

PPSC Physics Full Book

Sr	Questions	Answers Choice
1	The charge on an isolated conductor always lies.	A. Within the conductor B. At the centre of the conductor C. On the surface of the conductor D. Outside the surface of the conductor
2	If a dielectric is placed between the plates of a capacitor, its capacitance.	A. Decreases B. Increases C. Remains unaffected D. Is zero
3	The permittivity of a medium.	A. Is a measure of the density B. Is equal to unity for air C. Depends on the charge density of the medium D. Determines the magnitude of an electric field that can be established by the medium
4	The capacitance of a capacitor increases with a decrease in.	A. Plate area B. Permittivity C. Plate separation D. Dielectric constant
5	On which parameter the time required to charge a capacitor depends upon.	A. magnitude of charge B. Applied potential difference C. Capacitance D. Time constant
6	According to Gauss's law the number of electric field lines crossing any closed surface is.	A. numerically equal to the enclosed charge B. Equal to the enclosed positive charge C. Equal to the electric field inside the surface D. Equal to the charge density on the surface.
7	As a positively charged rod is brought closer and closer to a positively charged electroscope the gold leaf.	A. diverges B. Converges C. is neutralized D. Is unaffected
8	The spacing of electric field lines between two identical point charges of opposite signs	A. Is not indication of the field direction B. Is not dependent on the magnitude of the charges C. Is an indication of the field strength D. Is large when the charges are very large
9	Electrostatic force as compared to gravitational force is	A. Zero B. infinite C. Very weak D. Very strong
10	The field inside a hollow spherical conductor is.	A. Constant zero B. Constant but not necessarily zero C. A function of charge on sphere D. a function of distance from the centre
11	What is the part of a simple D.C. motor that reverses the direction of current through the coil every half cycle.	A. Armature B. Brushes C. Commutator D. Slip rings
12	What happens when a 250 V, 2500 W water heater is connected to main supply using a plug fitted with a 5 A fuse.	A. The fuse in the plug melts B. The heater burns out C. The heater runs at half power D. The heater works normally
13	A torch bulb uses a 3 V supply and makes a current of 0.2 A. It is switched on for one minute	A. 0.6 J B. 12 J C. 6 J D. 3 J

	How much electrical energy is used.	C. 24 J D. 36 J
14	A heater which is to be used on a 250 V mains circuit, has a 5 A fuse in its plug Which of the following is the most powerful heater that can be used with this fuse.	A. 150 W B. 500 W C. 1,000 W D. 2,000 W
15	If a charged body is moved against the electric field it will gain.	A. P.E B. K.E. C. Electrical P.E. D. Gravitational energy
16	Condenser is used	A. To produce charge B. To change the direction of current C. To collect the charge D. As a good conductor of electricity
17	The relation between the voltage and current that flows in a resistor is.	A. $V = 1/R$ B. $R = V/I$ C. $V = I^2 R$ D. $I = V/R$
18	Magnetic fields do not interact with	A. Stationary electric charges B. Stationary permanent magnets C. Moving electric charges D. Moving permanent magnets
19	The force experienced by a unit positive charge at that point placed in an magnetic field is known as.	A. Electric field intensity B. Electric flux C. Electric potential D. Electric dipole
20	A pair of point charges with equal magnitude and opposite sign separated by a distance 'r' produce.	A. Electric dipole B. Electric charge C. Electric field D. electric arc
21	Which of the following defines P.E. per unit charge.	A. Electric current B. Charges C. Potential D. Electric field
22	Which of the following does not reflect the laws of static charges.	A. like charges repel B. Opposite charges attract C. Neutral charges repel D. Neutral objects are attracted to charged ones.
23	What is the about the electric field inside a metallic sphere.	A. It is zero B. It varies with the shape of the conductor C. It depends on the charge there D. It does not charge the metallic sphere
24	When a balloon sticks to the whiteboard It is an example of.	A. Conduction B. Induction C. Polarization D. Conservation of charge
25	Which method of charging is involved in making lightning.	A. Induction B. Friction C. Contact D. Convection
26	When a positive charge is allowed to move from positive to negative plate, then it will gain	A. P.E. B. K.E C. Gravitational energy D. Electrical P.E.
27	The capacity of a spherical conductor is numerically equal to its.	A. Surface area B. Diameter C. Radius D. Volume
28	As electric field intensity is a potential gradient, it may be expressed in the units of NC ⁻¹ or	A. volt B. Volt metre C. Volt per metre D. Joule
29	When a conductor situated in a dielectric is charged the energy resides.	A. Only on the dielectric B. Only on medium surrounding charge C. On the dielectric and medium both D. Only on the type of the charge
		A. The dielectric strength of the surrounding medium

The amount of charge which can be placed on a conductor does not depend on.

- surrounding medium.
 - B. Its capacitance
 - C. Its potential
 - D. Its size or shape
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