



# TEST PAPER: PHYSICS

**Time: 70 Minutes**

**Class: C.B.S.E. 8**

**Max. Marks: 50 Marks**

**Date: 26<sup>th</sup> July 2018**

**Marking Scheme:** All questions carry 10 marks each. Subparts (A) and (B) carry 3 marks each and subpart (C) carries 4 marks.

## Question 1:

**A.** Fill in the blanks:

- i) Sound is produced by a \_\_\_\_\_ body.
- ii) Sound needs a \_\_\_\_\_ to travel.
- iii) Forces applied on an object in the same direction \_\_\_\_\_ to one another.

**B.** State true or false. Write correct statement if false:

- i) Sound cannot travel in vacuum.
- ii) Force has only magnitude no direction
- iii) Unit of pressure is Newton.

**C.** Solve:

- i) A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency.
- ii) What are audible and inaudible sounds? What is the range of audible frequencies?

## Question 2.

**A.** Choose the correct one:

- i) The force between two charged bodies is called
  - a) Muscular force
  - b) Gravitational force
  - c) Magnetic force
  - d) Electrostatic force
- ii) Which of the following voices is likely to have minimum frequency?
  - a) Baby girl
  - b) Baby boy
  - c) A man
  - d) A woman
- iii) Pressure is
  - a) Force per unit area
  - b) Force X area
  - c) Area per unit force
  - d) Force + Area

**B.** Define:

- a) Atmospheric pressure
- b) Frequency of oscillation
- c) Sound

**C.** Answer the following:

- i) On which property of vibrations does the loudness of sound depends?
- ii) Which property of vibrations determines the pitch of sound? Explain giving some examples.

### Question 3.

A. Answer the following:

- i) Does any part of our body vibrate when we speak? Name the part
- ii) When we hear a sound, does any part of our body vibrate? Name the part.
- iii) What is the unit of loudness of a sound?

B. Match the following:

- |                   |          |
|-------------------|----------|
| i) Fluid friction | a) Hertz |
| ii) Gravitation   | b) Drag  |
| iii) Frequency    | c) Force |

C. Answer the following:

- i) List four sources of noise pollution in your surroundings.
- ii) Why sliding friction is less than static friction.

### Question 4.

A. Which object is vibrating when the following sounds are produced?

- i) The sound of sitar
- ii) The sound of tabla
- iii) The sound of flute
- iv) The sound of dholak
- v) The sound of Veena
- vi) The sound of manjira (cymbals)

B. Answer the following:

- i) List three measures to limit noise pollution.
- ii) Explain different types of non-contact forces.

C. Fill in the blanks:

- i) If the area over which the force acts decreases, the pressure \_\_\_\_\_
- ii) A liquid exerts pressure in \_\_\_\_\_ direction
- iii) Vocal cord of a man is about \_\_\_\_\_ long
- iv) A charged body \_\_\_\_\_ an uncharged body towards it.

### Question 5.

A. State true or false. Write correct statement if false:

- i) Friction can be increased by using lubricants.
- ii) Fluid friction can be minimized by giving suitable shapes to bodies moving in fluids.
- iii) Friction opposes the relative motion between two surfaces in contact.

B. Answer:

- i) Lightning and thunder take place in the sky at the same time and at the same distance from us. Lightning is seen earlier and thunder is heard later. Can you explain?
- ii) What is the difference between noise and music? Can music become noise sometimes

C. In the following situations identify the agent exerting the force and the object on which it acts. State the effect of the force in each case:

- a) Squeezing a piece of lemon between the fingers to extract its juice
- b) Taking out paste from a toothpaste tube.
- c) A load suspended from a spring while its other end is on a hook fixed to a wall
- d) An athlete making a high jump to clear the bar at a certain height