



# TEST PAPER: PHYSICS

Time: 45 Minutes

Class: I.C.S.E. 8

Max. Marks: 30 Marks

Date: 31<sup>st</sup> October 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:

- Fill in the blanks:
  - A longer rod expands \_\_\_\_\_ than a shorter rod on being heated to the same rise in temperature.
  - If a hot body gives out heat, its \_\_\_\_\_ falls.
  - Gases expands \_\_\_\_\_ than the liquids.
- Define:
  - Linear expansion
  - Superficial expansion
  - Cubical expansion
- Answer the following:
  - State the factors on which the linear expansion of a metal rod on heating depends.
  - Explain one application of thermal expansion of liquids.

## Question 2:

- Match the following:

a. Increase in pressure increases	increase in intermolecular separation
b. Blowing air increases	boiling point
c. Thermal expansion	Evaporation
- Answer the following:
  - Why is one end of the steel girder in a bridge kept on rollers instead of fixing it in pillar?
  - What do you mean by anomalous behavior of water?
- Give reasons:
  - Telephone wires are kept slightly loose when they are laid in summer.
  - A small gap is left between adjacent rails while laying a railway line.

## Question 3:

- True or False
  - Equal volumes of different liquids expand by different amount when they are heated to the same rise in temperature.
  - All molecules of liquid take part in the process of evaporation.
  - A bimetallic strip bends when heated.
- Answer the following:
  - Explain thermal expansion in gases by the molecular motion.
  - What are the different effects of heat?
- Answer the following:
  - Why is cooling produced when a liquid evaporates?
  - In the ball and ring experiment, if the ball after heating is left to cool on the ring for some time, what do you observe and why?