NTS Educators SSE (Science) Jobs Test

Sr	Questions	Answers Choice
1	Mechanical waves on the surface of a liquid are	A. Transverse B. Longitudinal C. Torsional D. Both transverse and longitudinal
2	Velocity of sound in a diatomic as is 300 m/sec what is its rms velocity	A. 400 m/sec B. 40 m/sec C. 430 m/sec D. 300 m/sec
3	At a certain instant a stationary transverse wave is found to have maximum kinetic energy the appearance of string of that instant is:	A. Sinusoidal shape with amplitude A/3 B. Sinusoidal shape with amplitude A/2 C. Sinusoidal shape with amplitude A D. Straight line
4	With the propagation of a longitudinal wave through a material medium the quantities transmitted in the propagation direction are	A. Energy momentum and mass B. Energy C. Energy and mass D. Energy and linear momentum
5	If the amplitude of sound is doubled and the frequency reduced to one-fourth the intensity of sound at the same point will be	A. Increasing by a factor of 2 B. Decreasing by a factor of 2 C. Decreasing by a factor of 4 D. Unchanged
6	For production of beats the two sources must have	A. Different frequencies and same amplitude B. Different frequencies C. Different frequencies same amplitude and same phase D. Different frequencies and same phase.
7	The temperature at which the speed of sound becomes double as was at 27°C is	A. 273°C B. 0°C C. 927°C D. 1027°C
8	Two sources of sound are said to be coherent if	A. They produce sounds of equal intensity B. They produce sounds of equal frequency C. They produce sound waves vibrating with the same phase D. They produce sound waves with zero or constant phase difference all instant of time
9	When sound waves travel from air to water which of these remains constant?	A. Velocity B. Frequency C. Wavelength D. All the above
10	In a simple harmonic motion the kinetic energy (KE) and the potential energy (PE), are such that throughout the motion	A. KE remains constant B. PE remains constant C. KE/PE is constant D. KE + PE remains constant
11	A pendulum clock set to give correct time in Karachi is taken to Quetta it would give correct time if	A. The mass of the pendulum is increased B. The mass of the pendulum is decreased C. The length of the pendulum os increased D. The length of the pendulum is decreased
12	In a simple harmonic motion (SHM) which of the following does not hold?	A. The force on the particle is maximum at the ends B. The acceleration is minimum at the mean position C. The potential energy is maximum at the mean position D. The kinetic energy is minimum at...

		D. The kinetic energy is maximum at the mean position.
13	To make the frequency double of na oscillator we have to	A. Double the mass B. Half the mass C. Quadruple the mass D. Reduce the mass to one-fourth
14	When the displacement is half of the amplitude the ratio of potential energy to the total energy is	A. 1/2 B. 1/4 C. 1 D. 1/8
15	The time period of a simple pendulum is 2 seconds if its length is increased by 4 times then its period becomes	A. 16 s B. 12 s C. 8 s D. 4 s