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**Class-12 Sub.-Physics Dt-13/10/XX**

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**Multiple Choice Question-**

1 An electric field can deflect-

- A X-rays      B Neutron      C alpha-particle      D gamma rays.

2 A point charge  $q$  is placed in an electric field of intensity  $E$ . The force exerted on charge will be-

- A  $qE$       B  $q/E$       C  $E/q$       D none

3 The unit of electric field intensity is-

- A C-m      B N/C      C V/m      D J/C

4 The value of electron volt is:

- A  $2 \times 10^{-18} \text{ J}$     B  $1.5 \times 10^{-19} \text{ J}$     C  $1.6 \times 10^{-19} \text{ J}$     D None.

5 The potential on the surface of a hollow metallic sphere of radius 50 m is 50 V. The potential at the centre of sphere will be:

- A 10 V      B 50 V      C 250 V      D 0 V

6 Capacity of a spherical conductor is 1 micro farad, its radius will be:

- A 1.11 m      B 10 m      C 9 km      D 1.11 cm

7 64 identical drops each of capacitance 5 micro farad combine to form a big drop. The capacitance of big drop is:

- A 4 micro farad    B 25 micro farad    C 20 micro farad    D none

8 In current electricity, Ohm's is obeyed by all:

A Solids                  B Metals                  C Liquids                  D Gases.

9 With rise in temperature resistivity of a semiconductor :

A increases                  B decreases                  C remains const.                  D none.

10 n equal resistors are first connected in series and then connected in parallel. The ratio of the maximum to minimum resistance will be:

A  $1/n$                   B n                  C  $1/n^2$                   D  $n^2$

11 An electron is revolving in a circular orbit at the speed of  $6 \times 10^{15}$  round per second. Electric current in the loop will be:

A 0.96 mA                  B 0.96 micro-A                  C 28.8 A                  D none

12 A television of 200 watt is used for 4 hours. How many units of electricity will be used:

A 50                  B 20                  C 0.8                  D none

13 On the conservation of which quantity is Kirchhoff's second law is based:

A charge                  B momentum                  C energy                  D mass.

14  $\text{Wb/m}^2$  is the unit of which physical quantity:

A pole strength                  B magnetic field                  C absolute permeability                  D none

15 Which of the following is not a vector quantity:

A dipole moment                  B current element                  C electric flux                  D Lorentz force

16 Which of the following is not a scalar?

A electric current                  B electron mobility                  C current density                  D electric potential

17 The mean value of a. c. for a complete cycle is

A 2 x it's peak value                  B  $2 \div$  its peak value                  C Zero                  D infinity

18 An instrument used to measure a very small current is called

- A ammeter      B potentiometer      C galvanometer      D voltmeter

19 In Lenz's law, there is conservation of

- A charge      B momentum      C energy      D current

20 The working of generator is based on principle of

- A heating effect of current      B magnetic effect of current  
C chemical effect of current      D electromagnetic induction

21 The power factor varies between

- A 2 and 2.5      B 3.5 to 5      C 0 to 1      D 1 To 2

22 A 100 mH coil carries a current of 1 A. Energy stored in the form of magnetic field is

- A 0.5 J      B 1 J      C 0.05 J      D 0.1 J

23 Transformer is based on the principle of

- A self induction      B mutual induction      C eddy currents      D none of these

24 Core of transformer is made up of

- A soft iron      B steel      C iron      D alnico

25 The S I unit of magnetic flux is

- A weber      B oersted      C tesla      D gauss

**HELP US TO HELP YOU**