

ECAT Physics Chapter 12 Electrostatics Online Test

Sr	Questions	Answers Choice
1	The nature of capacity of electrostatic capacitor depends on	A. Shape B. Size C. Thickness of plates D. Area
2	A sheet of aluminium foil of negligible thickness is introduced between the plates of a capacitor. The capacitance of the capacitor	A. Increases B. Decreases C. Remain unchanged D. Becomes infinite
3	The energy required to charge a capacitor of $5\mu\text{F}$ by connecting D.C. source of 20 KV is	A. 10 KJ B. 5 KJ C. 2 KJ D. 1 KJ
4	When a dielectric material is introduced between the plates of a charged condenser the electric field between the plates	A. Decreases B. Increases C. No change D. May increase or decrease
5	A capacitor of capacity $1\mu\text{F}$ is charged to 1 KV. The energy stored in J	A. 5 B. 0.5 C. 0.005 D. 50
6	If the distance between the plates of a parallel plate condenser of capacity $10\mu\text{F}$ is doubled then new capacity will be	A. $5\mu\text{F}$ B. $20\mu\text{F}$ C. $10\mu\text{F}$ D. $15\mu\text{F}$
7	The capacity of a parallel plat capacitor depends on the	A. Type to metal used B. Thickness of plates C. Potential applied across the plates D. Separation between the plates
8	In a charged capacitor the energy is stored in	A. Both in positive and negative charges B. Positive charges C. The edges of the capacitor plates D. The electric field between the plates
9	A condenser of capacity $50\mu\text{F}$ is charged to 10 V. The energy stored is	A. $1.25 \times 10^{-3} \text{ J}$ B. $3.75 \times 10^{-3} \text{ J}$ C. $2.5 \times 10^{-3} \text{ J}$ D. $5 \times 10^{-3} \text{ J}$
10	A metal plate of thickness half the separation between the capacitor plates of capacitance C is inserted. The new capacitance is	A. C B. C/2 C. Zero D. 2C
11	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. $4 \times 10^{-3} \text{ J}$ D. $2 \times 10^{-3} \text{ J}$

12	A medium of dielectric constant 'K' is introduced between the plates of parallel plate condenser. As a result its capacitance	<p>A. Increase k time B. Decreases k times C. Decreases $1/K$ times D. Remains unchanged</p>
13	Force acting upon a charged particle kept between the plates of a charged condenser if F . If one of the plates of the condenser is removed, force acting on the same will become	<p>A. Zero B. $F/2$ C. F D. $2F$</p>
14	A parallel plate capacitor is first charged and then a dielectric slab is introduced between the plates. The quantity that remains unchanged is	<p>A. Charge Q B. Potential V C. Capacity D. Energy U</p>
15	If we increase the distance between two plates of the capacitor, the capacitance will	<p>A. Increase B. Decrease C. Remain same D. First increase then decrease</p>