

KNOWLEDGE HORIZON CLASSES

Test Series

- Q1.** A mirror forms a virtual image of a real object.
- (i) It must be a convex mirror.
 - (ii) It must be a concave mirror.
 - (iii) It must be a plane mirror.
 - (iv) It may be any of the mirrors mentioned above.
- Q2.** The angle of incidence is the angle between
- (i) The incident ray and the surface of the mirror
 - (ii) The reflected ray and the surface of the mirror
 - (iii) The normal to the surface and the incident ray
 - (iv) The normal to the surface and the reflected ray
- Q3.** An object placed at F of a convex lens will produce an image
- (i) At infinity
 - (ii) Highly enlarged
 - (iii) Real and Inverted
 - (iv) All of these
- Q4.** An object placed at 2F of a convex lens will produce an image
- (i) At 2F
 - (ii) Same size
 - (iii) Real and Inverted
 - (iv) All of these
- Q5.** Electrical signals generated by light sensitive cells of retina are sent to the brain via
- (i) Motor nerves
 - (ii) Optic nerves
 - (iii) Sensory nerves
 - (iv) Spinal cord
- Q6.** Accommodation of a human eye is the property of
- (i) The eye lens to adjust its focal length
 - (ii) The eye to see different colours
 - (iii) Filling the eyes with tears

- (iv) All of the above
- Q7.** Direction of conventional current is from
- (i) Negative terminal to positive terminal
 - (ii) Positive terminal to negative terminal
 - (iii) In any direction
 - (iv) In both the directions
- Q8.** Electric current is defined as the
- (i) Rate of flow of charges
 - (ii) Total quantity of charges flowing through the circuit
 - (iii) Number of electrons flowing through the circuit
 - (iv) None of the above
- Q9.** Potential difference is defined as
- (i) The amount of work done in moving a unit charge in a unit time
 - (ii) Distance between two terminals
 - (iii) Length of the connecting wire
 - (iv) The amount of work done in moving a unit charge
- Q10.** Heating effect of current passing through a wire depends on
- (i) Length of the wire
 - (ii) Time for which current is passed
 - (iii) Area of cross – section of the wire
 - (iv) All of the above
- Q11.** Power rating of an electric appliance indicates
- (i) The rate of consumption of electrical energy
 - (ii) Amount of heat evolved
 - (iii) Brightness of the light
 - (iv) Quality of the appliance
- Q12.** Which rule gives the direction of the magnetic field in a current carrying straight conductor?
- (i) Maxwell's left hand rule
 - (ii) Maxwell's right hand rule
 - (iii) Maxwell's cork screw rule
 - (iv) None of the above
- Q13.** In which of the following device are permanent magnets not used?
- (i) Speakers
 - (ii) Capacitors
 - (iii) Voltmeters
 - (iv) Dynamo

- Q14.** *Nipermag* is not composed of?
(i) Aluminium
(ii) Copper
(iii) Nickel
(iv) Titanium
- Q15.** How long are coal reserves expected to last?
(i) **300 years** (ii) **250 years** (iii) **50 years** (iv) **600 years**
- Q16.** Which among the following is a renewable source of energy?
(i) LPG (ii) CNG (iii) Water (iv) Coal
- Q17.** Out of the total energy reaching the earth's periphery how much is received at the earth's surface?
(i) **53%** (ii) **47%** (iii) **75%** (iv) **86%**
- Q18.** A solar water heater cannot be used to get hot water on
(i) a sunny day
(ii) a cloudy day
(iii) a hot day
(iv) a windy day
- Q19.** An object placed between F and $2F$ of a convex lens will produce an image
(i) Beyond $2F$
(ii) Enlarged
(iii) Real and Inverted
(iv) All of these
- Q20.** Refractive index of a substance is
(i) Speed of light in vacuum / Speed of light in the medium
(ii) Speed of light in water / Speed of light in the medium
(iii) Speed of light in the medium / Speed of light in air
(iv) All of these