

Physics FSC Part 2 Chapter 12 Online MCQ's Test

Sr	Questions	Answers Choice
1	A capacitor stores energy in the form of.	A. Magnetic field B. Heat energy C. Electrical energy D. Mechanical energy
2	the force between two charge is 28 N. If paraffin wax of relative permittivity 2.8 is introduced between the charges as medium, then the force reduces to.	A. 25 N B. 20 N C. 10 N D. 15 N
3	The work done is bringing a unit positive charge from infinity to that point in an electric field is called.	A. Potential B. Potential difference C. Absolute potential D. All of these
4	Charge on electron is	A. 1.6×10^{-19} C B. 1.6×10^{-19} C C. 1.6×10^{-17} C D. 1.6×10^{17} C
5	The electric field lines are closer where the field is	A. Strong B. Weak C. Uniform D. Variable
6	NC-1 is the SI unit is	A. Force B. Charge C. Current D. Electric intensity
7	The quantity time constant RC has units of.	A. Charge B. Time C. Capacitance D. Resistance
8	Intensity of field inside a hollow charged sphere will be.	A. Negative B. Unaffected C. Zero D. Maximum
9	Dielectric constant ϵ_r for air is:	A. 1 B. 1.006 C. 1.0002 D. 1.0006
10	Electric potential of earth is taken to be zero because the earth is good:	A. Semiconductor B. Conductor C. Insulator D. Dielectric
11	The SI unit of relative permittivity is.	A. Fm-1 B. C2N-1m-2 C. Nm2C-2 D. No unit
12	Coulomb's force is:	A. Conservative force B. None conservative force C. Similar to frictional force D. None of the above
13	Which one of the following is correct	A. D. All of above
14	The electric field in some region of of space is uniform in magnitude and direction. Which one of the following five statements best describes the volume charge density (ρ) , in this region of space?	A. p = 0 B. p decreases linearly in the direction of the electric field C. p increases linearly in the direction of the electric field D. p increases linearly in the direction of the electric field

the direction of the electric field
D. p has a uniform value throughout the region
E.

15 The electrical intensity is equal to:

- A. $-\Delta r/\Delta v$
- B. $\Delta v/\Delta r$
- C. $\Delta v/\Delta v$
- D. $-\Delta v/\Delta r$

16 If the potential difference across two plates of capacitor is doubled, then energy stored in it will be.

- A. Two times
- B. Eight times
- C. Four times
- D. Remain same

17 Gauss's law can only be applied to.

- A. A curved surface
- B. A flat surface
- C. A closed surface
- D. A surface of any shape

18 Net charge enclosed by Gaussian surface is:

- A. zero
- B. maximum
- C. depend on intensity
- D. none of all

19 The net charge on a capacitor magnitude of charge of charge

- A. Infinity
- B. $2q$
- C. $Q/2$
- D. Zero

20 Drum of photocopier is made of.

- A. Copper
- B. Aluminum
- C. Nickel
- D. Cobalt