

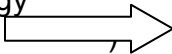
# CLASS X SAMPLE PAPER SCIENCE

## Science Multiple Chooses Questions

All Questions are compulsory

Time: 50 minutes

Marks: 50

1. Find the focal length of concave mirror radius of curvature is 32 cm  
(a) 15cm (b) 15.5 cm (c) 16cm (d) 16.5cm
2. The human eye can focus object at different distance by adjusting the focal length of the eye – lens this is due to:-  
(a) Presbyolia (b) Accommodation  
(c) Near sightedness (d) Far sightedness
3. How much is work done in moving a charge of 2C across two point having a potential difference of 12V?  
(a) 24J (b) 24.5J (c) 25J (d) 25.5J
4. In a electric motor the direction of current in the coil changed on each  
(a) Two rotation (b) one Rotation (c) half Rotation (d) one fourth rotation
5. Which of the following renewable Source of energy  
(a) Alcohol (b) Coal (c) Petrol (d) Natural Gas
6. At what distance from a concave mirror of focal length 10cm should an object 2cm long placed in order to get erect image 6cm tall  
(a) +6.6cm (b) -6.6 cm (c)  $\pm 6.6$ cm (d) none of these
7. We can see the sun before the actual sun rises by about  
(a) 5min (b) 4min (c) 2 hour (d) 2min
8. the other name of potential difference is :-  
(a) Amperage (b) waltage (c) voltage (d) Potential energy
9. Which way does the wire in diagram tends to move (Current   
(a) Upward (b) Downward (c) Left (d) Right
10. What will be the Calorific value of Charcoal?  
(a) 30kj/ g (b) 31Kj/g (c) 32Kj/g (d) 33Kj/g
11. Which Mirror has a wider field of view?  
(a) Concave (b) Convex (c) Both a & B (d) None of these
12. The human eye from the image of an object at its

- (a) Cornea (b) Iris (c) Pupil (d) Retina
13. What will be the resistivity of Tungsten?  
 (a)  $5.2 \times 10^{-8} \Omega\text{m}$  (b)  $5.2 \times 10^{-9} \Omega\text{m}$  (c)  $5.2 \times 10^{-7} \Omega\text{m}$  (d)  $5.2 \times 10^{-6} \Omega\text{m}$
14. A rectangular coil of copper wire is rotated in a magnetic field. The direction of induced current changed once  
 (a) Two rotation (b) one Rotation (c) half Rotation (d) one fourth rotation
15. Domestic gas cylinder like used Indian contains mainly \_\_\_\_\_  
 (a) Methane (b) Butane (c) Ethane (d) Propane
16. Which of the material cannot be used to make a lens?  
 (a) Water (b) Glass (c) Plastic (d) Clay
17. The least distance of distinct vision for a young adult with normal vision is about  
 (a) 25m (b) 2.5 cm (c) 25cm (d) 2.5m
18. A wire of resistance  $R_1$  is cut into 5 equal pieces these 5 pieces of wire are then  
 (a)  $1/25$  (b)  $1/5$  (c) 5 (d) 25
19. A generator with Commulator produces \_\_\_\_\_ Current  
 (a) Direct (b) Alternate (c) Both a & b (d) None of these
20. A solar water heater cannot used to get hot water in:-  
 (a) Sunny day (b) Cloudy day (c) Hot day (d) Wind Day
21. A diverging lens has a focal length of 3cm. Calculate the power  
 (a) +33.3D (b) -33.3D (c)  $\pm 33.3D$  (d) none of these
22. The change in focal length of the eye lens is caused by action of  
 (a) Pupil (b) Retina (c) Ciliary Muscles (d) Iris
23. If 5 resistances each of value  $0.2\Omega$  are connected in series what will be the resultant resistance  
 (a)  $1\Omega$  (b)  $2\Omega$  (c)  $3\Omega$  (d)  $4\Omega$
24. The device used for producing electric current is called a:-  
 (a) Generator (b) Ammeter (c) Motor (d) galvanometer
25. How much solar energy will be received by  $1\text{m}^2$  areas in one hour if the solar constant be  $1.4 \text{Kw/m}^2$   
 (a) 5039Kj (b) 5040Kj (c) 5041Kj (d) 5042Kj
26. Can a convex Mirror give the real image?  
 (a) Yes (b) No (c) Some times (d) None of these
27. What is the approximately focal length of the eye lens when ciliary muscles are fully relaxed?  
 (a) 25m (b) 2.5 cm (c) 25cm (d) 2.5m
28. A bulb is rated as 250V; 0.4A find its power  
 (a) 100W (b) 100.1 W (c) 100.2 W (d) 100.3W
29. at the time of short Circuit, then Current in the Circuit  
 (a) Reduce (b) Does not Change (c) Increase (d) Varies
30. Which of the following not a example of the biomass energy source  
 (a) Wood (b) Bio gas (c) Atomic Energy (d) Coal
31. What is the possible value of absolute refractive index of medium?  
 (a)  $n \leq 1$  (b)  $n \geq 1$  (c)  $n = 1$  (d)  $n \pm 1$

32. What is the range of normal eye?  
 (a) from 25cm to  $\infty$  (b) from 2.5cm to  $\infty$   
 (c) from 25m to  $\infty$  (d) from 2.5m to  $\infty$
33. Which of the following term do not represent electric power in circuit?  
 (a)  $I^2R$  (b)  $IR^2$  (c)  $VI$  (d)  $V^2/R$
34. Can you separated the North and South Pole of magnet  
 (a) Yes (b) No (c) Some times (d) None of these
35. Biomass is another form in which \_\_\_\_ energy manifests itself  
 (a) Solar (b) Bio gas (c) Atomic Energy (d) Coal
36. What is the sign of focal length & power of the convex lens?  
 (a) - ve (b) + ve (c)  $\pm$  ve (d) none of these
37. Approximately by how much times is the apparent duration of a day more than its true value  
 (a) 4mins (b) 5mins (c) 1 Hours (d)  $\frac{1}{2}$  Hours
38. An electric bulb is rated 220V & 100W when it is operated on 110V the power consumed will be  
 (a) 100W (b) 75W (c) 50W (d) 25W
39. A current carrying solenoid coil is suspended freely. In which direction will it settet  
 (a) N - S direction (b) S - N direction  
 (c) W - E direction (d) E - W direction
40. What is the range of temp. Which can be obtained from the use of bonty be solar cooker  
 (a)  $100^\circ$  to  $140^\circ\text{C}$  (b)  $110^\circ$  to  $140^\circ\text{C}$  (c)  $120^\circ$  to  $140^\circ\text{C}$  (d)  $130^\circ$  to  $140^\circ\text{C}$
41. What is the focal length of Glass Slab?  
 (a) Infinite (b) non infinite (c) Finite (d) none of these
42. What is observed colour of sky as seen from the moon Surface  
 (a) White (b) Blue (c) Yellow (d) Black
43. A battery of 6V is applied a cross a resisitance of  $15\ \Omega$  find the current following through the Circuit  
 (a) 0.3A (b) 0.4A (c) 0.5A (d) 0.6A
43. What is the sign of focal length & power of the convex lens?  
 (a) - ve (b) + ve (c)  $\pm$  ve (d) none of these
44. Which material is used to prepare an electromagnet?  
 (a) Soft metal (b) Soft steel (c) Hard matel (d) Hard Steel
45. What is the estimated wind power potential of India  
 (a) 450MW (b) 4500MW (c) 45000MW (d) 450000MW
46. two thin lens of power  $P_1$  to  $P_2$  ae placed in contact what is the power of the combination  
 (a)  $P_1 + P_2$  (b)  $P_1 - P_2$  (c)  $P_1 * P_2$  (d)  $P_1 / P_2$
47. A person can see near by object but cannot see the distance object what the name is given to this defect of vision  
 (a) Myopia (b) Presbyopia (c) Hypermetropia (d) none of these
48. How much heat is generated when a current I is passed through R for T  
 (a)  $I^2RT$  (b)  $IR^2T$  (c)  $IRT^2$  (d)  $(IRT)^2$

49. What is the frequency of AC being supplied in our home?  
(a) 48Hz      (b) 49Hz      (c) 50Hz      (d) 51Hz
50. Name the main constituent of bio gas  
(a) Ethane      (b) Methane      (c) Propane      (d) Hexane

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