

1. In vibratory motion
- A. P.E. remains constant B. K.E. remain constant
C. total energy remain constant D. total momentum remain constant

Answer: Option C

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2. The waveform of S.H.M. is
- A. standing wave B. sine wave
C. square wave D. none

Answer: Option B

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3. S.I unit of frequency is
- A. vibration S-2 B. radian
C. hertz D. ms⁻¹

Answer: Option C

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4. In S.H.M. the velocity of a particle is maximum at
- A. mean position B. extreme position
middle between mean and D. middle between mean and
C. extreme position on the right side extreme position on the left side

Answer: Option A

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5. The acceleration of a projection on the diameter for a particle moving along a circle is
- A. $\omega^2 x$ B. ωx^2
C. $\omega^2 x$ D. ωx^2

Answer: Option C

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6. Total energy of a body executing S.H.M is directly proportional to
- A. square root of amplitude B. the amplitude
C. reciprocal of amplitude D. square of amplitude

Answer: Option D
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7. The time period of a second pendulum is
- A. 4 seconds B. 3 seconds
C. 2 seconds D. 6 seconds

Answer: Option C
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8. The length of second pendulum is
- A. 100 cm B. 99 cm
C. 99.2 cm D. 98 cm

Answer: Option C
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9. If length of second pendulum becomes four times, then its time period will become
- A. four times B. six times
C. eight times D. two times

Answer: Option D
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10. The force responsible for the vibratory motion of the simple pendulum is
- A. $mg \cos\theta$ B. $mg \sin\theta$?
C. $mg \tan\theta$? D. mg

Answer: Option B
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