

Physics 10th Class English Medium Unit 4 Online Test

| Sr | Questions | Answers Choice |
|----|--|--|
| 1 | Unlike charges always: | A. Repel each other B. Attract each other C. Sometimes repel and attract each other D. Both A and B |
| 2 | If we double the distance between two charges, what will be the change in the force between them? | A. Half B. Double C. One fourth D. Four times |
| 3 | In the presence of a charged body, an insulated conductor develops positive charge at one end and negative charge at the other end, this is called: | A. Electrostatics B. Electrostatic induction C. Magnetism D. Electromagnetic induction |
| 4 | Which device is used to store charge: | A. Resistor B. Capacitor C. Dielectric D. Fuse |
| 5 | Electric field lines of force were first introduced by: | A. Ampere B. Faraday C. Fleming D. Coulomb |
| 6 | If a charged body is brought near a negatively charged electroscope and the leaves of electroscope diverge, then the body is: | A. Positively charged B. Negatively charged C. Neutral D. None of these |
| 7 | Coulomb's law is mathematically stated as: | A. $F = k q_1 q_2 / r^3$ B. $F = k q_2 q_2 / r^2$ C. $F = k q_1 q_2 / r$ D. $F = k q_1 q_2 / r^2$ |
| 8 | A positive electric charge: | A. Attracts other positive charge B. Repels other positive charge C. Attracts a neutral particle D. Repels a neutral particle |
| 9 | Field around a charge in which that charge exerts a force on a point charge brought in that field is called: | A. Electric field B. Magnetic field C. Neutral zone D. Point charge |
| 10 | The SI unit of electric field intensity is: | A. NC-2 B. NC-1 C. Ns D. Nm-1 |
| 11 | The S.I unit of electric potential is: | A. Watt B. Joule C. Coulomb D. Volt |
| 12 | Mathematical formula of capacitance of a capacitor is: | A. $C = QV$ B. $C = Q/V$ C. $C = V/Q$ D. $C = V^2/Q$ |
| 13 | A positive electric charge: | A. Attracts other positive charge B. Repels other positive charge C. Attracts a neutral charge D. Repels a neutral charge |
| 14 | An object gains excess negative charge after being rubbed against another object, which is: | A. Neutral B. Negatively charged C. Charged D. Either, a,b, and c |
| 15 | 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 B. Becomes positively charged C. Becomes negatively charged |

| | | |
|----|--|---|
| | | D. Unpredictable |
| 16 | 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 B. the rod acquires a positive charge C. the rod and the paper have the same charges D. the rod acquires a negative charge |
| 17 | According to Coulomb's law , what happens to the attraction of two oppositely charged objects as their distance of separation increases? | A. Increase B. Decreased C. remain unchanged D. can not be determined |
| 18 | The coulomb's law is valid for the charges which are: | A. moving and point charges B. moving and non-point charges C. stationary and point charges D. stationary and large size charges |
| 19 | A positive and negative charges are initially 4 cm apart. When they are moved closer together so that they are now only 1 cm apart, the force between them is: | A. 4 times smaller than before B. 4 times larger than before C. 8 times larger than before D. 16 times larger than before. |
| 20 | Five joules of work is needed to shift 10 C of charge from one place to another. The potential difference between the places is: | A. 0.5 V B. 2 V C. 5 V D. 10 V |
| 21 | Two charged spheres are separated by 2 mm. Which of the following would produced the greatest attractive force? | A. +1 q and +4q B. -1 q and -4q C. +2 q and +2q D. +2 q and -2q |
| 22 | Electric field lines: | A. always cross each other B. never cross each other C. cross each other in the region of strong field D. cross each other in the region of weak field |
| 23 | Capacitance is defined as: | A. VC B. Q/V C. QV D. V/Q |
| 24 | One micro coulomb charge is equal to: | A. 10^{-3} C B. 10^{-3} C C. 10^{-6} C D. 10^{-6} C |
| 25 | The SI the unit of charge is: | A. Jpi;e B. Volt C. Coulomb D. Watt |
| 26 | One coulomb is equal to charge of _____ electrons. | A. 6.25×10^{-19} B. 6.25×10^{19} C. 6.25×10^{18} D. 6.25×10^{-18} |
| 27 | If we double the distance between two charges, then force becomes | A. 4-times B. 1/4th C. Double D. Half |
| 28 | The electrostatic force acting on two charges each of 1 C 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 |
| 29 | Volt is named after the Italian physicist: | A. Faraday B. Alessandro volta C. Newton D. Coulomb |
| 30 | Who developed the 1st practical electric battery: | A. Alessandro volta B. Faraday C. Newton D. None of these |
| 31 | The 1st practical electric battery is known as: | A. Voltaic B. Pile C. Voltaic pile D. Voltaic cell |
| 32 | The unit of electrical energy is: | A. Joule B. Watt C. Volt |

D. Electron volt

- 33 Big unit of capacitance is:
A. Farad
B. Volt
C. watt
D. coulomb
- 34 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
- 35 1 Pico Farad is equal to:
A. 10^{-9} F
B. 10^{-12} F
C. 10^{-12} F
D. 10^{-6} F
- 36 SI unit of electric intensity is:
A. NC
B. NC^{-1}
C. NC^{-2}
D. NC^{-3}
- 37 Electric intensity is a quantity.
A. Scalar
B. Vector
C. Base
D. None of these
- 38 Electric potential is a quantity:
A. Scalar
B. Vector
C. Base
D. All
- 39 SI unit of electric potential is:
A. Watt
B. Volt
C. Coulomb
D. Joule
- 40 1 volt is equal to:
A. JC
B. JC^{-1}
C. JC^{-2}
D. JC^{-3}
- 41 SI unit of capacitance is:
A. Joule
B. Volt
C. Watt
D. Farad
- 42 When frequency of sound wave is increased, which of the following decreases: Wavelength Period Amplitude
A. (i) Only
B. (iii) Only
C. (i) And (ii) only
D. (i) And (iii) only
- 43 The speed of sound was accurately measured in:
A. 1736
B. 1737
C. 1738
D. 1739
- 44 The speed of sound in air at 21 °C is:
A. 336ms^{-1}
B. 343ms^{-1}
C. 430ms^{-1}
D. 470ms^{-1}
- 45 Bats can hear sound of frequency up to:
A. $100,000\text{Hz}$
B. 25000Hz
C. $120,000\text{Hz}$
D. 1000Hz
- 46 The unit of intensity of sound:
A. Wm^{-1}
B. Wm^{-2}
C. Wm^{-3}
D. Wm^{-4}

47 The intensity of lawn mover is:

D. <p class="MsoNormal">Wm²</p>

- A. <p class="MsoNormal">10-1
wm²</p></o:p></o:p></p>
- B. <p class="MsoNormal">10-2
wm²</p></o:p></o:p></p>
- C. <p class="MsoNormal">10-3
wm²</p></o:p></o:p></p>
- D. <p class="MsoNormal">10-4
wm²</p></o:p></o:p></p>

48 Frequency of tuning fork depends upon its of prongs:

A. Weight

B. Speed

C. Mass

D. Distance

49 The speed of sound in air at 0°C is:

- A. <p class="MsoNormal">331ms¹</p></o:p></o:p></p>
- B. <p class="MsoNormal">376ms¹</p></o:p></o:p></p>
- C. <p class="MsoNormal">231ms¹</p></o:p></o:p></p>
- D. <p class="MsoNormal">386ms¹</p></o:p></o:p></p>

50 The speed of sound in water at 25°C is:

- A. 1530ms⁻¹
- B. 1531ms⁻¹
- C. 1560ms⁻¹
- D. 1570ms⁻¹

51 The speed of sound in iron at 25°C is:

- A. <p class="MsoNormal">5950
m/sec</p></o:p></p>
- B. <p class="MsoNormal">5900
m/sec</p></o:p></p>
- C. <p class="MsoNormal">6950
m/sec</p></o:p></p>
- D. <p class="MsoNormal">6940
m/sec</p></o:p></p>

A. <p class="MsoNormal">20,000 Hz –

- 52 The frequency of silent whistle is:
A. <p class="MsoNormal">2000 Hz – 2500Hz</o:p></o:p></p>
B. <p class="MsoNormal">2000 Hz – 2000 KHz</o:p></o:p></p>
C. <p class="MsoNormal">200 KHz – 2000 Hz</o:p></o:p></p>
D. <p class="MsoNormal">25000 KHz</o:p></o:p></p>
- 53 The sound level of rustling of leave is:
A. <p class="MsoNormal">1 dB</o:p></o:p></p>
B. <p class="MsoNormal">20 dB</o:p></o:p></p>
C. <p class="MsoNormal">30 dB</o:p></o:p></p>
D. <p class="MsoNormal">10 dB</o:p></o:p></p>
- 54 To hear echoes, the minimum distance of the obstacle from source of sound should be:
A. 10m
B. 15m
C. 17m
D. 20m
- 55 Old people cannot hear sound above than:
A. <p class="MsoNormal">1000 Hz</o:p></o:p></p>
B. <p class="MsoNormal">15000 Hz</o:p></o:p></p>
C. <p class="MsoNormal">20000 Hz</o:p></o:p></p>
- 56 Intensity level of the sound produced by mosquito buzzing is:
A. <p class="MsoNormal">70 dB</o:p></o:p></p>
B. <p class="MsoNormal">40 dB</o:p></o:p></p>
C. <p class="MsoNormal">10 dB</o:p></o:p></p>
D. <p class="MsoNormal">120 dB</o:p></o:p></p>
- 57 The speed of sound in air at 100°C is:
A. 380ms⁻¹
B. 382ms⁻¹
C. 386ms⁻¹
D. 300ms⁻¹
- 58 The intensity level of whispering is:
A. <p class="MsoNormal">20 dB</o:p></o:p></p>
B. <p class="MsoNormal">30 dB</o:p></o:p></p>
C. <p class="MsoNormal">40 dB</o:p></o:p></p>
D. <p class="MsoNormal">50 dB</o:p></o:p></p>
- 59 Which frequency is used by elephants to communicate with each other:
A. <p class="MsoNormal">Zero frequency</o:p></o:p></p>
B. <p class="MsoNormal">Low frequency</o:p></o:p></p>
C. <p class="MsoNormal">Medium frequency</o:p></o:p></p>
D. <p class="MsoNormal">High frequency</o:p></o:p></p>
- 60 The intensity level of train siren is:
A. <p class="MsoNormal">150 dB</o:p></o:p></p>
B. <p class="MsoNormal">100 dB</o:p></o:p></p>
C. <p class="MsoNormal">130 dB</o:p></o:p></p>
D. <p class="MsoNormal">120 dB</o:p></o:p></p>
- 61 The pitch of a sound is most closely related to its:
A. <p class="MsoNormal">Wave form</o:p></o:p></p>
B. <p class="MsoNormal">Period</o:p></o:p></p>
C. <p class="MsoNormal">Amplitude</o:p></o:p></p>
D. <p class="MsoNormal">Frequency</o:p></o:p></p>
- 62 Safe level of noise depends on factors:
A. <p class="MsoNormal">One</o:p></o:p></p>
B. <p class="MsoNormal">Two</o:p></o:p></p>
C. <p class="MsoNormal">Three</o:p></o:p></p>
D. <p class="MsoNormal">Four</o:p></o:p></p>

| | | |
|----|---|---|
| 63 | The technique or method used to absorb undesirable sounds by soft and porous surface is called: | <p>A. <p class="MsoNormal">Ultrasonic<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Acoustic protection<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Infrasonics<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Echo<o:p></o:p></p></p> |
| 64 | Mice can hear frequencies upto: | <p>A. <p class="MsoNormal">100, 000 Hz<o:p></o:p></p></p> <p>B. <p class="MsoNormal">25.000 Hz<o:p></o:p></p></p> <p>C. <p class="MsoNormal">120,000 Hz<o:p></o:p></p></p> <p>D. <p class="MsoNormal">1,000 Hz<o:p></o:p></p></p> |
| 65 | Sound waves having frequency lower than 20 Hz are called: | <p>A. <p class="MsoNormal">Ultrasonic<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Infrasonic<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Audible<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Echo<o:p></o:p></p></p> |
| 66 | Sound waves having frequency higher than 20,000 Hz are called: | <p>A. <p class="MsoNormal">Ultrasonic<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Infrasonic<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Audible<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Echo<o:p></o:p></p></p> |
| 67 | 1 bel= | <p>A. <p class="MsoNormal">0.1 dB<o:p></o:p></p></p> <p>B. <p class="MsoNormal">10 dB<o:p></o:p></p></p> <p>C. <p class="MsoNormal">100 dB<o:p></o:p></p></p> <p>D. <p class="MsoNormal">0.01 dB<o:p></o:p></p></p> |
| 68 | Ultrasound waves carry energy: | <p>A. <p class="MsoNormal">Less<o:p></o:p></p></p> <p>B. <p class="MsoNormal">More<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Equal<o:p></o:p></p></p> <p>D. <p class="MsoNormal">None of these<o:p></o:p></p></p> |
| 69 | Level of noise recommended in eight, hour work day: | <p>A. <p class="MsoNormal">80-90 dB<o:p></o:p></p></p> <p>B. <p class="MsoNormal">80-85-dB<o:p></o:p></p></p> <p>C. <p class="MsoNormal">85-90 dB<o:p></o:p></p></p> <p>D. <p class="MsoNormal">90-95 dB<o:p></o:p></p></p> |
| 70 | NOT gate is also called: | <p>A. <p class="MsoNormal">Converter<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Inverter<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Transmitter<o:p></o:p></p></p> <p>D. <p class="MsoNormal">Receiver<o:p></o:p></p></p> |
| 71 | At room temperature, electrons cannot escape the metal surface due to | <p>A. <p class="MsoNormal">Repulsive forces<o:p></o:p></p></p> <p>B. <p class="MsoNormal">Attractive forces<o:p></o:p></p></p> <p>C. <p class="MsoNormal">Gravitational</p> |

- of atomic nucleus:
- forces<o:p></o:p></p>
D. <p class="MsoNormal">Electromagnetic forces<o:p></o:p></p>
-
- 72 Which is used to investigate the properties of electron beam:
- A. <p class="MsoNormal">LDR<o:p></o:p></p>
B. <p class="MsoNormal">Electroscope<o:p></o:p></p>
C. <p class="MsoNormal">Proton gun<o:p></o:p></p>
D. <p class="MsoNormal">Electron gun<o:p></o:p></p>
-
- 73 X=A.B. This equation is used for which operation:
- A. <p class="MsoNormal">AND<o:p></o:p></p>
B. <p class="MsoNormal">OR<o:p></o:p></p>
C. <p class="MsoNormal">NOT<o:p></o:p></p>
D. <p class="MsoNormal">NAND<o:p></o:p></p>
-
- 74 How many tubes or electron guns used in a colour television set:
- A. <p class="MsoNormal">Two<o:p></o:p></p>
B. <p class="MsoNormal">Four<o:p></o:p></p>
C. <p class="MsoNormal">Five<o:p></o:p></p>
D. <p class="MsoNormal">Three<o:p></o:p></p>
-
- 75 In case of OR and AND operation, if switches s_1 and s_2 both are open then lamp is:
- A. <p class="MsoNormal">On<o:p></o:p></p>
B. <p class="MsoNormal">Off<o:p></o:p></p>
C. <p class="MsoNormal">Sometimes on and sometimes off<o:p></o:p></p>
D. <p class="MsoNormal">Neither on nor off<o:p></o:p></p>
-
- 76 In computer terminology information means:
- A. <p class="MsoNormal">Any data<o:p></o:p></p>
B. <p class="MsoNormal">Raw data<o:p></o:p></p>
C. <p class="MsoNormal">Processed data<o:p></o:p></p>
D. <p class="MsoNormal">Large data<o:p></o:p></p>
-
- 77 Which is the most suitable means of reliable continuous communication between an orbiting satellite and earth:
- A. <p class="MsoNormal">Microwaves<o:p></o:p></p>
B. <p class="MsoNormal">Radio waves<o:p></o:p></p>
C. <p class="MsoNormal">Sound waves<o:p></o:p></p>
D. <p class="MsoNormal">Any light waves<o:p></o:p></p>
-
- 78 The basic operations performed by a computer are:
- A. <p class="MsoNormal">Arithmetic operations<o:p></o:p></p>
B. <p class="MsoNormal">Non-arithmetic operations<o:p></o:p></p>
C. <p class="MsoNormal">Logical operations<o:p></o:p></p>
D. <p class="MsoNormal">Both a and c<o:p></o:p></p>
-
- 79 The brain of any computer system is:
- A. <p class="MsoNormal">Monitor<o:p></o:p></p>
B. <p class="MsoNormal">Memory<o:p></o:p></p>
C. <p class="MsoNormal">CPU<o:p></o:p></p>
D. <p class="MsoNormal">Control unit<o:p></o:p></p>