## Physics ECAT Pre Engineering Chapter 8 Waves Online Test

| Sr | Questions | Answers Choice |
|----|-----------|----------------|
| 1 | At 'resonance' the transfer of energy from deriving source to the oscillator is | A. maximum<br>B. minimum<br>C. zero<br>D. none of them |
| 2 | In a resonance situation the amplitude of the motion may become extra ordinarily large, if | A. the driving force is large<br>B. the driving force is zero<br>C. the driving force may be feeble<br>D. all of them |
| 3 | If the external driving force is periodic with a period compareable to the natural period of the oscillator, then we get | A. diffraction<br>B. beat<br>C. interference<br>D. resonance |
| 4 | Associated with the motion of a driven harmonic oscillator, there is a very striking phenomenon, know as | A. waves<br>B. beat<br>C. interference<br>D. resonance |
| 5 | The vibrations of factory floor caused by the running of heavy machinery is an example of | A. free vibration<br>B. natural vibrations<br>C. forced vibrations<br>D. all of them |
| 6 | A physical system under going forced vibrations is known as | A. Simple harmonic oscillator<br>B. Compound harmonic oscillator<br>C. Physical harmonic oscillator<br>D. driven harmonic oscillator |
| 7 | If a freely oscillating system is subjected to an external force, then | A. free vibrations will take place<br>B. the body will move with its natural frequency<br>C. forced vibrations will take place<br>D. none of them |
| 8 | The natural frequency of a pendulum which is vibrating freely, depends upon its | A. mass<br>B. length<br>C. material<br>D. all of them |
| 9 | The frequency of free vibrations is known as | A. free frequency<br>B. forced frequency<br>C. natural frequency<br>D. un-natural frequency |
| 10 | A body is executing free vibrations when it oscilates | A. with the interference of an external force<br>B. without the interference of an external force<br>C. with the interference of an internal force<br>D. none of them |
| 11 | If a simple pendulum is shifted from karachi to K-2 cliff, its time period | A. remains the same<br>B. decreases<br>C. increases<br>D. none of them |
| 12 | The time period of pendulums of different lengths would be | A. same<br>B. different<br>C. both of them<br>D. none of them |
| 13 | A second's pendulum is a pendulum whose time period is | A. 1 second<br>B. 2 seconds<br>C. 3 seconds<br>D. 4 seconds |
| 14 | If the mass of the simple pendulum becomes double, its time period | A. increase<br>B. decreases<br>C. remains constant<br>D. none of them |

15     If we increase the length of a simple pendulum four times, its time period will become

A. 2 times
B. 3 times
C. 4 times
D. 6 times