

Electromagnetism

Sr	Questions	Answers Choice
1	An object gains excess negative charge after being rubbed against another object, which is:	<p>A. Neutral</p> <p>B. Negatively charged</p> <p>C. Positively charged</p> <p>D. Either, a, b or c</p>
2	The presence of a magnetic field can be detected by a	<p>A. small mass</p> <p>B. Stationary positive charge</p> <p>C. Stationary negative charge</p> <p>D. Magnetic compass</p>
3	If the change of current in a circuit induces a current in another circuit, this phenomena is known as:	<p>A. Self induction</p> <p>B. Mutual induction</p> <p>C. Electromagnetic induction</p> <p>D. None mutual induction</p>
4	Optical fibres works on the principle of:	<p>A. Reflection</p> <p>B. Refraction</p> <p>C. Total internal reflection</p> <p>D. Diffraction</p>
5	Totally reflecting prism is used in:	<p>A. Periscope</p> <p>B. Binoculars</p> <p>C. Periscope and binocular</p> <p>D. Telescope</p>
6	Number of poles in a magnet is:	<p>A. One</p> <p>B. Two</p> <p>C. Three</p> <p>D. Unlimited</p>
7	If current is flowing from bottom end to the top end in a wire, according to right hand rule the direction of line of forces would be:	<p>A. Anti-clock wise</p> <p>B. Clock wise</p> <p>C. Left and Right</p> <p>D. Along the conductor.</p>
8	The voltage is decreased by:	<p>A. Step-up transformer</p> <p>B. Step-down transformer</p> <p>C. A.C. generator</p> <p>D. D.C. Motor</p>
9	A transformer has 100 turns in its primary and 500 turns in secondary coil. If 6 volts D.C is applied across its primary, the voltage induced across its secondary coil will be:	<p>A. 0 volt</p> <p>B. 30 volts</p> <p>C. 45 volts</p> <p>D. 60 volts</p>
10	According to Fleming's left hand rule the direction of force on the conductor is given by:	<p>A. Thumb</p> <p>B. Fore finger</p> <p>C. Middle finger</p> <p>D. None of these</p>
11	Changing magnetic field in a closed circuit can induce:	<p>A. e.m.f</p> <p>B. Electric current</p> <p>C. Force</p> <p>D. Both A and B</p>
		A. Boolean

12	George Boole invented:	<p>algebra</p> <p>B. Arithmetic algebra</p> <p>C. Mean algebra</p> <p>D. Geometry</p>
13	The true ratio of a transformer is 10. It means:	<p>A. $V_s = 10V_p$</p> <p>B. $N_s = N_p/10$</p> <p>C. $N_s = 10N_p$</p> <p>D. $V_s = V_p/10$</p>
14	What is the direction of the magnetic field lines inside a bar magnet?	<p>A. From north pole to south pole</p> <p>B. From south pole to north pole</p> <p>C. From side to side</p> <p>D. There are no magnetic field lines.</p>
15	In A.C. generator flux will be zero if coil is to the field.	<p>A. 90°</p> <p>B. 45°</p> <p>C. Parallel</p> <p>D. Inclined</p>
16	The shape of magnetic lines of force in case of a straight current carrying conductor is:	<p>A. Elliptical</p> <p>B. Triangular</p> <p>C. Rectangular</p> <p>D. Circular</p>
17	The step-up transformer	<p>A. Increases the input current</p> <p>B. Increase the input voltage</p> <p>C. Has more turns in the primary</p> <p>D. Has less turns in the secondary coil</p>
18	Transformer Works on the principle of:	<p>A. Self induction</p> <p>B. Mutual induction</p> <p>C. Electro static</p> <p>D. Induction</p>
19	Electric motor converts electrical energy into:	<p>A. Chemical energy</p> <p>B. Solar energy</p> <p>C. Heat energy</p> <p>D. Mechanical energy</p>
20	In C.R.O grid is always connected with potential:	<p>A. Negative</p> <p>B. Positive</p> <p>C. High positive</p> <p>D. Zero positive</p>