Electromagnetism

Sr	Questions	Answers Choice
1	When we heat the metal at high temperature they emit:	A. Holes<o:p></o:p> B. Protons<o:p></o:p> C. Neutrons<o:p></o:p> D. Electrons<o:p></o:p>
2	When a current carrying conductor is placed in magnetic field at right angle to it. The direction of force acting upon it is:	A. The same as direction of field B. Opposite the direction of field C. Makes an angle of 45^owith the current D. At right angle to both the field and the current.
3	The angle at which prism deviates the incident ray is called:	A. Angle of incident<o:p></o:p> B. Angle of reflection<o:p></o:p> C. Angle of deviation<o:p></o:p> D. Angle of minimum deviation<o:p></o:p>
4	Two uncharged objects a and b are rubbed against each other. When object b is placed near a negatively charged object c, the two objects repel each other. Which of these statements is true about object a:	A. Remains uncharged<o:p></o:p> B. Becomes positively charged<o:p></o:p> C. Becomes negatively charged<o:p></o:p> D. Unpredictable<o:p></o:p>
5	The value of refractive index of water is:	A. 2.33<o:p></o:p> B. 1.36<o:p></o:p> C. 1.33<o:p></o:p> D. 1.39<o:p></o:p>
6	D.C. motor converts.	A. Mechanical energy into electrical energy B. Mechanical energy into chemical energy C. Electrical energy into mechanical energy D. Electrical energy into chemical energy
7	Totally reflecting prism is used in:	A. Periscope<o:p></o:p> B. Binoculars<o:p></o:p> C. Periscope and binocular<o:p></o:p> D. Telescope<o:p></o:p>
8	Who discovered Electromagnetic induction?	A. Michael Faraday B. Flemiing C. Ohm D. Coulomb
9	An object gains excess negative charge after being rubbed against another object, which is:	A. Neutral<o:p></o:p> B. Negatively charged<o:p></o:p> C. Positively charged<o:p></o:p> D. Either, a, b or c<o:p></o:p>
		A. 1.00<o:p></o:p> B. 1.33<o:p></o:p>

10	The refractive index of ice is:	 C. 1.31<o:p></o:p> D. 2.42<o:p></o:p>
11	A transformer has Np =100 and Ns =500 , if 6 volt D.C is applied across its primary, the induced voltage.	A. 0 V B. 30 V C. 45 V D. 60 V
12	The coil of a transformer which is connected to A.C is called:	A. Primary coil B. Secondary coil C. Field coil D. Armature coil
13	Spherical mirrors are used in:	A. Medical<o:p></o:p> B. Search light<o:p></o:p> C. Microscope<o:p></o:p> D. All of these<o:p></o:p>
14	When a ray of light enters from denser medium to rare medium, the angle of incidence for which angle of refraction is 90° is called:	A. Angle of incidence<o:p></o:p> B. Critical angle<o:p></o:p> C. Angle of refraction<o:p></o:p> D. Angle of deviation<o:p></o:p>
15	The lines will be in the form of concentric circles, if conductor is:	A. Circular B. Straight C. Solenoid D. None of these
16	The refracted light striking to the side of prism is called:	A. Refracted ray<o:p></o:p> B. Incident ray<o:p></o:p> C. Reflected ray<o:p></o:p> D. Emergent ray<o:p></o:p>
17	The end of solenoid from which lines of force emerge out is called:	A. North pole B. South pole C. North and south pole D. None of these
18	When did Michael Faraday discover Electromagnetic induction?	A. 1841 B. 1831 C. 1821 D. 1811
19	The standard group of bits in digital electronic is:	A. 5 bits<o:p></o:p> B. 6 bits<o:p></o:p> C. 7 bits<o:p></o:p> D. 8 bits<o:p></o:p>
20	The output of a two input NOR gate is 1 when:	A. A is 1 and B is 0<o:p></o:p> B. A is 0 and B is 1<o:p></o:p> C. Both a and b are 0<o:p></o:p> D. Both a and b are 1<o:p></o:p>
21	When you rub a plastic rod against your hair several times and put it near some bits of paper, the pieces of papers are attracted towards it. What does this observation indicate:	A. The rod and the paper are oppositely charged<o:p></o:p> B. The rod acquires a positive charge<o:p></o:p> C. The rod and the paper have the same charges<o:p></o:p> D. The rod acquires a negative charge<o:p></o:p>
22	The true ratio of a transformer is 10. It means:	A. Vs = 10Vp B. Ns = Np/10 C. Ns = 10Np

		C. Ns = 10Np D. VS= Vp/10
23	The line which passes through pole of the mirror and center of curvature is called principal:	A. Axis<o:p></o:p> B. Focus<o:p></o:p> C. Line<o:p></o:p> D. None of these<o:p></o:p>
24	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:	A. 0 volt B. 30 volts C. 45 volts D. 60 volts
25	If the change of current in a circuit induces a current in another circuit, this phenomena is known as:	A. Self induction B. Mutual induction C. Electromagnetic induction D. None mutual induction
26	Which device is used to increases / decreases A.C Voltage?	A. Electric motor B. Transformer C. A.C Generator D. Solenoid
27	If the current in a wire which is placed perpendicular to a magnetic field increases, the force on the wire.	A. Increases B. Decreases C. Remains the same D. Will be zero
28	Transformer Works on the principle of:	A. Self induction B. Mutual induction C. Electro statatic D. Induction
29	In C.R.O grid is always connected with potential:	A. Negative<o:p></o:p> B. Positive<o:p></o:p> C. High positive<o:p></o:p> D. Zero positive<o:p></o:p>
30	Which part of a D.C. motor reverses the direction of current through the coil every half-cycle.	A. The armature B. The commutator C. The burshes D. The slip rings
31	In D.C.motor split rings are made of:	A. Steel B. Carbon C. Copper D. Iron
32	According to Fleming's left hand rule the direction of magnetic field is indicated by:	A. Thumb B. Forefinger C. Middle finger D. Right hand rule
33	Which device has two coils, primary and secondary?	A. D.C. Motor B. Transformer C. A.C. genrator D. a and b
34	The number of lines of force in a magnetic field depends upon.	A. Shape of coil B. Sixe of coil C. Magnet D. Strength of field
35	Changing magnetic field in a closed circuit can induce:	A. e.m.f B. Electric current C. Force D. Both A and B
36	According to Fleming's left hand rule the direction of force on the conductor is given by:	A. Thumb B. Fore finger C. Middle finger D. None of these
37	The turn ratios of a transformer is 10. It means.	A. I_s = 10I_p B. N_s = N_p C. N_s = 10 N_p D. V_s =V_p /10
38	What is the direction of the magnetic field lines inside a bar magnet?	A. From north pole to south pole B. From south pole to north pole C. From side to side D. There are no magnetic field lines

		D. There are no magnetic field lines.
39	A current carrying conductor produces a field around it is called:	A. Electric field B. Magnetic field C. Both a and b D. None of these
40	In totally reflecting prism one angle is of 90°, and other two angles are of:	A. 30°,30°<o:p></o:p> B. 45°,90°<o:p></o:p> C. 45°,45°<o:p></o:p> D. 40°,40°<o:p></o:p>
41	In A.C. generator flux will be zero if coil is to the field.	A. 90^o B. 45^o C. Parallel D. Inclined
42	The speed of light in water is:	A. 2.0x10³ ms⁻¹<o:p></o:p> B. 2.5x10³ ms⁻¹<o:p></o:p> C. 2.3x10⁸ ms⁻¹<o:p></o:p> D. 2.3x10⁻⁸ ms⁻¹<o:p></o:p>
43	In SI the unit of charge is:	A. Joule<o:p></o:p> B. Volt<o:p></o:p> C. Coulomb<o:p></o:p> D. Watt<o:p></o:p>
44	Eight bits combine to form:	A. A byte<o:p></o:p> B. Megabyte<o:p></o:p> C. Kilobyte<o:p></o:p> D. Gigabyte<o:p></o:p>
45	When an electric current passes through a conductor, which field is produced around it?	A. Electric field B. Magnetic field C. Gravitational field D. Electrostatic field
46	Which type of energy is converted into mechanical energy in the D.C. Motor.	A. Magnetic energy B. Heat energy C. Electrical energy D. Chemical energy
47	Which statement is true about the magnetic poles?	A. Unlike poles repel B. Like poles attract C. Magnetic poles do not effect each other D. A single magnetic pole does not exist
48	Magnetic effect of electric current was first discovered by:	A. Faraday B. Ampere C. Volta D. Lenz
49	Electric motor converts electrical energy into:	A. Chemical energy B. Solar energy C. Heat energy D. Mechanical energy
50	A converging lens becomes a magnifying glass when an object is placed:	A. Outside of focal length<o:p></o:p> B. Inside the focal length<o:p></o:p> C. Equal of focal length<o:p></o:p> D. At double of focal length<o:p></o:p>
51	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:	A. Anti-clock wise B. Clock wise C. Left and Right D. Along the conductor.

52	In electric motor, the brushes are made of:	A. Lead B. Graphite C. Iron D. Wood
53	The ray of light after reflection from concave mirror passes through:	A. Centre<o:p></o:p> B. Principal focus<o:p></o:p> C. Pole<o:p></o:p> D. Radius<o:p></o:p>
54	The force on a current carrying conductor is maximum if angle between field and conductor is:	A. 0^o B. 90^o C. 180^o D. 45^o
55	A.C generator works on the principle of:	A. Electrostatic induction B. Electromagnetic induction C. Law of gravitation D. Third law of motion
56	The output of a NAND gate is 0 when:	A. Both of its inputs are 0<o:p></o:p> B. Both of its inputs are 1<o:p></o:p> C. Any of its inputs is 0<o:p></o:p> D. Any of its inputs is 1<o:p></o:p>
57	In totally reflecting prism one angle is of:	A. 45°<o:p></o:p> B. 90°<o:p></o:p> C. 180°<o:p></o:p> D. 120°<o:p></o:p>
58	One micro coulomb charge is equal to:	A. 10⁻³c<o:p></o:p> B. 10³c<o:p></o:p> C. 10⁶c<o:p></o:p> D. 10⁻⁶c<o:p></o:p>
59	The shape of magnetic lines of force in case of a straight current carrying conductor is:	A. Eliptical B. Trangular C. Rectangular D. Circular
60	Which animal have ability to move his eye lens:	A. Snake<o:p></o:p> B. Fish<o:p></o:p> C. Ant<o:p></o:p> D. Tiger<o:p></o:p>
61	Bouncing back of light after striking the surface is called:	A. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Refraction B. Reflection<o:p></o:p> C. Diffraction<o:p></o:p> D. Interference<o:p></o:p>
		A. Smaller<o:p></o:p> B. Larger<o:p>

62	In compound microscope, the objective have focal length than eye-piece:	</o:p> C. Equal<o:p> </o:p> D. Equal and larger<o:p></o:p>
63	The cathode ray oscilloscope consists of main parts:	A. Two<o:p></o:p> B. Three<o:p> </o:p> C. Four<o:p></o:p> D. Five<o:p></o:p>
64	The direction of induced e.m.f. in a circuit is in accordance with conservation of.	A. Mass B. Charge C. Momentum D. Energy
65	A positive electric charge:	A. Attracts other positive charge<o:p></o:p> B. Repels other positive charge<o:p></o:p> C. Attract a neutral charge<o:p></o:p> D. Repels a neutral charge<o:p></o:p>
66	Iron core is used in tranformer to:	A. Enhance the flux B. Decrease the flux C. Keep flux the same D. botha a and b
67	George Boole invented:	A. Boolean algebra<o:p></o:p> B. Arithmetic algebra<o:p></o:p> C. Mean algebra<o:p></o:p> D. Geometry<o:p> </o:p>
68	The step-up transformer	A. Increases the input current B. Increase the input voltage C. Has more turns in the primary D. Has less turns in hte secondary coil
69	According to coulomb's law, what happens to the attraction of two oppositely charged objects as their distance of separation increases:	A. Increases<o:p> </o:p> B. Decreases<o:p> </o:p> C. Remains unchanged<o:p></o:p> D. Cannot be determined<o:p></o:p>
70	The instrument which is used to display the magnitude of changing electric current is called:	A. Evacuated tube<o:p></o:p> B. Cathode rays oscilloscope<o:p></o:p> C. Television tube<o:p></o:p> D. Picture tube<o:p></o:p>
71	Optical fibres works on the principle of:	A. Reflection<o:p> </o:p> B. Refraction<o:p> </o:p> C. Total internal reflection<o:p></o:p> D. Diffraction<o:p> </o:p>
72	Transformer which increase voltage is called.	A. Step-up transformer B. Step down transformer C. D.C.Moter D. A.C.genrator
73	The voltage is decreased by:	A. Step-up transformer B. Step-down transformer C. A.C. generator D. D.C. Motor
74	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

75	In NOT gate number of input terminals is/are:	A. 1 B. 2 C. 3 D. 4
76	The minimum value of angle of deviation is called:	A. Minimum angle<o:p></o:p> B. Incident angle<o:p></o:p> C. Angle of minimum deviation<o:p></o:p> D. None of these<o:p></o:p>
77	Transformer works on _____ supply.	A. A.C B. D.C C. Battery D. Both A and B
78	The magnetic field of a solenoid resembles as:	A. Iron wire B. U-shape magnet C. Bar magnet D. Point charge.
79	Number of poles in a magnet is:	A. One B. Two C. Three D. Unlimited
80	To see from submarine and the ship at the surface of water, we use:	A. Telescope<o:p></o:p> B. Microscope<o:p></o:p> C. Periscope<o:p></o:p> D. Prism<o:p></o:p>