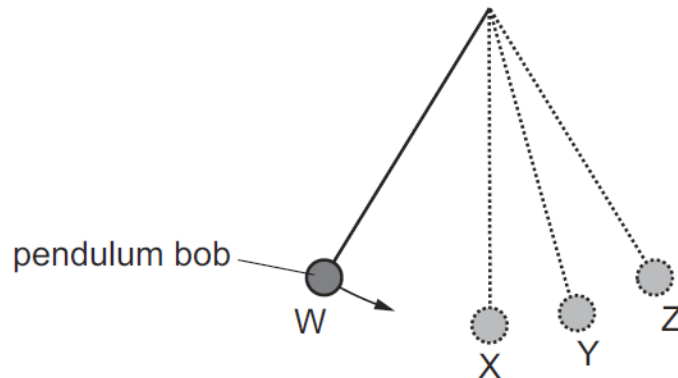


TIME PERIOD OF A SIMPLE PENDULUM-SET-1

- 1 A pendulum is swinging. Five students each measure the time it takes to swing through ten complete swings.
- Three students measure the time as 17.2s. Another student measures it as 16.9s, and the fifth student measures it as 17.0s.
- What is the average period of the pendulum?
- A** 1.69s **B** 1.70s **C** 1.71s **D** 1.72s

- 2 A pendulum is set in motion and 20 complete swings are timed. The time measured is 30 s.
- What is the time for one complete swing of the pendulum?
- A** 0.67s **B** 0.75s **C** 1.5s **D** 3.0s

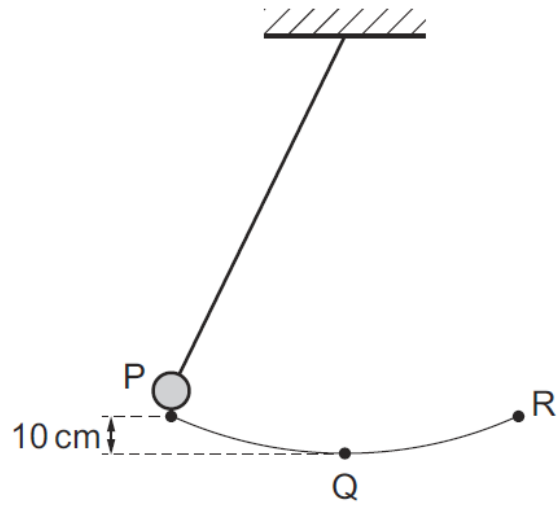
- 3 A pendulum bob swings along the path WXYZ and back again.
- Resistive forces can be ignored.



- Which statement describes the total energy of the bob?
- A** It has a maximum value at X.
- B** It has a maximum value at Y.
- C** It has a maximum value at Z.
- D** It has the same value at W, X, Y and Z.

4

The diagram shows a pendulum.



The pendulum swings from P to Q to R and back to P.

P is 10 cm higher than Q.

At which speed does the pendulum bob pass through Q?

A 0.44 m/s

B 1.0 m/s

C 1.4 m/s

D 2.0 m/s