

Physics 10th Class English Medium Unit 7 Online Test

Sr	Questions	Answers Choice
1	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
2	The emission of electron from the surface of hot metal is called:	A. Ionization B. Conduction C. Thermionic emission D. Convection
3	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
4	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
5	Those quantities whose values change gradually or stay constant are called:	A. Physical quantities B. Digital quantities C. Log quantities D. Analog quantities
6	Those quantities whose values do not remain constant are called:	A. physical quantities B. Digital quantites C. Log quantities D. Analog quantities
7	The base of computer operation are:	A. 1,2 B. 0, 1 C. 0, 2 D. 1, 10
8	The device which converts digital quantities into analog quantities is called:	A. ADC B. DAC C. ACD D. CAD
9	If Current flowing through switch then the output is expressed as:	A. 0 B. 1 C. -1 D. 2
10	The symbol of AND operation is:	A. + B. - C. . D. *
11	Boolean expression for AND operation is:	A. $X = \bar{A}$ B. $X = A + B$ C. $X = A \cdot B$ D. $X = \bar{A}\bar{B}$
12	Two switches attached in series work on which operation?	A. AND operation B. OR operation C. NOT operation D. NOR operation
13	The process by which electrons are emitted by a hot metal surface is known as:	A. Boiling B. Evaporation C. Conduction D. Thermionic emission
14	The particles emitted from a hot cathode surface are:	A. Positive ions B. Negative ions C. Proton D. Electron
15	The logical operation performed by this gate is:	A. AND B. NOR C. NAND D. OR

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- 16 AND gate can be formed by using two:
A. NOT gates
B. OR gates
C. NOR gates
D. Nand gates
- 17 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
- 18 If $X = A \cdot B$, 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
- 19 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
- 20 Electronics is a branch of:
A. Mass
B. Applied Physics
C. Mechanics
D. Nuclear Physics
- 21 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
- 22 The quantities, whose values remain constant or vary continuously are called.
A. Analogue quantities
B. Digital quantities
C. Maximum quantities
D. Minimum quantities.
- 23 Analogue quantity is:
A. Time
B. Pressure
C. Distance
D. All of these
- 24 Public address system is the example of :
A. Analogue electronics
B. Digital electronics
C. Binary system
D. None of these
- 25 The digits used in electronics are:
A. 1
B. 0
C. 0 and 1
D. 1 and 2
- 26 Digital technology is used in:
A. Bulb
B. Radar
C. Electric motor
D. All of these
- 27 The converter of analogue to digital signal is:
A. ADC
B. DAC
C. ATDC
D. None of these
- 28 The converter of digital to analogue signal is:
A. ADC
B. DAC
C. DATC
D. DTC
- 29 The closed switch in Boolean expression is represented by:
A. 0
B. 1
C. 10
D. 2
- 30 The open switch Boolean expression is represented by:
A. 0
B. 1
C. 10
D. 2
- 31 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
- 32 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
- 33 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
-
- 34 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
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- 35 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
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- 36 One coulomb is equal to charge of electrons:
A. 6.25×10^{-19} C
B. 6.25×10^{-19} C
C. 6.25×10^{-18} C
D. 6.25×10^{-18} C
-
- 37 If we double the distance between two charges, then force becomes:
A. 4-times
B. $\frac{1}{4}$ th
C. Double
D. Half
-
- 38 The electrostatic force acting on two charges each of 1C separated by 1m is about:
A. 9×10^9 N
B. 9×10^9 N
C. 9×10^8 N
D. 9×10^8 N
-
- 39 Value of 'k' depends upon:
A. System of unit
B. Nature of medium
C. Both a and b
D. None of these
-
- 40 Electric field lines were introduced by:
A. Faraday
B. Newton
C. Coulomb
D. Joule
-
- 41 Positive charge in an electric field always tend to move:
A. Does not move
B. From lower to higher potential
C. From higher to lower potential
D. All of these
-
- 42 The unit of electrical energy is:
A. Joule
B. Watt
C. Volt
D. Electron volt(eV)
-
- 43 Big unit of capacitance is:
A. Farad
B. Volt
C. Watt
D. Coulomb
-
- 44 1 Nano farad is equal to:
A. 1×10^{-12} F
B. 1×10^{-9} F
C. 1×10^{-9} F
D. 1×10^{-6} F
-
- 45 1 Pico farad is equal to:
A. 10^{-9} F
B. 10^{-12} F
C. 10^{-12} F
D. 10^{-6} F
-
- 46 SI unit of electric intensity is:
A. Watt
B. NC⁻¹
C. NS⁻¹
D. Nm
-
- 47 electric intensity is a quantity:
A. scalar
B. vector
C. base
D. none of these
-
- 48 SI unit of electric potential is:
A. watt
B. volt
C. coulomb
D. joule
-
- 49 1 volt is equal to:
A. JC
B. JC⁻¹
C. JC⁻²
D. JC⁻³
-
- 50 SI unit of capacitance is:
A. Joule
B. Volt
C. Watt
D. Farad

- 51 In variable capacitor, dielectric medium is:
A. <p class="MsoNormal">Air</p>
B. <p class="MsoNormal">Mica</p>
C. <p class="MsoNormal">Ceramic</p>
- 52 Static electricity can be generated by:
A. <p class="MsoNormal">Lubrication</p>
B. <p class="MsoNormal">Friction</p>
C. <p class="MsoNormal">Motion</p>
D. <p class="MsoNormal">Smaller the objects</p>
- 53 Give the number of factors which affect the ability of a capacitor to store charge.
A. 2
B. 3
C. 4
D. 5
A. <p class="MsoNormal">9X10²⁰Nm²C²</p>
B. <p class="MsoNormal">8X10⁹Nm²C²</p>
C. <p class="MsoNormal">9X10⁹Nm²C²</p>
D. <p class="MsoNormal">10X10⁻⁹Nm²C⁻²</p>
- 54 The value of K in SI unit is:
A. <p class="MsoNormal">Aluminum</p>
B. <p class="MsoNormal">Silver</p>
C. <p class="MsoNormal">Copper</p>
D. <p class="MsoNormal">Brass</p>
- 55 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. Current
B. Voltage
C. Charge
D. Resistance
- 56 Capacitors are used to store:
A. <p class="MsoNormal">Current</p>
B. <p class="MsoNormal">Charge</p>
C. <p class="MsoNormal">Voltage</p>
D. <p class="MsoNormal">Resistance</p>
- 57 Electroscope is used for detecting:
A. <p class="MsoNormal">Half</p>
B. <p class="MsoNormal">Two times</p>
C. <p class="MsoNormal">One fourth</p>
D. <p class="MsoNormal">Four times</p>
- 58 If the distance between two point charges is reduced to half, the coulomb's force become:
A. <p class="MsoNormal">Positive charge</p>
B. <p class="MsoNormal">Negative charge</p>
C. <p class="MsoNormal">Point charge</p>
D. <p class="MsoNormal">Zero charge</p>
- 59 If the distance between the charged bodies is much greater as compared to their sizes then the bodies are considered as:
A. <p class="MsoNormal">Combing in hair</p>
B. <p class="MsoNormal">Rubbing glass rod on silk</p>
C. <p class="MsoNormal">By rubbing ebonite rod on wool</p>
D. <p class="MsoNormal">By rubbing glass rod wool</p>
- 60 Positive charge can be produced by:
A. <p class="MsoNormal">Diverge</p>
B. <p class="MsoNormal">Contract</p>
C. <p class="MsoNormal">Shut</p>
D. <p class="MsoNormal">Remain in normal position</p>
- 61 If a neutral body is brought near to the electroscope its leaves:
A. <p class="MsoNormal">Far away</p>
B. <p class="MsoNormal">Separated</p>
C. <p class="MsoNormal">Closer</p>
D. <p class="MsoNormal">No effect</p>
- 62 If the field is stronger than lines of force are to each other:
A. <p class="MsoNormal">5 volt</p>
B. <p class="MsoNormal">2 volt</p>
C. <p class="MsoNormal">3 volt</p>
D. <p class="MsoNormal">1 volt</p>
- 63 If the potential energy of one coulomb charge is one joule then its potential will be:
A. <p class="MsoNormal">Power</p>
B. <p class="MsoNormal">Force</p>
C. <p class="MsoNormal">Capacitance</p>
D. <p class="MsoNormal">Energy</p>
- 64 The product of charge 'q' and potential difference is equal to:
A. <p class="MsoNormal">Increased</p>
B. <p class="MsoNormal">Much less</p>
C. <p class="MsoNormal">Decrease</p>
D. <p class="MsoNormal">No change</p>
- 65 What will be the capacitance of capacitor by joining them in parallel:
A. <p class="MsoNormal">6 NC⁻¹</p>

When a positive charge of 2 coulombs is placed at a

A. <p class="MsoNormal">6 NC</p>

- 66 point in an electric field, it experiences a force of 6N. The intensity of electric field at this point is:
B. <p class="MsoNormal">3 NC⁻¹<o:p></o:p></p>
C. <p class="MsoNormal">12 NC⁻¹<o:p></o:p></p>
D. <p class="MsoNormal">1.5 NC⁻¹<o:p></o:p></p>
- 67 In electrostatic all charges are in:
A. <p class="MsoNormal">The same direction<o:p></o:p></p>
B. <p class="MsoNormal">Opposite direction<o:p></o:p></p>
C. <p class="MsoNormal">Motion<o:p></o:p></p>
D. <p class="MsoNormal">Static state<o:p></o:p></p>
- 68 Which type of capacitor is cylindrical in shape:
A. <p class="MsoNormal">Paper capacitor<o:p></o:p></p>
B. <p class="MsoNormal">Mica capacitor<o:p></o:p></p>
C. <p class="MsoNormal">Variable capacitor<o:p></o:p></p>
D. <p class="MsoNormal">Plates capacitor<o:p></o:p></p>
- 69 Each volt of lightning contains energy:
A. <p class="MsoNormal">4x10⁶ joules<o:p></o:p></p>
B. <p class="MsoNormal">1000 joules<o:p></o:p></p>
C. <p class="MsoNormal">1000 million joules<o:p></o:p></p>
D. <p class="MsoNormal">10 joules<o:p></o:p></p>
- 70 Capacitors that are used in resonant circuits that tune radios to particular frequencies, such circuits are called:
A. <p class="MsoNormal">Series circuits<o:p></o:p></p>
B. <p class="MsoNormal">Filter circuits<o:p></o:p></p>
C. <p class="MsoNormal">Parallel circuits<o:p></o:p></p>
D. <p class="MsoNormal">AC circuits<o:p></o:p></p>
- 71 Power of hair dryer is:
A. <p class="MsoNormal">1000 W<o:p></o:p></p>
B. <p class="MsoNormal">750 W<o:p></o:p></p>
C. <p class="MsoNormal">10 W<o:p></o:p></p>
D. <p class="MsoNormal">75 W<o:p></o:p></p>
- 72 The amount of current that can be felt is:
A. <p class="MsoNormal">1A<o:p></o:p></p>
B. <p class="MsoNormal">0.1A<o:p></o:p></p>
C. <p class="MsoNormal">0.001 A<o:p></o:p></p>
D. <p class="MsoNormal">2A<o:p></o:p></p>
- 73 The amount of current that can be painful is:
A. <p class="MsoNormal">0.005A<o:p></o:p></p>
B. <p class="MsoNormal">0.001A<o:p></o:p></p>
C. <p class="MsoNormal">1A<o:p></o:p></p>
D. <p class="MsoNormal">2A<o:p></o:p></p>
- 74 The amount of current that causes the loss of muscle control is:
A. <p class="MsoNormal">0.1A<o:p></o:p></p>
B. <p class="MsoNormal">0.015A<o:p></o:p></p>
C. <p class="MsoNormal">2A<o:p></o:p></p>
D. <p class="MsoNormal">1A<o:p></o:p></p>
- 75 Which instrument is used to measure current, resistance and potential difference:
A. <p class="MsoNormal">Galvanometer<o:p></o:p></p>
B. <p class="MsoNormal">Digital meter<o:p></o:p></p>
C. <p class="MsoNormal">Voltmeter<o:p></o:p></p>
D. <p class="MsoNormal">Ammeter<o:p></o:p></p>
- 76 Earth wire is connected to the:
A. <p class="MsoNormal">Power house<o:p></o:p></p>
B. <p class="MsoNormal">Transformer<o:p></o:p></p>
C. <p class="MsoNormal">Ground<o:p></o:p></p>
D. <p class="MsoNormal">Generator<o:p></o:p></p>
- 77 Simplest electrical circuits use:
A. <p class="MsoNormal">One wire<o:p></o:p></p>
B. <p class="MsoNormal">Two wires<o:p></o:p></p>
C. <p class="MsoNormal">Four wires<o:p></o:p></p>
D. <p class="MsoNormal">Five wires<o:p></o:p></p>
- 78 What does a switch do:
A. <p class="MsoNormal">Oppose the current<o:p></o:p></p>
B. <p class="MsoNormal">Open and close the circuit<o:p></o:p></p>
C. <p class="MsoNormal">Store energy<o:p></o:p></p>
D. <p class="MsoNormal">Provide voltage<o:p></o:p></p>
- 79 If one of the resistors in a parallel circuit is removed, the total resistance will be:
A. <p class="MsoNormal">Doubled<o:p></o:p></p>
B. <p class="MsoNormal">Decreased<o:p></o:p></p>
C. <p class="MsoNormal">Increased<o:p></o:p></p>
D. <p class="MsoNormal">Remain same<o:p></o:p></p>
- 80 The process by which electrons are emitted by a hot metal surface is known as:
A. <p class="MsoNormal">Boiling<o:p></o:p></p>
B. <p class="MsoNormal">Evaporation<o:p></o:p></p>
C. <p class="MsoNormal">Conduction<o:p></o:p></p>
D. <p class="MsoNormal">Thermionic emission<o:p></o:p></p>
- 81 The particles emitted from a hot cathode surface are:
A. <p class="MsoNormal">Positive ions<o:p></o:p></p>
B. <p class="MsoNormal">Negative ions<o:p></o:p></p>
C. <p class="MsoNormal">Protons<o:p></o:p></p>
D. <p class="MsoNormal">Electrons<o:p></o:p></p>