

Physics 10th Class English Medium Unit 1 Online Test

Sr	Questions	Answers Choice
1	Mathematical formula of spring constant is:	A. F/x B. X/F C. F/t D. F/m
2	When a body moves to and fro about a point its motion is called:	A. Random motion B. Linear motion C. Vibratory motion D. Rotatory motion
3	The S.I unit of Spring constant is:	A. Nm B. N C. Nm⁻¹ D. Ns
4	Formula for time period of spring mass system is represented by:	A. $T = 2\pi\sqrt{m/k}$ B. $T = 2\pi\sqrt{k/m}$ C. $T = 1/2\pi\sqrt{k/m}$ D. $T = 1/2\pi\sqrt{m/k}$
5	If the mass of a spring mass system is doubled, its time period becomes:	A. $\sqrt{2} T$ B. $T/2$ C. $\sqrt{T/2}$ D. $T/\sqrt{2}$
6	The formula of time period of simple pendulum is:	A. $T = 2\pi\sqrt{L/g}$ B. $T = 2\pi(L/g)$ C. $T = 2\pi\sqrt{1/g}$ D. $T = 1/2\pi\sqrt{L/g}$
7	If the length of a simple pendulum is halved its time period will become:	A. $T/2$ B. $T = T/\sqrt{2}$ C. $\sqrt{2}T$ D. $2T$
8	During S.H.M acceleration of the body is maximum at:	A. Mean position B. Extreme positions C. Between mean & Extreme D. None of these
9	The waves in which particles of the medium vibrate perpendicular to the direction of propagation of waves are called:	A. Transverse waves B. Longitudinal waves C. Electromagnetic waves D. None of these
10	Wave equation is defined as:	A. $f = T\lambda$ B. $f = v\lambda$ C. $v = 2f\lambda$ D. $v = f\lambda$
11	If a wave moves in a slinky spring with frequency of 4Hz and wave length of 0.4m, the speed of the wave will be:	A. 1.0 ms ⁻¹ B. 1.2 ms ⁻¹ C. 1.4 ms ⁻¹ D. 1.6 ms⁻¹
12	The product of frequency (f) and wavelength λ is equal to:	A. Time period B. Amplitude C. Wave speed D. Wave energy / frequency
13	Which of the following is an example of simple harmonic motion ?	A. Motion of the simple pendulum B. The motion of ceiling fan C. The spinning of the Earth on its axis D. A bouncing ball on a floor
14	If the mass of the bob of a pendulum is increased by a factor of 3. The period of the pendulum's motion will:	A. Be increased by a factor 2 B. Remain the same C. Be decreased by a factor of 2 D. Be decreased by a factor of 4
15	Which of the following devices can be used to produce both a transverse and longitudinal waves?	A. A string B. A ripple tank C. A helical spring D. A tuning fork

16	Wave transfer	A. Energy B. Frequency C. Wavelength D. Velocity
17	Which of the following is a method of energy transfer.	A. Conduction B. Reatiation C. wave motion D. all of these
18	The vacuum all electromagnetic wave have the same	A. speed B. frequency C. amplitude D. wavelength
19	A large ripple tank with a vibrator working at a frequency of 30 Hz produces 25 complete wae in distance of 50 cm. The velocity of the wave is:	A. 54 cms⁻¹ B. 60 cms⁻¹ C. 750 cms⁻¹ D. 1500 cms⁻¹
20	Which of the following characteristic of a wave is independent of the others .	A. speed B. frequency C. amplitude D. wavelength
21	The relation between v,f and λ of a wave is:	A. $v f = \lambda$ B. $f \lambda = v$ C. $v \lambda = f$ D. $v = \lambda / f$
22	The disturbance travelling in a medium is called:	A. Wave motion B. Simple harmonic motion C. Motion D. both a ,b
23	The waves, which are used to detect the broken bones, are called:	A. Light waves B. x-rays C. Sound waves D. both b,c,
24	The force applied on the mass attached with a spring is represented by:	A. F_{a} B. F_{c} C. F_{ext} D. F_{s}
25	In there is no extension in the spring then this positon is called	A. Equilibrium position B. Unequilibrium C. Nautral equilibrium D. Stable equilibrium
26	The unit of spring constnat is:	A. m B. kg C. Nm² D. Nm⁻¹
27	If the distance is nspring is 'x' of mass 'm' attached with a spring then restoring force is:	A. $F = ma$ B. $F = kx$ C. $F = mx$ D. $F = m/a$
28	The ratio of external force applied on the spring to displacement is called:	A. Hook's law B. Constant C. Spring constant
29	The time required to complete one round trip (vibration) abut mena position is called:	A. Time period B. Frequency C. Amplitude D. None of these
30	The time period of mass attached with a spring can be calculated by:	A. $T = 2\pi\sqrt{L/g}$ B. $T = 1/T$ C. $T = 2\pi\sqrt{g/L}$ D. $T = 2\pi\sqrt{m/k}$
31	The time period of simple pendulum can be calculated by:	A. $T = 2\pi\sqrt{L/g}$ B. $T = 2\pi\sqrt{m/k}$ C. $T = 2\pi\sqrt{g/L}$ D. $T = 2\pi\sqrt{k/m}$
32	The maximum displacement from mean position is called:	A. Maximum height B. Time period C. Amplitude D. Interval
33	The displacement produced in the spring directly proportional to force is called:	A. Hook's law B. Boyle's law C. Newton's law D. both 'h' and 'c'

		<p>A. Both a and c</p>
34	At mean position of pendulum, the potential energy of the pendulum is:	<p>A. Maximum B. Minimum C. Much more D. Both a and c</p>
35	At mean position kinetic energy of the ball is:	<p>A. Minimum B. Zero C. Maximum D. None of these</p>
36	At extreme position potential energy of the pendulum is	<p>A. Maximum B. Minimum C. a and b D. zero</p>
37	In simple Harmonic motion, the acceleration of the body is _____ proportional to the displacement.	<p>A. Inversely B. Directly C. Equally D. None of these</p>
38	The value of acceleration in simple harmonic motion at mean position is	<p>A. Maximum B. Zero C. 10 N D. Both a , b</p>
39	The waves in which particle of the medium vibrate parallel to the direction of waves are called	<p>A. Longitudinal waves B. Transverse waves C. Electromagnetic waves D. both b and c</p>
40	The waves in which particles of the medium vibrate perpendicular to the direction of waves are:	<p>A. Electromagnetic waves B. Sound waves C. both a and b D. Transverse waves</p>
41	The energy is transferred from one place to another:	<p>A. Through matter B. Through waves C. both a and b D. None of these</p>
42	The wave properties	<p>A. Reflection B. Refraction C. Diffraction D. All of these</p>
43	The instrument used to study the properties of waves is called:	<p>A. Ripple tank B. Stroboscope C. Pendulum D. None of these</p>
44	The part of waves at which particles of the medium are below the normal position are called:	<p>A. Extreme position B. Crest C. Trough D. None of these</p>
45	The distance between two consecutive troughs or crests is called:	<p>A. wavelength B. Frequency C. Time period D. None of these</p>
46	The number of wavelength of waves passing through a point in one second is called:	<p>A. Time period B. Cycle C. Frequency D. None of these</p>
47	The unit of frequency is:	<p>A. Hertz B. Vibration per second C. Cycle per second D. all a, b, c</p>
48	The speed of waves can be calculated by:	<p>A. Vt B. $d \times t$ C. $f \lambda$ D. Tf</p>
49	The water waves after striking the hurdle will:	<p>A. Reflect B. Refract C. Diffract D. All a , b, c</p>
50	The motion in which the friction reduces the mechanical energy of the system as time passes and the amplitude of motion reduces is called:	<p>A. SHM B. Random motion C. Damped motion D. None of these</p>
51	The oscillations of a system in the presence of _____ force are called damped oscillations:	<p>A. Resistive force B. Attractive force C. Both of these</p>

		<p>C. Both of these</p> <p>D. None of these</p>
52	Shock absorbers in automobiles are one practical application of:	<p>A. SHM</p> <p>B. Random motion</p> <p>C. Damped motion</p> <p>D. None of these</p>
53	Time period is reciprocal of:	<p>A. Frequency</p> <p>B. Cycle</p> <p>C. Wavelength</p> <p>D. Amplitude</p>
54	Thye Water waves obey the laws of	<p>A. Reflection</p> <p>B. Refraction</p> <p>C. Diffraction</p> <p>D. All of these</p>
55	The time period of frequency and time period is equal to:	<p>A. v</p> <p>B. $\frac{1}{v}$</p> <p>C. 0</p> <p>D. λ</p>
56	It mass of bob o a simple pendulum is doubled, its time period.	<p>A. is doubled</p> <p>B. become four times</p> <p>C. remains same</p> <p>D. none of the above</p>
57	Diffraction of wave can be observed clearly only when the size of slit or obstacle is nearly_____ to the wavelength of the wave:	<p>A. Two times</p> <p>B. Equal</p> <p>C. Four times</p> <p>D. None of these</p>
58	BASIC is a:	<p>A. High level language</p> <p>B. Low level language</p> <p>C. Assembly language</p> <p>D. Machine Language</p>
59	How many possible solutions are there for a prblem?	<p>A. One</p> <p>B. Two</p> <p>C. Three</p> <p>D. Multiple</p>
60	Program up gradation refers to:	<p>A. Program enhancement</p> <p>B. Program identification</p> <p>C. Program development</p> <p>D. Program implementation</p>
61	Which of the following tasks are performed by most of the algorithms?	<p>A. Input</p> <p>B. Out put</p> <p>C. Processing</p> <p>D. All of these</p>
62	Typographical errors in BASIC statements are:	<p>A. Runtime errors</p> <p>B. Logical Errors</p> <p>C. Syntax errors</p> <p>D. Execution erros</p>
63	Which of the following is an example of simple harmonic motion:	<p>A. <p class="MsoNormal">Motion of a simple pendulum</p></p> <p>B. <p class="MsoNormal">The motion of ceiling fan</p></p> <p>C. <p class="MsoNormal">The spinning of the earth on its axis</p></p> <p>D. <p class="MsoNormal">A bouncing ball on a floor</p></p>
64	If the mass of the bob of a pendulum is increased by a factor of 3, the period of the pendulum's motion will:	<p>A. <p class="MsoNormal">Be increased by a factor of 2</p></p> <p>B. <p class="MsoNormal">Remain the same</p></p> <p>C. <p class="MsoNormal">Be decreased by a factor of 2</p></p> <p>D. <p class="MsoNormal">Be decreased by factor of 4</p></p>
65	Which of the following devices can be used to produce both a transverse and longitudinal waves:	<p>A. <p class="MsoNormal">A string</p></p> <p>B. <p class="MsoNormal">A ripple tank</p></p> <p>C. <p class="MsoNormal">A helical spring (slinky)</p></p> <p>D. <p class="MsoNormal">A tuning fork</p></p>

A. <D

66	Waves transfer:	<p>Energy</p> <p>Wavelength</p> <p>Velocity</p> <p>frequency</p>
67	Which of the following is a method of energy transfer:	<p>Conduction</p> <p>Radiation</p> <p>Wave motion</p> <p>All of these</p>
68	In a vacuum all electromagnetic waves have the same:	<p>Speed</p> <p>frequency</p> <p>amplitude</p> <p>wavelength</p>
69	<p>A large ripple tank with a vibrator working at a frequency of 30 Hz produces 25 complete waves in a distance of 50 cm.</p> <p>The velocity of the wave is:</p>	<p>53 cms⁻¹</p> <p>60 cms⁻¹</p> <p>750 cms⁻¹</p> <p>1500 cms⁻¹</p>
70	Which of the following characteristics of a wave is independent of the others:	<p>speed</p> <p>frequency</p> <p>amplitude</p> <p>wavelength</p>
71	One byte is equal to:	<p>7 bits</p> <p>5 bits</p> <p>8 bits</p> <p>9 bits</p>
72	Which is not a hardware:	<p>CPU</p> <p>Window</p> <p>Keyboard</p> <p>Mouse</p>
73	With broadband information can be loaded:	<p>In 1 min</p> <p>In 1 sec</p> <p>In 1 day</p> <p>In 2 days</p>
74	First voice signal was transmitted in the form of electrical signal in:	<p>1870</p> <p>1875</p> <p>1876</p> <p>1880</p>
75	The way of doing business by using web is called:	<p>Sources of entertainment</p> <p>Web business</p> <p>E-commerce</p> <p>E-mail</p>

76	Floppy has a storage capacity	A. 4-5 MB B. 3-4 MB C. 1-3 MB D. 3-6 MB
77	In CD presence of pits is indicated by:	A. 0 B. 2 C. 3 D. 1
78	Which rays are used to send or receive digital information along optical fibre:	A. infrared B. alpha rays C. beta rays D. mechanical
79	A device which has two ways of communication is:	A. television B. radio C. hard disk D. mobile phone
80	waves whose speed is equal to speed of light are:	A. X-rays B. sound rays C. electromagnetic waves D. shock waves
81	To get a design on the computer screen by moving a pointer with the help of mouse is called:	A. word processing B. graphic designing C. data managing D. telecommunication