

PPSC Physics Topic 6 Electricity and Magnetism

Sr	Questions	Answers Choice
1	The electric bulb does not obey Ohm's law because.	A. Current changes B. Resistance changes C. Heat is produced D. All of these
2	Five joules of work is needed to shift 10 C of charge from one place to another The potential difference between the places is.	A. 0.5 V B. 2 V C. 5 V D. 10 V
3	In which of the following eddy current is not used	A. Induction furnace B. Automobile speedometer C. Electromagnetic damping D. X- rays diffraction
4	A resistor connected to a battery is heated due to current passing through it. Which of the following quantity does not change.	A. Resistivity B. Resistance C. Number of free electrons D. Drift velocity
5	What is a measure of the separation of positive and negative electrical charges in a system of charges.	A. charge polarization B. Electric dipole moment C. Electric field D. Electrostatic induction
6	The presence of a magnetic field can be detected by a	A. Small mass B. Stationary positive charge C. Stationary negative charge D. Magnetic compass
7	The potential difference between two points is equal to the difference of	A. Kinetic energy B. potential energy C. Electric current D. Charge energy
8	A galvanometer can be converted into voltmeter by connecting in series with the galvanometer a	A. Low resistance B. High resistance C. Resistance of intermediate range D. Shunt
9	Capacitance is directly proportional to	A. Distance between the plates B. Di electric strength C. Area of the plates D. Charge multiplied by the applied voltage
10	A number of spherical capacitors of different radii have same potentials The surface charge density on them	A. I equal B. Is proportional to their radii C. Is inversely proportional to their radii D. Is inversely proportional to square of their radii
11	In a simple D.C. motor the direction of current in the motor is reversed every half revolution to keep the motor turning in the same direction which part of the motor does this.	A. Brushes B. Coil C. Commutator D. Poles
12	The effective resistance offered by the resistance capacitance and inductance in an A.C. circuit is known as	A. Impedance B. Resistance C. Capacitance D. Reactance
13	When a pentavalent material like arsenic is added to a tetravalent material such as germanium, we get a.	A. n-type material B. p -type material C. diode D. super conductor
14	In modulation, low frequency signal is called	A. Fluctuated signal B. Loaded signal C. Modulated signal D. Harmonic signal

15	In a series resonant circuit, the current at resonance is.	B. Minimum C. Zero D. Sometimes maximum and sometimes minimum
16	The long distance transmission of electrical energy is done at.	A. High potential and low current B. High potential and high current C. Low potential and high current D. Low potential and low current
17	Which one of the following is not a measure of electric power.	A. V_i B. I^2R C. VR^2 D. V^2/R
18	It is deduced that a piece of metal is already a magnet if	A. A copper wire is attracted to it B. A copper wire is repelled by it C. One end of a compass is repelled by it D. Both ends of a compass needle are attracted to it.
19	A single silicon photovoltaic cell produces a current of the order of.	A. A few milliamperes B. $10^{2\text{ A}}$ C. $10^{3\text{ A}}$ D. $10^{4\text{ A}}$
20	Which one of the following materials has negative temperature coefficient.	A. Conductors B. Semiconductors C. Insulators D. Covalent bonds