

## Current Electricity

Sr	Questions	Answers Choice
1	The point through which rays of light pass after reflection from concave mirror is called principal:	A. Focus B. Circle C. Axis D. Radius
2	Mathematical form of Ohm's law is:	A. $V = IR$ B. $V = I2R$ C. $V = Qt$ D. $V = IR^2$
3	The S.I unit of electric current is:	A. Volt B. Ampere C. Coulomb D. Watt
4	The distance between principal focus and pole of mirror is called:	A. Principal focus B. Focal length C. Aperture D. Image
5	How Galvanometer is connected in circuit to detect current?	A. In Series B. In Parallel C. Fixed D. Variable
6	Half of radius of curvature is called:	A. Focal length B. Principal focus C. Axis D. Aperture
7	The property of substance, which opposes the flow of current through it is called.	A. Resistance B. Reactance C. Resistivity D. None of these
8	The ampere is a unit of:	A. Energy B. Potential difference C. Electric potential D. Electric current
9	Which wire has lowest resistance?	A. Thick wire B. Thin wire C. Very thin wire D. All
10	Electron gun has an electrode called for controlling the flow of electrons in the beam:	A. Plate B. Grid C. Screen D. Filament
11	What is the power rating of a lamp connected to a 12 v source when it carries 2.5 A?	A. 4.8 W B. 14.5 W C. 30 W D. 60 W
12	Which we double the voltage in a simple electric circuit. We double the	A. Current B. Power C. Resistance D. both a and b
13	The S.I unit of electric power is:	A. Volt B. Watt C. Ampere D. Joule
14	As the temperature of a conductor rises, its resistance.	A. Increase B. Decrease C. Does not change

	D. None of these
15	Mathematical formula of electromotive force (e.m.f) is: A. $E = W/Q$ B. $E = Q/W$ C. $E = WQ$ D. $E = W^2Q$
16	Example of mechanical waves is: A. Radio waves B. X-rays C. Light waves D. Sound waves
17	Which type of image is produced by the converging lens of human eye if it views a distant object: A. Real, erect, same size B. Real, inverted, diminished C. Virtual, erect, diminished D. Virtual, inverted, magnified
18	Resistance of conductor is directly proportional to: A. Length B. Pressure C. Area D. All of these
19	An electric current in conductors is due to the flow of: A. Positive ions B. Negative ions C. Positive charge D. free electron
20	J.J Thomson observed deflection of cathode rays in: A. 1895 B. 1896 C. 1897 D. 1998
21	What is the voltage across a $6\Omega$ resistor when 3 A of current passes through it? A. 2 V B. 9 V C. 18 V D. 36 V
22	Which combination forms NAND gate: A. AND & OR B. AND & NOT C. NOT & OR D. NAND & NOT
23	The resistance of voltmeter is: A. zero B. low C. Very high D. $10\Omega$
24	The sensation of sound persists in our brain for: A. 0.1 sec B. 0.01 sec C. 1 sec D. 10 sec
25	The current used in houses is: A. A.C. B. Conventional current C. Current D. D.C
26	Joule's law is $W =$ _____
27	Image formed on a camera is: A. Real, inverted, and diminished B. Virtual, upright and diminished C. Virtual, upright and magnified D. Real, inverted and magnified
28	The unit of resistance is: A. $\Omega \cdot m$ B. $\Omega$ C. V D. C
29	When resistance are connected in series the current passing through them is . A. Different B. Zero C. The same D. None of these
30	Electric potential and e.m.f. A. are the same terms B. are the different terms C. have different units D. both b and c

31	Which of the following quantities is not change during refraction of light:	B. <p class="MsoNormal">Its speed</o:p></p> C. <p class="MsoNormal">Its frequency</o:p></p> D. <p class="MsoNormal">Its wavelength</o:p></o:p></p>
32	Which instrument is used to detect current?	A. Galvanometer B. Voltmeter C. Ammeter D. Electroscope
33	An object is placed at the Centre of curvature of a concave mirror. The image produced by the mirror is located:	A. <p class="MsoNormal">Out beyond the centre of curvature</o:p></o:p></p> B. <p class="MsoNormal">At the centre of curvature</o:p></o:p></p> C. <p class="MsoNormal">Between the centre of curvature and the focal point</o:p></o:p></p> D. <p class="MsoNormal">At the focal point</o:p></o:p></p>
34	The index of refraction depends on:	A. <p class="MsoNormal">The focal length</o:p></o:p></p> B. <p class="MsoNormal">The speed of light</o:p></o:p></p> C. <p class="MsoNormal">The image distance</o:p></o:p></p> D. <p class="MsoNormal">The object distance</o:p></o:p></p>
35	A converging mirror with a radius of 20cm creates a real image 30 cm from the mirror. What is the object distance:	A. <p class="MsoNormal">5.0 cm</o:p></o:p></p> B. <p class="MsoNormal">7.5 cm</o:p></o:p></p> C. <p class="MsoNormal">15 cm</o:p></o:p></p> D. <p class="MsoNormal">20 cm</o:p></o:p></p>
36	We can distinguish between the notes of a piano and flute due to ..... of sound.	A. <p class="MsoNormal">Loudness</o:p></o:p></p> B. <p class="MsoNormal">Pitch</o:p></o:p></p> C. <p class="MsoNormal">Quality</o:p></o:p></p> D. <p class="MsoNormal">Intensity</o:p></o:p></p>
37	The diameter of spherical mirror is called:	A. <p class="MsoNormal">Curvature</o:p></o:p></p> B. <p class="MsoNormal">Aperture</o:p></o:p></p> C. <p class="MsoNormal">Sphere</o:p></o:p></p> D. <p class="MsoNormal">Both a and b</o:p></o:p></p>
38	In medical field, C.R.O is used to display:	A. <p class="MsoNormal">Heart beats</o:p></o:p></p> B. <p class="MsoNormal">Pictures of organs</o:p></o:p></p> C. <p class="MsoNormal">Pictures of bones</o:p></o:p></p> D. <p class="MsoNormal">Blood pressure</o:p></o:p></p>
39	What is the voltage across a $6\Omega$ resister when 3A current passes through it?	A. 2V B. 9V C. 18V D. 36V
40	LDR can act as:	A. <p class="MsoNormal">Diode</o:p></o:p></p> B. <p class="MsoNormal">Switch</o:p></o:p></p> C. <p class="MsoNormal">Transistor</o:p></o:p></p> D. <p class="MsoNormal">Rectifier</o:p></o:p></p>
41	According to Ohm's law $V = \underline{\hspace{2cm}}$	A. $I^{sup}2R$ B. $IR^{sup}2$ C. $IR$ D. $I/R$
42	The unit of power is _____	A. Volt B. Watt C. Joule D. Coulomb
43	The characteristics of sound by which we can distinguish between two sounds of same loudness and pitch is called.	A. <p class="MsoNormal">Intensity</o:p></o:p></p> B. <p class="MsoNormal">Quality</o:p></o:p></p> C. <p class="MsoNormal">Loudness</o:p></o:p></p> D. <p class="MsoNormal">Pitch</o:p></o:p></p>
44	The more negative potential of grid, the more electrons will be:	A. <p class="MsoNormal">Attracted</o:p></o:p></p> B. <p class="MsoNormal">Repelled</o:p></o:p></p> C. <p class="MsoNormal">Attracted as well as repelled</o:p></o:p></p> D. <p class="MsoNormal">Neither attracted nor repelled</o:p></o:p></p>
45	What should household appliances be connected in parallel with the voltage source?	A. to increase the resistance of the circuit B. to decrease 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

46	The resistance of conductors is due to:	A. Protons B. Fixed atoms C. Molecules D. Neutrons
47	If we double both the current and the voltage in a circuit while keeping its resistance constant, the power.	A. remains unchanged B. halves C. doubles D. four time
48	The current which changes its direction is called:	A. Current B. A.C. C. Conventional current D. D.C.
49	The mirror whose inner surface is reflecting is called:	A. <p class="MsoNormal">Concave mirror&lt;/o:p&gt;&lt;/p&gt; B. <p class="MsoNormal">Convex mirror&lt;/o:p&gt;&lt;/p&gt; C. <p class="MsoNormal">Mirror&lt;/o:p&gt;&lt;/p&gt; D. <p class="MsoNormal">Lens&lt;/o:p&gt;&lt;/p&gt;</p></p></p></p>
50	The equivalent resistance of a parallel combination is	A. equal to sum of all resistance B. is greater than the largest resistance of combination C. is smaller than the smallest resistance of combination D. All of these
51	What happens to the intensity of the brightness of the lamps connected in series as more and more lamps are added?	A. Increases B. Decreases C. Remains the same D. Can not be predicted
52	The S.I unit of potential difference is:	A. Ampere B. Coulomb C. Volt D. Watt
53	Which gate is used for safety alarm:	A. <p class="MsoNormal">AND&lt;/o:p&gt;&lt;/p&gt; B. <p class="MsoNormal">NAND&lt;/o:p&gt;&lt;/p&gt; C. <p class="MsoNormal">OR&lt;/o:p&gt;&lt;/p&gt; D. <p class="MsoNormal">NOR&lt;/o:p&gt;&lt;/p&gt;</p></p></p></p>
54	The combined resistance of two identical resistors, connected in series is $8\Omega$ . Their combined resistance in a parallel arrangement will be:	A. $2\Omega$ B. $4\Omega$ C. $8\Omega$ D. $12\Omega$
55	The rate of flow of charge through any cross-sectional area is called:	A. potential difference B. Energy C. Coulomb D. Electric current
56	In mathematical form of Ohm's law, "R" is:	A. Resistance B. Specific resistance C. Resistor D. Resistivity
57	Specific resistance of silver = _____ $\times 10^{-8}$ Ohm-meter	A. 5.25 B. 2.75 C. 1.69 D. 1.62
58	AND operation is represented by:	A. <p class="MsoNormal">Dot (.)&lt;/o:p&gt;&lt;/p&gt; B. <p class="MsoNormal">Addition (+)&lt;/o:p&gt;&lt;/p&gt; C. <p class="MsoNormal">Division (&lt;span style="font-family: Arial, sans-serif; color: rgb(34, 34, 34); background-image: initial; background-position: initial; background-size: initial; background-repeat: initial; background-attachment: initial; background-origin: initial; background-clip: initial;"&gt;/&gt;+&lt;/span&gt;)&lt;/o:p&gt;&lt;/p&gt; D. <p class="MsoNormal">Minus (-)&lt;/o:p&gt;&lt;/p&gt;</p></p></p></p>
59	Specific resistance of copper is _____ $\times 10^{-8}$ Ohm-meter	A. 1.62 B. 1.69 C. 5.25 D. 2.75
60	The mirror whose outer surface is reflecting is called:	A. <p class="MsoNormal">Concave mirror&lt;/o:p&gt;&lt;/p&gt; B. <p class="MsoNormal">Convex mirror&lt;/o:p&gt;&lt;/p&gt; C. <p class="MsoNormal">Mirror&lt;/o:p&gt;&lt;/p&gt; D. <p class="MsoNormal">Lens&lt;/o:p&gt;&lt;/p&gt;</p></p></p></p>
61	What type of graph is in between V and I?	A. Curved B. Parabola C. Straight line D. None of these

If a ray of light in glass is incident on an air surface at

A. 

Refract only</o:p></p>  
B. 

Deflect only</o:p></p>

62	Incident on an air surface at an angle greater than the critical angle, the ray will:	A. $\nabla p \text{ class="MsoNormal">reflect only$ B. $\nabla p \text{ class="MsoNormal">Partially refract and partially reflect$ C. $\nabla p \text{ class="MsoNormal">Diffract only$
63	The screen of a cathode ray tube consists of a thin layer of:	A. Sodium B. Nitrogen C. Oxygen D. Phosphorus
64	The unit of potential difference is:	A. Volt B. Coulomb C. Ampere D. Joule
65	The equivalent resistance in parallel combination is:	A. $R_{\text{eq}} = R_1 + R_2 + R_3 + \dots + R_n$ B. $R_{\text{eq}} = 1/R_1 + 1/R_2 + 1/R_3 + \dots + 1/R_n$ C. a and b D. None of these
66	Which instrument measures the potential difference:	A. Voltmeter B. Barometer C. Galvanometer D. Ammeter
67	The A.C. used in our houses has frequency _____ cycle/sec	A. 60 B. 30 C. 50 D. 130
68	The critical angle for a beam of light passing from water into air is 48.8 degrees. This mean that all light rays with an angle of incidence greater than this angle will be:	A. Absorbed B. Totally reflected C. Partially reflected and partially transmitted D. Totally transmitted
69	The unit of ( $\rho$ ) in formula $R=\rho L/a$ is _____.	A. $\Omega$ B. $\Omega \cdot m$ C. $\Omega \cdot m^{2/3}$ D. $\Omega \cdot m^{-2/3}$
70	Which one is a safety device?	A. Switch B. Fuse C. Circuit breaker D. Both B and C
71	Electric current in conductors is due to the flow of:	A. Positive ions B. Negative ions C. Positive charge D. Free electrons
72	That period in which voltage repeats its value in equal intervals is called:	A. cycle B. Time period C. Frequency D. Amplitude
73	Battery converts chemical energy into which energy:	A. Mechanical B. Electrical C. Thermal D. None of these
74	The speed of sound in a liquid is .....than that in gases:	A. Ten times B. Fifteen times C. Five times D. Two times
75	Current is equal to:	A. $IR^2$ B. CV C. $Q/t$ D. IR
76	An object is 14 cm in front of a convex mirror. The image is 5.8 cm behind the mirror. What is the focal length of the mirror:	A. -4.1 cm B. -8.2 cm C. -9.9 cm D. -20 cm

- 77 Which type of image is formed by a convex lens on a screen:
- A. <p class="MsoNormal">Inverted and real</o:p></p>
  - B. <p class="MsoNormal">Inverted and virtual</o:p></p>
  - C. <p class="MsoNormal">Upright and real</o:p></p>
  - D. <p class="MsoNormal">Upright and virtual</o:p></p>
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- 78 The center of curved surface of spherical mirror is called:
- A. <p class="MsoNormal">Focus</o:p></p>
  - B. <p class="MsoNormal">Axis</o:p></p>
  - C. <p class="MsoNormal">Centre</o:p></p>
  - D. <p class="MsoNormal">Pole</o:p></p>
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- 79 A conductor of electric current is:
- A. Wood
  - B. Rubber
  - C. Plastic
  - D. Copper
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- 80 In OR operation inputs are connected as:
- A. <p class="MsoNormal">Series</o:p></p>
  - B. <p class="MsoNormal">Parallel</o:p></p>
  - C. <p class="MsoNormal">Both series or parallel</o:p></p>
  - D. <p class="MsoNormal">None of these</o:p></p>