



## Model Test

11. A positively charged glass rod attracts an object then the object must be  
(1 marks)

- ☐ -vely charged
- ☐ Neutral
- ☐ Either -vely charged or neutral
- ☐ Magnet

12. n drops of mercury of radius 'r' of each drop combine to form a single drop of radius R. The capacitance of bigger drop to smaller drop will be  
(1 marks)

- ☐  $n : 1$
- ☐  $n^{2/3} : 1$
- ☐  $n^{1/3} : 1$
- ☐  $n^3 : 1$

13. A dry cell has an emf of 1.5 V and internal resistance  $0.5\Omega$  connected with a load then 1A current flows through load. The potential difference across terminal of cell is  
(1 marks)

- ☐ 1.5 V
- ☐ 1 V
- ☐ 0.5 V
- ☐ 0

14. The magnetic field due to a long straight conductor carrying current at 10 cm is 0.04 T. The magnetic field at 40 cm from conductor will be  
(1 marks)

- ☐ 0.01 T
- ☐ 0.02 T



☐ 0.05 T

☐ 0.16 T

15. Two magnets of magnetic moment  $M$  each are placed at an angle of  $60^\circ$  touching at same point with same pole. The magnetic moment will be  
(1 marks)

☐  $M$ 
☐  $\sqrt{2}M$ 
☐  $\sqrt{3}M$ 
☐  $\frac{M}{\sqrt{2}}$ 

16. A proton and  $\alpha$  particle are ejected into a uniform magnetic field at right angles to the direction of field with equal speed. The ratio of radii of circular path in field will be  
(1 marks)

☐ 1 : 1

☐ 2 : 1

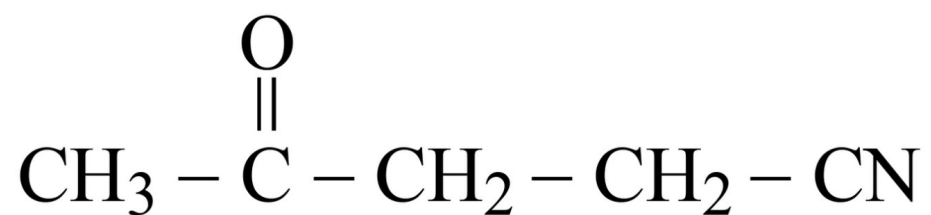
☐ 1 : 2

☐  $\sqrt{2} : 1$ 

17. On changing forward voltage in a diode from 0.5 V to 0.7 V the forward current changes by 1mA. The forward resistance of diode will be  
(1 marks)

☐  $100\Omega$ 
☐  $120\Omega$ 
☐  $200\Omega$ 
☐  $240\Omega$ 

18. The IUPAC name of organic compound



(1 marks)

☐ 4-cyanobutane-2-one

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☐ 5-cyanopentane-2-one

☐ 4-oxo butane-5-nitrile

19. Metamerism is a type of isomerism that has?

( 1 marks )

☐ Difference in nature of carbon chain

☐ Unequal distribution of carbon atom on either side of functional group

☐ Difference in the position of same functional group

☐ Different functional group

20. In the Down's cell  $CaCl_2$  is added to NaCl to achieve which of the following

( 1 marks )

☐ increase the solubility

☐ increase the dissociation

☐ increase conductivity

☐ lower melting point

Next



