- (c)both weight and mass change
- (d)both weight and mass remain same

**Q158.**

A mirage occurs because of

- (a)reflection by hot ground
- (b) total internal reflection by layers of air
- (c)interference of light
- (d)diffraction of light

**Q159.**

Atomic power plant work son the principle of

- (a) fission
- (b)fusion
- (c)thermal combustion
- (d)combined effect of all the above three

**Q160.**

Bolometer is used to measure

- (a) Frequency
- (b) Temperature
- (c) Velocity
- (d) Wavelength

**Q161.**

ATM stands for

- (a)Automatic Teller Machine
- (b)Automated Teller Machine
- (c)Automatic Tally Machine
- (d). Automated Tally Mechanism

**Q162.**

A person is hurt on kicking a stone due to

- (a) Inertia
- (b) Velocity
- (c) Reaction
- (d) Momentum

**Q163.**

The fuse in pure domestic electric circuit melts when there is a high rise in

- (a) Inductance
- (b) Current
- (c) Resistance
- (d) Capacitance

**Q164.**

Which of the following is an example for cantilever beam?

- (a) Diving board
- (b) Bridge
- (c)Seesaw
- (d)Common balance

**Q165.**

UK It is difficult to cook rice

- (a) at the top of a mountain
- (b) at the sea level
- (c) under a mine
- (d) same anywhere

**Q166.**

A dynamo is a device which

- (a) creates mechanical energy
- (b) creates electrical energy
- (c)converts mechanical energy into electrical energy
- (d) converts electrical energy into mechanical energy

**Q167.**

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

- (a)Diffraction
- (b)Polarization
- (c) Interference
- (d)Reflection

**Q168.**

The Instrument used to see the distant objects on the Earth is

- (a) Terrestrial telescope
- (b) Astronomical telescope
- (c) Compound microscope
- (d) Simple microscope

**Q169.**

Global warming is expected to result in

- (a) increase in level of sea
- (b) change in crop pattern
- (c) change in coast line
- (d) All of the above

**Q170.**

Which of the following liquids has the least density ?

- (a) Fresh water
- (b) Salt water
- (c) Petrol
- (d) Mercury

**Q171.**

Which of the following principle is used to produce low temperatures ?

- (a) Superconductivity
- (b) Joule Kelvin effect
- (c) Thermoelectric effect
- (d) Adiabatic demagnetization

**Q172.**

A photoelectric cell converts

- (a) mechanical energy to electric energy
- (b) heat energy to mechanical energy
- (c) light energy to chemical energy
- (d) light energy to electrical energy

**Q173.**

Two stones of different masses are dropped simultaneously from the top of a building

- (a) Smaller stone reaches the ground earlier
- (b) Larger stone reaches the ground earlier
- (c) Both the stones reach the ground at the same time
- (d)

**Q174.**

The device used to change the speed of an electric fan is

- (a) Amplifier
- (b) Regulator
- (c) Switch
- (d) Rectifier

**Q175.**

Fog is an example of

- (a) Gas dispersed in gas
- (b) Liquid dispersed in gas
- (c) Solid dispersed in gas
- (d) Solid dispersed in liquid

**Q176.**

A concave lens always forms an image which is

- (a) real and erect
- (b) virtual and erect
- (c) real and inverted
- (d) virtual and inverted

**Q177.**

The modulus of rigidity Is the ratio of

- (a) longitudinal stress to longitudinal strain
- (b) Volume stress to volume strain
- (c) shearing stress to shearing strain
- (d) tensile stress to tensile strain

**Q178.**

The propagation of sound waves in a gas involves

- (a) adiabatic compression and rarefaction
- (b) isothermal compression and rarefaction
- (c) isochoric compression and rarefaction
- (d) isobaric compression and rarefaction

**Q179.**

Heat transfer horizontally within the atmosphere Is called

- (a) Conduction
- (b) Convection
- (c) Absorption
- (d) Advection

**Q180.**

Noise is measured In

- (a) Watt
- (b) REM
- (c) Centigrade
- (d) Decibel

**Q181.**

The bats can fly in the dark because

- (a) they can see the objects in darkness
- (b) they have weak legs and are likely to be attacked by predators
- (c) they generate flashes of light
- (d) they generate ultrasonic sound waves

**Q182.**

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

- (a) All ice will melt

- (b) All water will become ice
- (c) No change will happen
- (d) Only some ice will melt

**Q183.**

Cupric point is the temperature at which

- (a) Matter becomes radioactive
- (b) A metal loses magnetic properties.
- (c) A metal loses conductivity
- (d) Transmutation of metal

**Q184.**

Angle of friction and angle of repose are

- (a) equal to each other
- (b) not equal to each other
- (c) proportional to each other
- (d) None of the above

**Q185.**

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

- (a) fall in front of him
- (b) fall behind him
- (c) fall into his hand
- (d) None of the above

**Q186.**

Intensity of gravitational field of earth is maximum at

- (a) Poles
- (b) Equator
- (c) Centre of earth
- (d) Surface

**Q187.**

The spokes Used in the wheel of a bicycle increase its

- (a) Moment of inertia
- (b) Velocity
- (c) Acceleration
- (d) Momentum

**Q188.**

A transformer works on the principle of

- (a) Self induction
- (b) Mutual induction
- (c) Generator
- (d) Inverter

**Q189.**

The sky appears blue because

- (a) all colours interfere to produce blue
- (b) in white light the blue component dominates

(c) the atmosphere scatters blue colour more than the others

(d) it is actually blue

**Q190.**

When a ship enters the sea from a river

- (a) it rises a little
- (b) it sinks a little
- (c) It remains at the same level
- (d) it rises or sinks depending on the material it is made of

**Q191.**

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

- (a) The heavier mass will reach greater height
- (b) The lighter mass will reach greater height
- (c) Both will reach the same height
- (d) Any of them may reach great height

**Q192.**

The unit of electrical power is

- (a) Bolt
- (b) Watt
- (c) Kilowatt hour
- (d) Ampere

**Q193.**

The scientist who first sent electromagnetic waves to distant places is

- (a) James Clerk Maxwell
- (b) Heinrich Hertz
- (c) Thomas Alva Edison
- (d) John Logie Baird

**Q194.**

The centre of gravity of a sprinter during the race lies

- (a) ahead of his feet
- (b) behind his feet
- (c) at the centre of the body
- (d) to the left side of the body

**Q195.**

Cloudy nights are warmer compared nights because clouds mainly

- (a) absorb heat from the atmosphere send it towards earth
- (b) prevent cold waves from the sky descending on earth
- (c) reflect back the heat given by earth
- (d) produce heat and radiate toward earth

**Q196.**

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

- (a) Increase
- (b) Decrease
- (c) Remain constant
- (d) Will increase first and then decrease

**Q197.**

The period of revolution of a geo stationary satellite is

- (a) 365 days
- (b) 30 days
- (c) 24 hours
- (d) changing continuously

**Q198.**

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 ?

- (a) They must have the same volume
- (b) They must have the same density
- (c) They must have the same mass
- (d) They must be dropped in vacuum

**Q199.**

The frequency of ultrasound wave is typically

- (a) Above 20 kHz
- (b) Above 20000 kHz
- (c) Below 20 kHz
- (d) Below 02 kHz

**Q200.**

Which type of reaction produces the most harmful radiation ?

- (a) Fusion reaction
- (b) Fission reaction
- (c) Chemical reaction
- (d) Photo Chemical reaction

**Q201.**

Optical fibers are based on the phenomenon of

- (a) Interference
- (b) Dispersion
- (c) Diffraction
- (d) Total Internal Reflection

**Q202.**

Mirage is an example of

- (a) refraction of light only
- (b) total internal reflection of light only
- (c) refraction and total internal reflection of light
- (d) dispersion of light only

**Q203.**

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

- (a) Interference
- (b) Reflection
- (c) Refraction
- (d) Scattering

**Q204.**

Lens is made up of

- (a) Pyrex glass
- (b) Flint glass
- (c) Ordinary glass
- (d) Cobalt glass

**Q205.**

The time period of a pendulum when taken to the Moon would

- (a) remain the same
- (b) decrease
- (c) become zero
- (d) increase

**Q206.**

The atmospheric air is held to the Earth by :

- (a) gravity
- (b) winds
- (c) clouds
- (d) rotation of the Earth

**Q207.**

The function of ball bearings in a wheel is :

- (a) to increase friction
- (b) to convert kinetic friction into rolling friction
- (c) to convert static friction into kinetic friction
- (d) just for convenience

**Q208.**

SHOCK ABSORBERS are usually made of steel because :

- (a) is not brittle
- (b) has lower elasticity
- (c) has higher elasticity
- (d) has no ductile property

**Q209.**

Among the following materials sound travels fastest in

- (a) Steel
- (b) Air
- (c) Vacuum
- (d) Water

**Q210.**

The time period of a seconds pendulum is

- (a) 1 second

- (b) 2 seconds
- (c) 5second
- (d) 15 seconds

**Q211.**

Lakes freeze in cold countries in winter leaving the water underneath at

- (a) 0°C
- (b) 0°F
- (c) 4°C
- (d) 4°F

**Q212.**

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

- (a)The aperture
- (b)The exposure time
- (c)The focal length of the lens
- (d)Size of the camera

**Q213.**

In MRI machine which one Of the following is used?

- (a)Sound wave
- (b)X-ray
- (c)Ultrasound wave
- (d)Magnetic wave

**Q214.**

For a person having hyper metropia the near point is

- (a)greater than 25 cm
- (b)greater than 50 cm
- (c)less than 25 cm
- (d)infinity

**Q215.**

Amount of water vapour in the atmosphere is measured in terms of

- (a)Humidity
- (b) Droplets
- (c)Smog
- (d)All of the above

**Q216.**

Name the process of production of energy in the Sun

- (a)Nuclear fission
- (b)Radioactivity
- (c)Nuclear fusion
- (d)Ionization

**Q217.**

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

- (a)sink in mercury
- (b)will be on the surface of mercury
- (c)will be partly immersed mercury
- (d)will dissolve in mercury

**Q218.**

the sound having a frequency of 20 hertz to 20000 hertz are known as

- (a)Audible sounds
- (b)Ultrasonic's
- (c)Infrasonic
- (d)Mega sonics

**Q219.**

Eclipses occur due to which optical phenomena?

- (a) Reflection
- (b) Refraction
- (c)Rectilinear propagation
- (d)Diffraction

**Q220.**

Pure water is bad conductor of electricity because it is

- (a)feebly ionized
- (b)not volatile
- (c)a very good solvent
- (d)a non polar solvent

**Q221.**

The filament of electric bulb is made up of :

- (a)Copper
- (b) Nichrome
- (c) Lead
- (d) Tungsten

**Q222.**

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

- (a)reflection
- (b)refraction
- (c)forced vibrations
- (d)damped vibrations

**Q223.**

Light houses are places with powerful lights to

- (a)guide and resolve traffic jams in crowded metro cities during nights.
- (b)guide and help large crowds at religious gathering during nights.
- (c)indicate to the incoming war ships the location of a harbor during night
- (d)guide and warn the ships coming from different directions in the ocean.

**Q224.**

A piece of wood is held under water. The up thrust on it will be:

- (a) equal to the weight of the wood
- (b) less than weight of the wood
- (c) more than weight of the wood
- (d) Zero

**Q225.**

Persistence of vision is the principle behind

- (a) Camera
- (b) Spectroscope
- (c) Cinema
- (d) Periscope

**Q226.**

In a nuclear reactor one of the following is used as a fuel

- (a) Coal
- (b) Uranium
- (c) Radium
- (d) Diesel

**Q227.**

The density of the liquid when heated

- (a) decreases
- (b) increases
- (c) does not change
- (d) may increase or decrease depending on pressure

**Q228.**

The distance between node and adjacent antinodes is 30 cm. The wavelength is

- (a) 30 cm.
- (b) 90 cm
- (c) 120 cm.
- (d) 60 cm.

**Q229.**

The nature of fuse wire is

- (a) high resistance and low melting point.
- (b) high resistance and high melting point.
- (c) low resistance and high melting point.
- (d) low resistance and low melting point

**Q230.**

In a railway track two rails rejoin end to end with a gap in between them because

- (a) steel can be saved
- (b) accidents due to contraction in winter can be avoided
- (c) air gaps are necessary for bearing the weight of running train
- (d) accidents due to expansion in summer can be avoided.

**Q231.**

Vehicle tyres are inflated properly

- (a) to ensure smooth running.
- (b) to allow the vehicle to take more load.
- (c) to avoid skidding and to minimize friction
- (d) to go fast and save fuel.

**Q232.**

Refrigeration is a process which

- (a) kills bacteria
- (b) slows down the bacterial growth
- (c) inactivates the bacteria
- (d) plasmolyses the bacteria

**Q233.**

Mud houses are cooler in summers and warmer in winters as compared to brick houses because

- (a) mud is a good conductor
- (b) mud is a bad conductor
- (c) mud is a poor insulator
- (d) evaporation of water causes cooling in summers and sunlight coming through holes causes warming in winters

**Q234.**

After long periods of use a grey spot develops on the inside of a bulb. This is because

- (a) the tungsten filament evaporates and collects there
- (b) the heat of the bulb scorches the glass at the top
- (c) dust inside the bulb condenses on the top
- (d) glass undergoes a change due to the heat

**Q235.**

Should cars have bumpers that collapse under impact?

- (a) Yes since the offending car should get damaged and pay for the mistake
- (b) No since it would be very expensive to get the car repaired
- (c) No since the colliding car would then ram into the occupants and kill them
- (d) Yes since they help to absorb the impact of a collision and keep the occupants safe

**Q236.**

Ice cubes are added to a glass of pure water and a glass of pure alcohol. The ice would be

- (a) at a higher level in water
- (b) at a higher level in alcohol
- (c) at the same level in both
- (d) floating in alcohol and sinking in water

**Q237.**

A person wears spectacles with concave lenses. It means that normally (when not using glasses) the image of distant objects is focused in his eyes

- (a) behind the retina
- (b) in front of the retina
- (c) on the retina
- (d) on the blind spot

**Q238.**

What is the principle of a Life Jacket?

- (a) It provides oxygen to a drowning person
- (b) It increases the volume of the person to keep him afloat
- (c) It decreases the volume of the person to keep him afloat
- (d) The person can sit on it like a raft

**Q239.**

Myopia is the same as

- (a) Near sightedness
- (b) Astigmatism
- (c) Presbyopia
- (d) Long sightedness

**Q240.**

Sun's heat reaches us by

- (a) Conduction
- (b) Convection
- (c) Radiation
- (d) Reflection

**Q241.**

A sphere rolls down on two inclined planes of different angles but same height it does so

- (a) in the same time
- (b) with the same speed
- (c) In the same time with the same speed
- (d) in the same time with the same kinetic energy

**Q242.**

Which one of the following has the highest value of specific heat?

- (a) Glass
- (b) Copper
- (c) Lead
- (d) Water

**Q243.**

A microscope used in pathological laboratories forms

- (a) magnified virtual erect image
- (b) diminished real and erect image
- (c) magnified virtual and inverted image

(d) diminished virtual and erect image

**Q244.**

The velocity of sound is more of

- (a) water
- (b) air
- (c) steel
- (d) wood

**Q245.**

The magnifying power of an astronomical telescope can be decreased by

- (a) decreasing the focal length of the eyepiece
- (b) increasing the focal length of the eyepiece
- (c) increasing the focal length of the objective
- (d) None of these

**Q246.**

Necessary element of change in solar energy to electric energy

- (a) Beryllium
- (b) Silicon
- (c) Tantalum
- (d) Pure Copper

**Q247.**

Which of the following events occurred first ?

- (a) Albert Einstein propounded the General Theory of Relativity
- (b) Max Planck unveiled the Quantum Theory
- (c) Marconi first transmitted a wireless signal
- (d) Madame Marie Curie became the first woman Nobel Prizewinner

**Q248.**

The audio signals of TV are

- (a) Amplitude modulated
- (b) Frequency modulated
- (c) Unmodulated
- (d) Velocity modulated

**Q249.**

Woollen cloth protects the body from cold because

- (a) it is a good conductor of heat
- (b) it is a poor conductor of heat
- (c) external heat rays enter into the body through the woolen cloth
- (d) it reflects heat

**Q250.**

The owl can see most clearly in total darkness because

- (a) it has squint eyes

- (b) it has large eyes with orbs directed forward giving it binocular sight  
 (c) it has light bulbs in its eyes provided by nature  
 (d) it produces infrasonic sounds

**Q251.**

Damp clothes are dried in spin dryers by the action of

- (a) centripetal forces  
 (b) centrifugal forces  
 (c) central forces  
 (d) non central forces

**Q252.**

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

- (a) Clock  
 (b) Magnet  
 (c) Electrical switchboard  
 (d) Radio

**Q253.**

When a person sitting on a swing stands up on the swing the frequency of oscillation

- (a) decreases  
 (b) increases  
 (c) becomes infinite  
 (d) does not change

**Q254.**

Night photography and photography in mist and fog are possible using

- (a) ultraviolet radiation  
 (b) infrared radiation  
 (c) microwave radiation  
 (d) gamma radiation

**Q255.**

It is easier to carry two buckets of water in one hand each than to carry only one in one hand because

- (a) weights of buckets are balanced  
 (b) centre of gravity falls within the body  
 (c) centre of gravity and centre of equilibrium fall within the feet  
 (d) resultant weight of buckets is zero

**Q256.**

The surface tension of water on adding detergent to it

- (a) increases  
 (b) decreases  
 (c) no change  
 (d) becomes zero

**Q257.**

Which of the following is optical illusion?

- (a) Rainbow  
 (b) Earthshine  
 (c) Halo  
 (d) Mirage

**Q258.**

An athlete runs before long jump to get advantage on

- (a) Inertia of motion  
 (b) Frictional force  
 (c) Moment of a force  
 (d) Principle of moments

**Q259.**

In sunlight a rose appears red. In green light the same rose appears :

- (a) red  
 (b) black  
 (c) green  
 (d) yellow

**Q260.**

The sparkling of a diamond is due to

- (a) total internal reflection of light  
 (b) interference of light  
 (c) polarisation of light  
 (d) refraction of light

**Q261.**

If a copper wire is increased to double its length its resistance will become

- (a) four times  
 (b) one fourth  
 (c) double  
 (d) half

**Q262.** In a diesel engine the high temperature needed to ignite the fuel is achieved by

- (a) using heat from exhaust  
 (b) the battery  
 (c) compressing air in the cylinders  
 (d) an electrical spark

**Q263.**

Waves that are required for long distance wireless communication are

- (a) infrared rays  
 (b) Ultraviolet rays  
 (c) Radio waves  
 (d) Microwaves

**Q264.**

Rise of oil in a wick is due to

- (a) density of the oil
- (b) viscosity of the oil
- (c) surface tension of the oil
- (d) pressure of the oil

**Q265.**

The radiation initially produced in fluorescent tube is

- (a) (J) infrared
- (b) ultraviolet
- (c) microwaves
- (d) X-rays .

**Q266.**

The four stroke petrol engine is based on the slope of a velocity time graph represents (a) acceleration

- (b) displacement
- (c) distance
- (d) speed

**Q271.**

The earth wire of a cable is connected to

- (a) the outer metallic body of the appliance
- (b) the fuse of the appliance
- (c) the filament of the appliance
- (d) short circuitry of the appliance

**Q272.**

Water is used in car radiator because of its

- (a) low density
- (b) easy availability
- (c) high specific heat capacity
- (d) low boiling point

**Q273.**

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

- (a) 2 J.
- (b) 80 J
- (c) 336 J
- (d) 2268 J

**Q274.**

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 (a) zero

- (b) one
- (c) less than one
- (d) more than one

**Q275.**

The layer of atmosphere used for radio wave transmission is

- (a) chromospheres

- (b) troposphere
- (c) ionosphere
- (d) stratosphere

**Q276.**

Negative feedback in amplifiers

- (a) increases bandwidth and decreases noise
- (b) decreases bandwidth and decreases noise
- (c) increases bandwidth and increases noise
- (d) decreases bandwidth and increases noise

- (a) Carnot cycle
- (b) Otto cycle
- (c) Diesel cycle
- (d) Boyles cycle

**Q267.**

It is dangerous to observe Solar eclipse with naked eyes because

- (a) Infrared radiations from sun burn our retina
- (b) Ultraviolet radiations from Sun burn our retina
- (c) All radiations from sun initiate chemical reactions in eyes
- (d) Cosmic rays reach eyes more during the eclipse .

**Q268.**

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

- (a) is zero
- (b) depends on the total mass of all the fragments
- (c) depends on the speeds of various fragments
- (d) is infinity

**Q269.**

An optically plane surface reflects a beam of light

- (a) as a parallel beam in one direction
- (b) as diffused beams in all directions
- (c) as parallel beams in all directions
- (d) as a diffused beam in one direction

**Q270. Q277.**

Water cannot be used to extinguish fire caused by electric current because

- (a) it may cause electrocution
- (b) it may cause hydrolysis
- (c) it may cause electrolysis
- (d) it may spoil the wiring

**Q278.**

A periscope works on the principle of

- (a) refraction
- (b) total internal reflection
- (c) diffraction

(d) reflection

**Q279.**

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

- (a) increases
- (b) decreases
- (c) No change
- (d) first increases and then decreases

**Q280.**

A rearview mirror for driving is

- (a) plain
- (b) concave
- (c) convex
- (d) inverted

**Q281.**

The Important unit of a microprocessor is

- (a) ALU
- (b) array of registers
- (c) control unit
- (d) All of the above

**Q282.**

Which one of the following has the highest value of specific heat?

- (a) Glass
- (b) Copper
- (c) Lead
- (d) Water

**Q283.**

The device used for locating submerged objects under sea is

- (a) sonar
- (b) radar
- (c) laser
- (d) maser

**Q284.**

The metal whose electrical conductivity is more is

- (a) copper
- (b) aluminum
- (c) silver
- (d) lead

**Q285.**

What happens to a liquid when the vapour pressure equals the atmospheric pressure?

- (a) The liquid cools
- (b) The liquid boils
- (c) No change
- (d) The liquid evaporates

**Q286.**

In nuclear reactor heavy water is used as

- (a) coolant
- (b) fuel
- (c) moderator
- (d) atomic smasher

**Q287.**

Water boils at a lower temperature on the hills because

- (a) it is cold on the hills
- (b) there is less carbon dioxide on the hills
- (c) there is a decrease in air pressure on the hills
- (d) There is less oxygen

**Q288.**

Why do birds not have respiratory trouble at the time of flying at high altitude ?

- (a) Their lungs are very large
- (b) They fly Inactively
- (c) They have extra air sacs
- (d) They use less oxygen

**Q289.**

The temperature which has the same reading on both Fahrenheit and Celsius scales is

- (a) 40°
- (b) 40°
- (c) 34°
- (d) 140°

**Q290.**

Kilowatt hour is the unit of

- (a) Energy
- (b) Power
- (c) Force
- (d) Momentum

**Q291.**

The part of the eye having the largest refractive index is :

- (a) cornea
- (b) aqueous humor
- (c) lens
- (d) vitreous humor

**Q292.**

Conversion of heat into electrical is achieved by using :

- (a) Ammeter
- (b) Hydrometer
- (c) Voltmeter
- (d) Thermocouple

**Q293.**

Ball pen functions on the principle of

- (a) Viscosity
- (b) Boyles Law
- (c) Gravitational force
- (d) surface tension

(d) becomes maximum for angle of incidence equal to  $45^\circ$

**Q294.**

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

- (a) Far sight
- (b) Myopia
- (c) Cataract
- (d) Hyper metropia

**Q295.**

When milk is churned the cream separates from it due to:

- (a) Frictional force
- (b) Centrifugal force
- (c) Gravitational force
- (d) Viscous forces

**Q296.**

Moving electric charge produces :

- (a) magnetic field
- (b) sound waves
- (c) light rays
- (d) heat waves

**Q297.**

The S.I. Unit of electric charge is :

- (a) ampere
- (b) coulomb
- (c) e.s.u
- (d) Kelvin

**Q298.**

Light beam which is highly directional is called:

- (a) eraser
- (b) grazer
- (c) maser
- (d) laser

**Q299.**

Permissible noise level at Residential area during night time is:

- (a) 45 dB (A)
- (b) 55 dB(A)
- (c) 75 dB(A)
- (d) 80 dB(A)

**Q300.**

Energy in reflected light :

- (a) does not depend on the angle of incidence
- (b) increases with the increase in angle
- (c) decreases with the increase in angle of incidence

**ANSWERS**

:

**1 d 2 a 3 c 4 a 5 a 6 a**  
**7 b 8 b 9 b 10 c 11 a 12 a**  
**13 c 14 a 15 c 16 b 17 b 18 b**  
**19 a 20 b 21 c 22 d 23 b 24 a**  
**25 b 26 c 27 d 28 a 29 c 30 a**  
**31 a 32 b 33 a 34 a 35 c 36 b**  
**37 b 38 b 39 d 40 b 41 c 42 a**  
**43 b 44 d 45 c 46 b 47 b 48 b**  
**49 a 50 c 51 c 52 d 53 c 54 c**  
**55 c 56 d 57 c 58 b 59 c 60 c**  
**61 b 62 c 63 a 64 a 65 b 66 b**  
**67 d 68 a 69 d 70 b 71 d 72 c**  
**73 c 74 a 75 b 76 b 77 d 78 c**  
**79 b 80 a 81 d 82 c 83 a 84 c**  
**85 c 86 c 87 b 88 b 89 b 90 d**  
**91 d 92 d 93 d 94 a 95 c 96 b**  
**97 a 98 c 99 d 100 d 101 b 102 a**  
**103 b 104 a 105 c 106 c 107 a 108 d**  
**109 b 110 b 111 d 112 a 113 b 114 b**  
**115 b 116 b 117 d 118 c 119 d 120 c**  
**121 c 122 b 123 c 124 c 125 a 126 a**  
**127 d 128 c 129 d 130 c 131 c 132 a**  
**133 d 134 d 135 c 136 c 137 b 138 d**  
**139 b 140 d 141 a 142 a 143 a 144 a**  
**145 a 146 a 147 a 148 b 149 a 150 b**  
**151 b 152 a 153 c 154 d 155 c 156 a**  
**157 b 158 b 159 a 160 b 161 a 162 c**  
**163 b 164 b 165 a 166 c 167 c 168 a**  
**169 d 170 c 171 d 172 d 173 c 174 b**  
**175 b 176 b 177 c 178 a 179 d 180 d**  
**181 d 182 c 183 b 184 a 185 c 186 a**  
**187 a 188 b 189 c 190 a 191 c 192 a**  
**193 c 194 a 195 c 196 a 197 c 198 d**  
**199 c 200 b 201 d 202 c 203 d 204 b**  
**205 d 206 a 207 b 208 c 209 a 210 b**  
**211 c 212 a 213 d 214 a 215 a 216 c**  
**217 b 218 a 219 c 220 a 221 d 222 c**  
**223 d 224 b 225 c 226 b 227 a 228 d**  
**229 a 230 d 231 c 232 b 233 b 234 c**  
**235 d 236 a 237 b 238 b 239 a 240 c**  
**241 b 242 d 243 c 244 c 245 b 246 b**  
**247 b 248 b 249 b 250 b 251 b 252 b**  
**253 b 254 b 255 c 256 b 257 d 258 a**  
**259 b 260 a 261 c 262 c 263 c 264 c**  
**265 b 266 b 267 b 268 a 269 a 270 a**  
**271 b 272 c 273 b 274 a 275 c 276 a**  
**277 a 278 b 279 a 280 c 281 d 282 d**  
**283 a 284 c 285 b 286 c 287 c 288 c**  
**289 b 290 a 291 c 292 d 293 d 294 b**  
**295 b 296 a 297 b 298 d 299 a 300 b**