PPSC Physics Topic 6 Electricity and Magnetism

Sr	Questions	Answers Choice
1	A diode cn be used as	A. Amplifier B. Rectifier C. Oscillator D. Transistor
2	The time constant of a RL circuit is.	A. L/R B. LR C. R/L D. L2/R
3	Two wires P and Q each of same length and the same material are connected in parallel to a battery The diameter of P is half that of Q What fraction of the total current passes through P.	A. 0.02 B. 0.25 C. 0.33 D. 0.50
4	The best instrument used for the measurement of emf of a cell a	A. A voltimeter B. An ammeter C. A potentiometer D. Wheatstone bridge
5	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
6	The effective resistance in an A.C. circuit is	A. An inductance B. An impedance C. A mutual inductance D. Always zero
7	The net charge on a condenser is	A. Zero B. Q/2 C. 2Q D. Infinity
8	A germanium atom is	A. Monovalent B. Diavalent C. Travalent D. Tetravalent
9	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
10	If a conductor sun infirmly stretched so that its length is increased in timed, then its resistance becomes.	A. n times the original resistance B. 1/n times the original resistance C. n2 times the original resistance D. n3 times the original resistance
11	When a point charge which is responsible for a force being exerted on another point charge is suddenly moved the second charge experience.	A. Nor charge of force B. An instantaneous change of force C. A sudden change of force of some later time D. an increase of its charge because of induction.
12	If a person winds a coil of wire around a steel rod and then passes an electric current through the wire then the	A. Steel rod becomes an electromagnet B. Steel rod becomes hot C. Wire becomes magnetized D. wire becomes demagnetized
13	What information is given by the tangent to a field that point of electric field.	A. Magnitude B. Direction C. Proper unit D. Dimensions
14	For an A.C. circuit the power factor is	A. Always les than one B. Always greater than one C. Always equal to one D. Absent
		A. Number of turns of the coil

15	On which factor the self induction does not depends upon.	B. the core material C. Weight of the coil D. Area of the cross section of the coil
16	A capacitor of capacitance F micro is fully charged from a 20 V d.c supply what is the energy delivered by 20 V supply.	A. 2 mJ B. 10 m j C. 20 mJ D. 25 mj
17	A choke coil is a coil with	A. Low inductance and low resistance B. Low inductance and high resistance C. High inductance and low resistance D. Low inductance and negligible resistance
18	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
19	Why should household appliances be connected in parallel with the voltage source.	A. To increase the resistance of the circuit B. To decreases the resistance of the circuit C. To provide each appliance the same voltage as the power source D. To provide each appliance the same current as the power source.
20	On which of the following parameters capacitance does not depend upon.	A. Area of the plates B. Medium between the plates C. Distance between the plates D. Nature of material for plates