EXERCISE MULTIPLE CHOICE QUESTIONS FROM TEXT BOOK

(1) **Which of the following is an example of simple harmonic motion?**

(a) Motion of a simple pendulum (b) The motion of ceiling fan

(c) The spinning of the Earth on its axis (d) A bouncing ball on floor

(2) **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 of 2 (b) Remain the same

(c) Be decreased by a factor of 2 (d) Be decreased by a factor of 4

(3) **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 (slinky) (d) A tuning fork

(4) **Waves transfer**

(a) Energy (b) Frequency (c) Wavelength (d) Velocity

(5) **Which of the following is a method of energy transfer?**

(a) Conduction (b) Radiation (c) Wave motion (d) All of these

(6) **In a vacuum all electromagnetic waves have the same**

(a) Speed (b) Frequency (c) Amplitude (d) Wavelength

(7) **A large ripple tank with a vibrator working at a frequency of 30 Hz produces 25 complete waves in a distance of 50 cm. The velocity of the wave is**

(a) 53 cm^{-1} (b) 60cms^{-1} (c) 750 cms^{-1} (d) 1500 cms^{-1}

(8) **Which of the following characteristics of a wave is independent of the others**

(a) Speed (b) Frequency (c) Amplitude (d) Wavelength

(9) **The relation between v, f and λ of a wave is**

(a) $vf = \lambda$ (b) $f\lambda = v$ (c) $v\lambda = f$ (d) $v = \frac{\lambda}{f}$

ANSWER KEY

1	2	3	4	5	6	7	8	9
a	b	c	a	d	a	b	c	b