

Physics FSC Part 2 Chapter 12 Online MCQ's Test

| Sr | Questions | Answers Choice |
|----|--|--|
| 1 | A charge on 4 coulomb is in the field of intensity 4N/C the force on the charge is. | A. Uniform B. Non uniform C. Weak D. Strong |
| 2 | Two oppositely charged balls A and B attract the third ball C, when placed near them turn by turn The third ball C must be. | A. Positively charged B. Negatively charged C. Electrically neutral D. Positively and negatively charged |
| 3 | S.I unit of strength of electric field is | A. J/C B. C/V C. V/C D. N/C |
| 4 | If the distance between two charges is halved and charges are also doubled, then force between them will be. | A. Two time B. Four time C. Eight time D. Sixteen time |
| 5 | One of the applications of electrostatic induction is | A. Laser B. Photocopier C. X ray machine D. Wilson cloud chamber |
| 6 | A capacitor is charged with a battery and then it is disconnected. A slab of dielectric is now inserted between the plates, Then | A. The charge in the plates reduces and potential difference increase B. Potential difference between the plates increase, stored energy decreases and charge remains the same C. Potential difference between the plates decreases, stored energy decreases and charge remains unchanged D. None of them |
| 7 | Flux through any closed surface is: | A. $\frac{1}{\epsilon} \times \text{total charge enclosed in it}$ B. $\epsilon \times \text{total charge enclosed in it}$ C. $\frac{1}{\epsilon} \times \text{total charge enclosed in it}$ D. $\epsilon \times \text{total charge enclosed in it}$ |
| 8 | The process of copying is: | A. Axillugraphy B. Chromatography C. Xerography D. Spectrography |
| 9 | The number of electrons in one coulomb charge is equal to | A. 6.2×10^{18} electrons B. Zero electrons C. 1.6×10^{22} electrons D. 6.2×10^{21} electrons |
| 10 | A one microfarad capacitor of a TV is subjected to 4000 V potential difference. The energy stored in capacitor is: | A. 8 j B. 16 j C. 4×10^{-3} j D. 2×10^{-3} j |
| 11 | For which material medium, force between two charged particles is maximum. | A. Ammonia B. Germanium C. Mica D. Teflon |
| 12 | Electric flux is a: | A. Scalar quantity B. Vector quantity C. Variable quantity D. None of these |
| 13 | Coulomb's force is: | A. Conservative force B. None conservative force C. Similar to frictional force D. None of the above |

$$V = \frac{1}{4\pi\epsilon_0} \frac{q}{r^2}$$

| | | |
|----|--|--|
| 14 | Electric potential at a distance "r" from "q" is: | B. $V = \frac{1}{4\pi\epsilon_0} \frac{q}{r}$ C. $V = \frac{1}{4\pi\epsilon_0} \frac{q}{r^2}$ D. $V = \frac{1}{4\pi\epsilon_0} \frac{q}{r^2}$ |
| 15 | The electric field lines are closer where the field is | A. Strong B. Weak C. Uniform D. Variable |
| 16 | Some charge is being given to a conductor. Then its potential | A. Its maximum at surface B. Its maximum at its maximum at center C. Is remain same throughout the conductor D. Is maximum somewhere between surface and centre |
| 17 | Dielectric constant ϵ_r for air is: | A. 1 B. 1.006 C. 1.0002 D. 1.0006 |
| 18 | The capacitance of a capacitor depends upon. | A. Thickness of plates B. Charges on the plates C. Voltage applied D. Geometry of the capacitor |
| 19 | The quantity time constant RC has units of. | A. Charge B. Time C. Capacitance D. Resistance |
| 20 | The electric field in some region 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. $\rho = 0$ B. ρ decreases linearly in the direction of the electric field C. ρ increases linearly in the direction of the electric field D. ρ has a uniform value throughout the region E. |