21. Sharpness of resonance is

   A. directly proportional to damping force
   B. inversely proportional to damping force
   C. equal to square of damping force
   D. equal to square of damping force

   Answer: Option **B**

22. Which one dows not work according to resonance?

   A. T.V
   B. radio
   C. microwave oven
   D. bulb

   Answer: Option **D**

23. The restoring force acting on simple pendulum is given by

   A. mg sin ?
   B. mg sin ?
   C. mg cos ?
   D. mg cos ?

   Answer: Option **B**

24. Phase of SHM describes

   A. displacement only
   B. direction of motion only
   C. both displacement and direction of motion
   D. neither displacement nor direction of motion

   Answer: Option **C**

25. Natural frequency of simple pendulum depends upon

   A. its mass
   B. its length
   C. square of its length
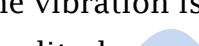   D. square root of its length

   Answer: Option **D**

26. Electrical resonance is observed in

A. radio

B. microwave oven

C. both in radio and microwave oven

D. neither in radio nor in microwave oven

Answer: Option **A**
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27. Total distance traveled by bob of simple pendulum in one vibration is equal to

A. amplitude

B. square of amplitude

C. 2 x amplitude

D. 4 x amplitude

Answer: Option **D**
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28. When K.E energy of SHM is maximum its

A. P.E is zero

B. acceleration is zero

C. restoring force is zero

D. all P.E acceleration and restoring force are zero

Answer: Option **D**
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29. In damped harmonic oscillation which one decreases?

A. amplitude of vibration

B. energy of vibration

C. both amplitude and energy

D. neither amplitude nor energy

Answer: Option **C**
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30. Forced vibration are known as

A. simple harmonic vibration

B. natural vibration

C. driven harmonic vibration

D. free vibration

Answer: Option **C**
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