

11. The frequency of the second pendulum is
- A. 1 hertz B. 0.5 hertz
C. 1.5 hertz D. 2.5 hertz

Answer: Option B
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12. Simple harmonic motion is a type of
- A. rotational motion B. circular motion
C. musical arrangement D. vibratory motion

Answer: Option D
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13. The SI unit of force constant is identical with that of
- A. force B. pressure
C. surface tension D. loudness

Answer: Option C
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14. When the amplitude of a wave become double its energy become
- A. double B. four times
C. one half D. none time

Answer: Option B
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15. A simple pendulum suspended from the ceiling of a lift has time period T when the lift is at rest. When the lift falls freely, the time period is
- A. infinite B. T/g
C. zero D. g/T

Answer: Option A
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16. The energy of SHM is maximum at

- A. mean position B. extreme position
C. in between mean and extreme D. all positions during SHM

Answer: Option D
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17. The product of frequency and time period is equal to

- A. 1 B. 2
C. 3 D. 4

Answer: Option A
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18. When one is the correct graph between acceleration a and displacement d for SHM?

19. The displacement of SHM is written as $X = X_0 \sin \omega t$ if displacement is written by $X = X_0 \cos \omega t$ then phase constant will be equal to

- A. 0° B. 45°
C. 90° D. 180°

Answer: Option c
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20. For what displacement the P.E becomes $1/4$ of its maximum value?

- A. $x = x_0$ B. $x = x_0/2$
C. $x = x_0/4$ D. $x = x_0^2/2$

Answer: Option B
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