Electrostatics

Sr	Questions	Answers Choice
1	The pitch of a sound is most closely related to its:	A. Wave form<o:p></o:p> B. Period<o:p></o:p> C. Amplitude<o:p></o:p> D. Frequency<o:p></o:p>
2	Which is the most suitable means of reliable continuous communication between an orbiting satellite and earth:	A. Mecrowaves<o:p></o:p> B. Radio waves<o:p></o:p> C. Sound waves<o:p></o:p> D. Any light waves<o:p></o:p>
3	1 volt is equal to:	A. JC B. JC⁻¹ C. JC⁻² D. JC⁻³
4	Volt is named after the Italian physicist:	A. Faraday B. Alessandro volta C. Newton D. Coulomb
5	The speed of sound in air at 0°C is:	A. 331ms⁻¹<o:p></o:p> B. 376ms⁻¹<o:p></o:p> C. 231ms⁻¹<o:p></o:p> D. 386ms⁻¹<o:p></o:p>
6	The electrostatic force acting on two charges each of 1 C separated by 1m is about .	A. 9 x 10⁹ N B. 9 x 10⁻⁹N C. 9 x 10⁸N D. 9 x 10⁻⁸N
7	The sound level of rustling of leave is:	A. 1 dB<o:p></o:p> B. 20 dB<o:p></o:p> C. 30 dB<o:p></o:p> D. 10 dB<o:p></o:p>
8	Mice can hear frequencies upto:	A. 100, 000 Hz<o:p></o:p> B. 25.000 Hz<o:p></o:p> C. 120,000 Hz<o:p></o:p> D. 1,000 Hz<o:p></o:p>
9	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. Unpredicatable
10	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
11	The 1st practical electric battery is known as:	A. Voltaic B. Pile C. Voltaic pile D. Voltaic cell
12	Frequency of tuning fork depends upon its ……. of prongs:	A. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Weight B. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Speed C. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Mass D. <span style="font-size:11.0pt;line-height:107%; font-family:"Calibri",sans-serif;mso-ascii-theme-font:minor-latin;mso-fareast-font-family: Calibri;mso-fareast-theme-font:minor-latin;mso-hansi-theme-font:minor-latin; mso-bidi-font-family:Arial;mso-bidi-theme-font:minor-bidi;mso-ansi-language: EN-US;mso-fareast-language:EN-US;mso-bidi-language:AR-SA">Distance
13	When frequency of sound wave is increased, which of the following decreases:WavelengthPeriodAmplitude	A. (i) Only B. (iii) Only C. (i) And (ii) only D. (i) And (iii) only
14	SI unit of capacitance is:	A. Joule B. Volt C. Watt D. Farad
15	The technique or method used to absorb undesirable sounds by soft and porous surface is called:	A. Ultrasonic<o:p></o:p> B. Acoustic protection<o:p></o:p> C. Infrasonics<o:p></o:p> D. Echo<o:p></o:p>
16	The SI the unit of charge is:	A. Jpi;e B. Volt C. Coulomb D. Watt
17	Sound waves having frequency higher than 20,000 Hz are called:	A. Ultrasonic<o:p></o:p> B. Infrasonic<o:p></o:p> C. Audible<o:p></o:p>

		class= MsoNormal >Audible<o:p></o:p> D. Echo<o:p></o:p>
18	Big unit of capacitance is:	A. Farad B. Volt C. watt D. coulomb
19	1 bel=	A. 0.1 dB<o:p></o:p> B. 10 dB<o:p></o:p> C. 100 dB<o:p></o:p> D. 0.01 dB<o:p></o:p>
20	SI unit of electric intensity is:	A. NC B. NC⁻¹ C. NC⁻² D. NC⁻³
21	Coulomb's law is mathematically stated as:	A. F = k q1 q2/r3 B. F = k q2 q2 / r2 C. F = k q1 q2 / r D. F = k q1 q2 / r2
22	Intensity level of the sound produced by mosquito buzzing is:	A. 70 dB<o:p></o:p> B. 40 dB<o:p></o:p> C. 10 dB<o:p></o:p> D. 120 dB<o:p></o:p>
23	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.
24	Unlike charges always:	A. Repel each other B. Attract each other C. Sometimes repel and attract each other D. Both A and B
25	The speed of sound in air at 100°C is:	A. 380ms-1 B. 382ms-1 C. 386ms-1 D. 300ms-1
26	Which device is used to store charge:	A. Resister B. Capacitor C. Dielectric D. Fuse
27	A positive electric charge:	A. Attracts other positive charge B. Repels other positive charge C. Attracts a neutral particle D. Repels a neutral particle
28	The intensity level of whispering is:	A. 20 dB<o:p></o:p> B. 30 dB<o:p></o:p> C. 40 dB<o:p></o:p> D. 50 dB<o:p></o:p>
29	If we double the distance between two charges, then force becomes	A. 4-times B. 1/4th C. Double D. Half
30	The SI unit of electric field intensity is:	A. NC-2 B. NC-1 C. Ns D. Nm-1
31	In computer terminology information means:	A. Any data<o:p></o:p> B. Raw data<o:p></o:p> C. Processed data<o:p></o:p>

		D. Large data<o:p></o:p>
32	The speed of sound was accurately measured in:	A. 1736 B. 1737 C. 1738 D. 1739
33	One coulomb is equal to charge of _____ electrons.	A. 6.25 x 10⁻¹⁹ B. 6.25 x 10¹⁹ C. 6.25 x 10¹⁸ D. 6.25 x 10⁻¹⁸
34	The speed of sound in are water at 25°C is:	A. 1530ms-1 B. 1531ms-1 C. 1560ms-1 D. 1570ms-1
35	How many tubes or electron guns used in a colour television set:	A. Two<o:p></o:p> B. Four<o:p></o:p> C. Five<o:p></o:p> D. Three<o:p></o:p>
36	SI unit of electric potential is:	A. Watt B. Volt C. Coulomb D. Joule
37	The unit of electrical energy is:	A. Joule B. Watt C. Volt D. Electron volt
38	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
39	Which is used to investigate the properties of electron beam:	A. LDR<o:p></o:p> B. Electroscope<o:p></o:p> C. Proton gun<o:p></o:p></o:p> D. Electron gun<o:p></o:p></o:p>
40	To hear echoes, the minimum distance of the obstacle from source of sound should be:	A. 10m B. 15m C. 17m D. 20m
41	Mathematical formula of capacitance of a capacitor is:	A. C = QV B. C = Q/V C. C = V/Q D. C = V2/Q
42	Level of noise recommended in eight, hour work day:	A. 80-90 dB<o:p></o:p> B. 80-85-dB<o:p></o:p> C. 85-90 dB<o:p></o:p> D. 90-95 dB<o:p></o:p>
43	Electric potential is a quantity:	A. Scalar B. Vector C. Base D. All
44	Old people cannot hear sound above than:	A. 1000 Hz<o:p></o:p> B. 15000 Hz<o:p></o:p> C. 20000 Hz<o:p></o:p>
45	X=A.B. This equation is used for which operation:	A. AND<o:p></o:p> B. OR<o:p></o:p> C. NOT<o:p></o:p>

		D. NAND<o:p></o:p>
46	The intensity of lawn mover is:	A. 10-1 wm⁻²<o:p></o:p> B. 10-2 wm⁻²<o:p></o:p> C. 10-3 wm⁻²<o:p></o:p> D. 10-4 wm⁻²<o:p></o:p>
47	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 reod and the paper have the same charges D. the rod acquires a negative charge
48	A positive electric charge:	A. Attracts other positive charge B. Repels other positive charge C. Attracts a neutral charge D. Repels a neutral chage
49	Capacitance is defined as:	A. VC B. Q/V C. QV D. V/Q
50	Bats can hear sound of frequency up to:	A. 100,000Hz<o:p></o:p> B. 25000Hz<o:p></o:p> C. 120, 000Hz<o:p></o:p> D. 1000Hz<o:p></o:p>
51	In the presence of a charged body, an insulated conductor develops positive charge at one end and negative charge at the other end, this i- called:	A. Electrostatics B. Electrostatic induction C. Magnetism D. Electromagnetic induction
52	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
53	The unit of intensity of sound:	A. Wm⁻¹<o:p></o:p> B. Wm⁻²<o:p></o:p> C. Wm<o:p></o:p> D. Wm²<o:p></o:p>
54	Safe level of noise depends on factors:	A. One<o:p></o:p> B. Two<o:p></o:p> C. Three<o:p></o:p> D. Four<o:p></o:p>
55	1 nano farad is equal to:	A. 1 x 10⁻¹² F B. 1 x 10⁹F C. 1 x 10⁻⁹F D. 1 x 10⁻⁶F
56	In case of OR and AND operation, if switches s_1 and s_2 both are open then lamp is:	A. On<o:p></o:p> B. Off<o:p></o:p> C. Sometimes on and sometimes off<o:p></o:p> D. Neither on nor off<o:p></o:p>
57	Which frequency is used by elephants to communicate with each other:	A. Zero frequency<o:p></o:p> B. Low frequency<o:p></o:p> C. Medium

		frequency<o:p></o:p> D. High frequency<o:p></o:p>
58	The brain of any computer system is:	A. Monitor<o:p></o:p> B. Memory<o:p></o:p> C. CPU<o:p></o:p> D. Control unit<o:p></o:p>
59	Sound waves having frequency lower than 20 Hz are called:	A. Ultrasonic<o:p></o:p> B. Infrasonic<o:p></o:p> C. Audible<o:p></o:p> D. Echo<o:p></o:p>
60	Electric field lines of force were first introduced by:	A. Ampere B. Faraday C. Fleming D. Coulomb
61	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
62	1 Pico Farad is equal to:	A. 10⁻⁹F B. 10⁻¹²F C. 10¹²F D. 10⁻⁶F
63	One micro coulomb charge is equal to:	A. 10⁻³ C B. 10³C C. 10⁶C D. 10⁻⁶C
64	NOT gate is also called:	A. Converter<o:p></o:p> B. Inverter<o:p></o:p> C. Transmitter<o:p></o:p> D. Receiver<o:p></o:p>
65	The S.I unit of electric potential is:	A. Watt B. Joule C. Coulomb D. Volt
66	The intensity level of train siren is:	A. 150 dB<o:p></o:p> B. 100 dB<o:p></o:p> C. 130 dB<o:p></o:p> D. 120 dB<o:p></o:p>
67	The speed of sound in air at 21 °C is:	A. 336ms⁻¹<o:p></o:p> B. 343ms⁻¹<o:p></o:p> C. 430ms⁻¹<o:p></o:p> D. 470ms^{-1<o:p></o:p>}
		A. always cross each other B. never cross each other

68	Electric field lines:	C. cross each other inthe region of strong field D. cross each other in the region of weak field
69	The frequency of silent whistle is:	A. 20,000 Hz – 25000Hz<o:p></o:p> B. 2000 Hz – 2500Hz<o:p></o:p> C. 200 KHz – 2000 Hz<o:p></o:p> D. 25000 KHz<o:p></o:p>
70	Electric intensity is a quantity.	A. Scalar B. Vector C. Base D. None of these
71	Ultrasound waves carry energy:	A. Less<o:p></o:p> B. More<o:p></o:p> C. Equal<o:p></o:p> D. None of these<o:p></o:p>
72	The speed of sound in iron at 25°C is:	A. 5950 m/sec<o:p></o:p> B. 5900 m/sec<o:p></o:p> C. 6950 m/sec<o:p></o:p> D. 6940 m/sec<o:p></o:p>
73	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 pont charges D. stationary and large size charges
74	At room temperature, electrons cannot escape the metal surface due to …….. of atomic nucleus:	A. Repulsive forces<o:p></o:p> B. Attractive forces<o:p></o:p> C. Gravitational forces<o:p></o:p> D. Electromagnetic forces<o:p></o:p>
75	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
76	Who developed the 1st practical electric battery:	A. Alessandro volta B. Faraday C. Newton D. None of these
77	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
78	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
79	The basic operations performed by a computer are:	A. Arithmetic operations<o:p></o:p> B. Non-arithmetic operations<o:p></o:p> C. Logical operations<o:p></o:p> D. Both a and c<o:p></o:p>