Basic Electronics

Sr	Questions	Answers Choice
1	Two switches attached in series work on which operation?	A. AND operation B. OR operation C. NOT operation D. NOR operation
2	Digital technology is used in:	A. Bulb B. Radar C. Electric motor D. All of these
3	Electronics is a branch of:	A. Mass B. Applied Physics C. Mechanics D. Nuclear Physics
4	The closed switch in Boolean expression is represented by:	A. 0 B. 1 C. 10 D. 2
5	Analogue quantity is:	A. Time B. Pressure C. Distance D. All of these
6	Big unit of capacitance is:	A. Farad<o:p></o:p> B. Volt<o:p></o:p> C. Watt<o:p></o:p> D. Coulomb<o:p></o:p>
7	Value of ‘k’ depends upon:	A. System of unit<o:p></o:p> B. Nature of medium<o:p></o:p> C. Both a and b<o:p></o:p> D. None of these<o:p></o:p>
8	Electronics is the study of principles by means of which we control the:	A. Flow of electrons. B. Nuclear fission C. Fusion reaction D. Radiations
9	The amount of current that can be painful is:	A. 0.005A<o:p></o:p> B. 0.001A<o:p></o:p> C. 1A<o:p></o:p> D. 2A<o:p></o:p>
10	The digits used in electronics are:	A. 1 B. 0 C. 0 and 1 D. 1 and 2
11	The process by which electrons are emitted by a hot metal surface is known as:	A. Boiling<o:p></o:p> B. Evaporation<o:p></o:p> C. Conduction<o:p></o:p> D. Thermionic emission<o:p></o:p>
12	The base of computer operation are:	A. 1,2 B. 0, 1 C. 0, 2 D. 1, 10
13	Static electricity can be generated by:	A. Lubrication<o:p></o:p> B. Friction<o:p></o:p> C. Motion<o:p></o:p> D. Smaller the objects<o:p></o:p>
14	The particles emitted from a hot cathode surface are:	A. Positive ions B. Negative ions C. Proton D. Electron
15	What does a switch do:	A. Oppose the current<o:p></o:p> B. Open and close the circuit<o:p></o:p> C. Store energy<o:p></o:p> D. Provide voltage<o:p></o:p>

16	If A input is 1 and B is zero, then in AND operation output will be:	A. 0 B. 0.1 C. 1 D. None of these
17	The electrostatic force acting on two charges each of 1C separated by 1m is about:	A. 9X10⁹ N<o:p></o:p> B. 9X10⁻⁹ N<o:p></o:p> C. 9X10⁸ N<o:p></o:p> D. 9X10⁻⁸ N<o:p></o:p>
18	If a neutral body is brought near to the electroscope its leaves:	A. Diverge<o:p></o:p> B. Contract<o:p></o:p> C. Shut<o:p></o:p> D. Remain in normal position<o:p></o:p>
19	Those quantities whose values change gradually or stay constant are called:	A. Physical quantities B. Digital quantities C. Log quantities D. Analog quantities
20	Electric field lines were introduced by:	A. Faraday<o:p></o:p> B. Newton<o:p></o:p> C. Coulomb<o:p></o:p> D. Joule<o:p></o:p>
21	The two inputs of a NAND gate are A and B. Its output would be zero when:	A. A = 0, B = 0 B. A = 1, B= 0 C. A = 1 , B = 1 D. A = 0 , B = 1
22	If the field is stronger than lines of force are to each other:	A. Far away<o:p></o:p> B. Separated<o:p></o:p> C. Closer<o:p></o:p> D. No effect<o:p></o:p>
23	The symbol of AND operation is:	A. + B. - C. . D. *
24	Which type of capacitor is cylindrical in shape:	A. Paper capacitor<o:p></o:p> B. Mica capacitor<o:p></o:p> C. Variable capacitor<o:p></o:p> D. Plates capacitor<o:p></o:p>
25	Which device is used to show the change in the value of current or electrical potential as a graph?	A. Cathode ray tube B. Electron gun C. Oscilloscope D. Transformer
26	Positive charge can be produced by:	A. Combing in hair<o:p></o:p> B. Rubbing glass rod on silk<o:p></o:p> C. By rubbing ebonite rod on wool<o:p></o:p> D. By rubbing glass rod wool<o:p></o:p>
27	The logical operation performed by this gate is:	A. AND B. NOR C. NAND D. OR
28	The open switch Boolean expression is represented by:	A. 0 B. 1 C. 10 D. 2
29	If the distance between two point charges is reduced to half, the coulomb's force become:	A. Half<o:p></o:p> B. Two times<o:p></o:p> C. One fourth<o:p></o:p> D. Fourth times<o:p></o:p>
30	Each volt of lightening contains energy:	A. 4x10⁶ joules<o:p></o:p> B. 1000 joules<o:p></o:p> C. 1000 million joules<o:p></o:p> D. 10 joules<o:p></o:p>
31	1 Pico farad is equal to:	A. 10⁻⁹F<o:p></o:p> B. 10¹²F<o:p></o:p> C. 10⁻¹²F<o:p></o:p> D. 10⁻⁶F<o:p></o:p>
32	SI unit of capacitance is:	A. Joule<o:p></o:p> B. Volt<o:p></o:p> C. Watt<o:p></o:p> D. Farad<o:p></o:p>

33	To protect the gold leaves of electroscope from the external electric disturbances, the aluminum foil is grounded by a thin wire, which is made up of:	A. Aluminum<o:p></o:p> B. Silver<o:p></o:p> C. Copper<o:p></o:p> D. Brass<o:p></o:p>
34	Power of hair dryer is:	A. 1000 W<o:p></o:p> B. 750 W<o:p></o:p> C. 10 W<o:p></o:p> D. 75 W<o:p></o:p>
35	Give the number of factors which affect the ability of a capacitor to store charge.	A. 2 B. 3 C. 4 D. 5
36	The converter of digital to analogue signal is:	A. ADC B. DAC C. DATC D. DTC
37	The particles emitted from a hot cathode surface are:	A. Positive ions<o:p></o:p> B. Negative ions<o:p></o:p> C. Protons<o:p></o:p> D. Electrons<o:p></o:p>
38	The quantities, whose values remain constant or vary continuously are called.	A. Analogue quantities B. Digital quantities C. Maximum quantities D. Minimum quantities.
39	Public address system is the example of :	A. Analogue electronics B. Digital electonics C. Binary system D. None of these
40	If the distance between the charged bodies is much greater as compared to their sizes then the bodies are considered is:	A. Positive charge<o:p></o:p> B. Negative charge<o:p></o:p> C. Point charge<o:p></o:p> D. Zero charge<o:p></o:p>
41	Boolean expression for AND operation is:	A. $X = \overline{A}$ B. X = A + B C. X = A . B D. $X = \overline{AB}$
42	The emission of electron from the surface of hot metal is called:	A. Ionization B. Conduction C. Thermionic emission D. Convection
43	When a positive charge of 2 coulombs is placed at a point in an electric field, it experiences a force of 6N. The intensity of electric field at this point is:	A. 6 NC⁻¹<o:p></o:p> B. 3 NC⁻¹<o:p></o:p> C. 12 NC⁻¹<o:p></o:p> D. 1.5 NC⁻¹<o:p></o:p>
44	If Current flowing through switch then the output is expressed as:	A. 0 B. 1 C. -1 D. 2
45	The amount of current that can be felt is:	A. 1A<o:p></o:p> B. 0.1A<o:p></o:p> C. 0.001 A<o:p></o:p> D. 2A<o:p></o:p>
46	AND gate can be formed by using two:	A. NOT gates B. OR gates C. NOR gates D. Nand gates
47	What will be the capacitance of capacitor by joining them in parallel:	A. Increased<o:p></o:p> B. Much less<o:p></o:p> C. Decrease<o:p></o:p> D. No change<o:p></o:p>
48	Earth wire is connected to the:	A. Power house<o:p></o:p> B. Transformer<o:p></o:p> C. Ground<o:p></o:p> D. Generator<o:p></o:p>
49	In electrostatic all charges are in:	A. The same direction<o:p></o:p> B. Opposite direction<o:p></o:p> C. Motion<o:p></o:p> D. Static state<o:p></o:p>

50	SI unit of electric potential is:	A. watt<o:p></o:p> B. volt<o:p></o:p> C. coulomb<o:p></o:p> D. joule<o:p></o:p>
51	The unit of electrical energy is:	A. Joule<o:p></o:p> B. Watt<o:p></o:p> C. Volt<o:p></o:p> D. Electron volt(eV)<o:p></o:p>
52	Capacitors that are used in resonant circuits that tune radios to particular frequencies, such circuits are called:	A. Series circuits<o:p></o:p> B. Filter circuits<o:p></o:p> C. Parallel circuits<o:p></o:p> D. AC circuits<o:p></o:p>
53	The product of charge ‘q’ and potential difference is equal to:	A. Power<o:p></o:p> B. Force<o:p></o:p> C. Capacitance<o:p></o:p> D. Energy<o:p></o:p>
54	If we double the distance between two charges, then force becomes:	A. 4-times<o:p></o:p> B. ¼ th<o:p></o:p> C. Double<o:p></o:p> D. Half<o:p></o:p>
55	The process by which electrons are emitted by a hot metal surface is known as:	A. Boiling B. Evaportion C. Conduction D. Thermionic emission
56	Which instrument is used to measure current, resistance and potential difference:	A. Galvanometer<o:p></o:p> B. Digital meter<o:p></o:p> C. Voltmeter<o:p></o:p> D. Ammeter<o:p></o:p>
57	A and B are the two inputs of a NOR gate. Its output would be 1 when:	A. A = 1, B = 1 B. A = 0 , B = 1 C. A = 1, B = 0 D. A = 0 , B = 0
58	If X = A,B, then X is 1 when:	A. A and B are 1 B. A or B is 0 C. A is 0 and B is 1 D. A is 1 and B is 0
59	Simplest electrical circuits use:	A. One wire<o:p></o:p> B. Two wires<o:p></o:p> C. Four wires<o:p></o:p> D. Five wires<o:p></o:p>
60	The output of an AND gate is only 1, when:	A. Both of its inputs are zero B. Anyone of the two inputs is zero C. Both of its inputs are 1 D. Anyone of the two inputs is 1
61	Positive charge in an electric field always tend to move:	A. Does not move<o:p></o:p> B. From lower to higher potential<o:p></o:p> C. From higher to lower potential<o:p></o:p> D. All of these<o:p></o:p>
62	Electroscope is used for detecting:	A. Current<o:p></o:p> B. Charge<o:p></o:p> C. Voltage<o:p></o:p> D. Resistance<o:p></o:p>
63	In 1950, physicists observed that in cathode ray tube a special type of rays produced from cathode, these rays were called:	A. Cathode rays B. X-rays C. Alpha rays D. Gamma rays
64	The device which converts digital quantities into analog quantities is called:	A. ADC B. DAC C. ACD D. CAD
65	The amount of current that causes the loss of muscle control is:	A. 0.1A<o:p></o:p> B. 0.015A<o:p></o:p> C. 2A<o:p></o:p> D. 1A<o:p></o:p>
		A. 9X10²⁰ Nm²C²<o:p></o:p> B. 8X10⁹Nm²C²

66	The value of K in SI unit is:	<o:p></o:p> C. 9X10⁹Nm²C²<o:p></o:p> D. 10X10⁻⁹Nm²C⁻²<o:p></o:p>
67	One coulomb is equal to charge of electrons:	A. 6.25x10⁻¹⁹<o:p></o:p> B. 6.25x10¹⁹<o:p></o:p> C. 6.25x10¹⁸<o:p></o:p> D. 6.25x10⁻¹⁸<o:p></o:p>
68	For the emission of electrons from the tungsten filament the values of current and voltage are taken as:	A. 0.1 A and 2V B. 0.2 A and 4V C. 0.3A and 6V D. 0.4A and 8V
69	In variable capacitor, dielectric medium is:	A. Paper<o:p></o:p> B. Air<o:p></o:p> C. Mica<o:p></o:p> D. Ceramic<o:p></o:p>
70	1 Nano farad is equal to:	A. 1X10⁻¹²F<o:p></o:p> B. 1X10⁹F<o:p></o:p> C. 1X10⁻⁹F<o:p></o:p> D. 1X10⁻⁶F<o:p></o:p>
71	The converter of analogue to digital signal is:	A. ADC B. DAC C. ATDC D. None of these
72	1 volt is equal to:	A. JC<o:p></o:p> B. JC⁻¹<o:p></o:p> C. JC⁻²<o:p></o:p> D. JC⁻³<o:p></o:p>
73	Those quantities whose values do not remain constant are called:	A. physical quantities B. Digital quantites C. Log quantities D. Analog quantities
74	The output of a two input NOR gate is 1 when:	A. A is 1 and B is 0 B. A is 0 and B IS 1 C. Both A and B are 0 D. Both A and B are 1
75	Capacitors are used to store:	A. Current B. Voltage C. Charge D. Resistance
76	The output of OR gate would be '0' When:	A. Both of its inputs are zero B. One of its two inputs is zero C. Both of its inputs ar 1 D. Any one of its inputs is 1
77	If one of the resistors in a parallel circuit is removed, the total resistance will be:	A. Doubled<o:p></o:p> B. Decreased<o:p></o:p> C. Increased<o:p></o:p> D. Remain same<o:p></o:p>
78	SI unit of electric intensity is:	A. Watt<o:p></o:p> B. NC⁻¹<o:p></o:p> C. NS⁻¹<o:p></o:p> D. Nm<o:p></o:p>
79	The output of a NAND gate is 0 when	A. Both of its inputs are 0 B. Both of its inputs are 1 C. any of its inputs is 0 D. any of its inputs is 1
80	electric intensity is a quantity:	A. scalar<o:p></o:p> B. vector<o:p></o:p> C. base<o:p></o:p> D. none of these<o:p></o:p>
81	If the potential energy of none coulomb charge is one joule then its potential will be:	A. 5 volt<o:p></o:p> B. 2 volt<o:p></o:p> C. 3 volt<o:p></o:p> D. 1 volt<o:p></o:p>