Physics 10th Class English Medium Unit 5 Online Test

Sr	Questions	Answers Choice
1	The S.I unit of electric current is:	A. Volt B. Ampere C. Coulomb D. Watt
2	The S.I unit of potential difference is:	A. Ampere B. Coulomb C. Volt D. Watt
3	Mathematical formula of electromotive force (e.m.f) is:	A. E = W/Q B. E = Q/W C. E = WQ D. E = W2Q
4	Which instrument measures the potential difference:	A. Voltmeter B. Barometer C. Galvanometer D. Ammeter
5	Electric current in conductors is due to the flow of:	A. Positive ions B. Negative ions C. Positive charge D. Free electrons
6	In mathematical form of Ohm's law, "R" is:	A. Resistance B. Specific resistance C. Resistor D. Resistivity
7	Which wire has lowest resistance?	A. Thick wire B. Thin wire C. Very thin wire D. All
8	A conductor of electric current is:	A. Wood B. Rubber C. Plastic D. Copper
9	The S.I unit of electric power is:	A. Volt B. Watt C. Ampere D. Joule
10	What is the voltage across a 6Ω resister when 3A current passes through it?	A. 2V B. 9V C. 18V D. 36V
11	Mathematical form of Ohm's law is:	A. V = IR B. V = I2R C. V = Qt D. V = IR2
12	Which one is a safety device?	A. Switch B. Fuse C. Circuit breaker D. Both B and C
13	An electric current in conductors is due to the flow of:	A. Positive ions B. Negtive ions C. Positive charge D. free electron
14	What is the voltage across a 6Ω resistor when 3 A of current passes through it?	A. 2 V B. 9 V C. 18 V D. 36 V
15	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

16	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
17	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
18	Which we double the voltage in a simple electric circuit. We double the	A. Current B. Power C. Resistance D. both a and b
19	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
20	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
21	The combined resistance of two identical resistors, connected in series is 8Ω. Their combined resistance in a parallel arrangement will be:	A. 2Ω <!--[endif]--><o:p></o:p> B. 4Ω C. 8Ω D. 12Ω
22	The ampere is a unit of:	A. Energy B. Potential differrence C. Electric potential D. Electric current
23	The rate of flow of charge through any cross-sectional area is called:	A. potential difference B. Energy C. Coulomb D. Electric current
24	Battery converts chemical energy into which energy:	A. Mechanical B. Electrical C. Thermal D. None of these
25	The resistance of conductors is due to:	A. Protons B. Fixed atoms C. Molecules D. Neutrons
26	The unit of potential difference is:	A. Volt B. Coulomb C. Ampere D. Joule
27	According to Ohm's law V =_____	A. I²R B. IR² C. IR D. I/R
28	What type of graph is in between V and I?	A. Curved B. Parabola C. Straight line D. None of these
29	The unit of (ρ) in formula R=ρ.L/a is_____.	A. Ω B. Ω-m C. Ω-m² D. Ω-m⁻²
30	The unit of resistance is:	A. Ω-m B. Ω C. V D. C
31	Resistance of conductor is directly proportional to:	A. Length B. Pressure C. Area D. All of these
32	The equivalent resistance in parallel combination is:	A. R_c=R₁+R₂+R₃ +.....+R_n B. R_c=1/R₁+1/R₂+1/R₃+.....+1/R_n C. a and b D. None of these

33	Which instrument is used to detect current?	A. Galvanometer B. Voltmeter C. Ammeter D. Electroscope
34	How Galvanometer is connected in circuit to detect current?	A. In Series B. In Parallel C. Fixed D. Variable
35	Joule's law is W = _____	A. IR/t B. IRt² C. IR²t D. I²Rt
36	The unit of power is _____	A. Volt B. Watt C. Joule D. Coulomb
37	The A.C. used in our houses has frequency _____ cycle/sec	A. 60 B. 30 C. 50 D. 130
38	The current used in houses is:	A. A.C. B. Conventiona current C. Current D. D.C
39	The current which changes its direction is called:	A. Current B. A.C. C. Conventional current D. D.C.
40	That period in which voltage repeats its value in equal intervals is called:	A. cycle B. Time period C. Frequency D. Amplitude
41	The resistance of voltmeter is:	A. zero B. low C. Very high D. 10Ω
42	Specific resistance of silver = _____ x 10^{-s}Ohm-meter	A. 5.25 B. 2.75 C. 1.69 D. 1.62
43	Specific resistance of copper is _____ x 10^{-8}Ohm-meter	A. 1.62 B. 1.69 C. 5.25 D. 2.75
44	Current is equal to:	A. IR² B. CV C. Q/t D. IR
45	As the temperature of a conductor rises, its resistance.	A. Increase B. Decrease C. Does not change D. None of these
46	The property of substance, which opposes the flow of current through it is called.	A. Resistance B. Reactance C. Resistivity D. None of these
47	When resistance are connected in series the current passing through them is .	A. Different B. Zero C. The same D. None of these
48	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
49	The sensation of sound persists in our brain for:	A. 0.1 sec<o:p></o:p> B. 0.01 sec<o:p></o:p> C. 1 sec<o:p></o:p> D. 10 sec<o:p></o:p>
50	The speed of sound in a liquid is .....than that	A. Ten times<o:p></o:p> B. Fifteen times<o:p></o:p>

	liquid is ……than that in gases:	C. Five times<o:p></o:p> D. Two times<o:p></o:p>
51	We can distinguish between the notes of a piano and flute due to …… of sound.	A. Loudness<o:p></o:p> B. Pitch<o:p></o:p> C. Quality<o:p></o:p> D. Intensity<o:p></o:p>
52	The characteristics of sound by which we can distinguish between two sounds of same loudness and pitch is called.	A. Intensity<o:p></o:p> B. Quality<o:p></o:p> C. Loudness<o:p></o:p> D. Pitch<o:p></o:p>
53	Example of mechanical waves is:	A. Radio waves<o:p></o:p> B. X-rays<o:p></o:p> C. Light waves<o:p></o:p> D. Sound waves<o:p></o:p>
54	Which of the following quantities is not change during refraction of light:	A. Its direction<o:p></o:p> B. Its speed<o:p></o:p> C. Its frequency<o:p></o:p> D. Its wavelength<o:p></o:p>
55	A converging mirror with a radius of 20cm creates a real image 30 cm from the mirror. What is the object distance:	A. 5.0 cm<o:p></o:p> B. 7.5 cm<o:p></o:p> C. 15 cm<o:p></o:p> D. 20 cm<o:p></o:p>
56	An object is placed at the Centre of curvature of a concave mirror. The image produced by the mirror is located:	A. Out beyond the centre of curvature<o:p></o:p> B. At the centre of curvature<o:p></o:p> C. Between the centre of curvature and the focal point<o:p></o:p> D. At the focal point<o:p></o:p>
57	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<o:p></o:p> B. -8.2 cm<o:p></o:p> C. -9.9 cm<o:p></o:p> D. -20 cm<o:p></o:p>
58	The index of refraction depends on:	A. The focal length<o:p></o:p> B. The speed of light<o:p></o:p> C. The image distance<o:p></o:p> D. The object distance<o:p></o:p>
59	Which type of image is formed by a convex lens on a screen:	A. Inverted and real<o:p></o:p> B. Inverted and virtual<o:p></o:p> C. Upright and real<o:p></o:p> D. Upright and virtual<o:p></o:p>
60	Which type of image is produced by the converging lens of human eye if it views a distant object:	A. Real, erect, same size<o:p></o:p> B. Real, inverted, diminished<o:p></o:p> C. Virtual, erect, diminished<o:p></o:p> D. Virtual, inverted, magnified<o:p></o:p>
61	Image formed on a camera is:	A. Real, inverted, and diminished<o:p></o:p> B. Virtual, upright and diminished<o:p></o:p> C. Virtual, upright and magnified<o:p></o:p> D. Real, inverted and magnified<o:p></o:p>
62	If a ray of light in glass is incident on an air surface at an angle greater than the critical angle, the ray will:	A. Refract only<o:p></o:p> B. Reflect only<o:p></o:p> C. Partially refract and partially reflect<o:p></o:p> D. Diffract only<o:p></o:p>

63	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<o:p></o:p> B. Totally reflected<o:p></o:p> C. Partially reflected and partially transmitted<o:p></o:p> D. Totally transmitted<o:p></o:p>
64	The diameter of spherical mirror is called:	A. Curvature<o:p></o:p> B. Aperture<o:p></o:p> C. Sphere<o:p></o:p> D. Both a and b<o:p></o:p>
65	The center of curved surface of spherical mirror is called:	A. Focus<o:p></o:p> B. Axis<o:p></o:p> C. Centre<o:p></o:p> D. Pole<o:p></o:p>
66	Half of radius of curvature is called:	A. Focal length<o:p></o:p> B. Principal focus<o:p></o:p> C. Axis<o:p></o:p> D. Aperture<o:p></o:p>
67	The point through which rays of light pass after reflection from concave mirror is called principal:	A. Focus<o:p></o:p> B. Circle<o:p></o:p> C. Axis<o:p></o:p> D. Radius<o:p></o:p>
68	The distance between principal focus and pole of mirror is called:	A. Principal focus<o:p></o:p> B. Focal length<o:p></o:p> C. Aperture<o:p></o:p> D. Image<o:p></o:p>
69	The mirror whose inner surface is reflecting is called:	A. Concave mirror<o:p></o:p> B. Convex mirror<o:p></o:p> C. Mirror<o:p></o:p> D. Lens<o:p></o:p>
70	The mirror whose outer surface is reflecting is called:	A. Concave mirror<o:p></o:p> B. Convex mirror<o:p></o:p> C. Mirror<o:p></o:p> D. Lens<o:p></o:p>
71	Electron gun has an electrode called for controlling the flow of electrons in the beam:	A. Plate<o:p></o:p> B. Grid<o:p></o:p> C. Screen<o:p></o:p> D. Filament<o:p></o:p>
72	The more negative potential of grid, the more electrons will be:	A. Attracted<o:p></o:p> B. Repelled<o:p></o:p> C. Attracted as well as repelled<o:p></o:p> D. Neither attracted nor repelled<o:p></o:p>
73	In medical field, C.R.O is used to display:	A. Heart beats<o:p></o:p> B. Pictures of organs<o:p></o:p> C. Pictures of bones<o:p></o:p> D. Blood pressure<o:p></o:p>
74	LDR can act as:	A. Diode<o:p></o:p> B. Switch<o:p></o:p> C. Transistor<o:p></o:p> D. Rectifier<o:p></o:p>
75	Which gate is used for safety alarm:	A. AND<o:p></o:p> B. NANAD<o:p></o:p> C. OR<o:p></o:p> D. NOR<o:p></o:p>
76	AND operation is represented by:	A. Dot (.)<o:p></o:p> B. Addition (+)<o:p></o:p> C. Division (<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;">÷) <o:p></o:p> D. Minus (-)<o:p></o:p>

77	In OR operation inputs are connected as:	A. Series<o:p></o:p> B. Parallel<o:p></o:p> C. Both series or parallel<o:p></o:p> D. None of these<o:p></o:p>
78	Which combination forms NAND gate:	A. AND & OR<o:p></o:p> B. AND & NOT<o:p></o:p> C. NOT & OR<o:p></o:p> D. NAND & NOT<o:p></o:p>
79	J.J Thomson observed deflection of cathode rays in:	A. 1895<o:p></o:p> B. 1896<o:p></o:p> C. 1897<o:p></o:p> D. 1998<o:p></o:p>
80	The screen of a cathode ray tube consists of a thin layer of:	A. Sodium<o:p></o:p> B. Nitrogen<o:p></o:p> C. Oxygen<o:p></o:p> D. Phosphorus<o:p></o:p>