# FORMATIVE ASSESSMENT - SECOND MID TERM

**SCIENCE**

**Max. Marks: 50**

**Std - VII**

**Time: 2 Hrs**

| **Name of the School:** | **Name of the Student:** |
|---|---|
| _____ | _____ |
| **Place:** | **Roll No.:** |
| _____ | _____ |

## I. Choose the correct answer: 10 x 1 = 10

1. The principle of a thermometer is _____
   a. heat is a form of energy
   b. law of conservation of energy
   c. thermal expansion
   d. liquids are conductors
2. SI unit of measuring temperature is _____
   a. Kelvin b. Joule c. Celsius d. Fahrenheit
3. Solid substances are usually purified by the process of _____
   a. sublimation b. crystallization c. fermentation d. freezing
4. The cell _____is semi-permeable and regulates the substance that enters and exits the cell.
   a. wall b. membrane c. layer d. none
5. _____ Blood cells are circular and biconcave to carry out their function of transporting oxygen.
   a. White b. Red c. a and b d. none
6. The kink in the thermometer helps prevent _____
   a. immediate back rush of the liquid
   b. error in taking readings
   c. both a and b
   d. none of these
7. _____ is a reversible process.
   a. Melting b. Burning c. Fermentation d. Curdling
8. _____ is the process of cooling a hot concentrated solution of a substance.
   a. Sublimation b. Crystallization c. Freezing d. boiling
9. Ribosomes are present on the _____
   a. rough b. smooth c. a and b d. none
10. The _____ is the smallest part of the body of any living organism that is capable of existing independently.
    a. cell b. tissue c. organ d. organism

**II. Answer the following: (any 7)** **7 x 2 = 14**

1. State two advantages of a digital thermometer.
2. Fill in the blanks:
   a. Zero kelvin is called the _____
   b. _____ cannot be used in a thermometer instead of mercury because it is colourless.
3. What are the characteristics of a good thermometric liquid?
4. State true (or) false and correct the statement.
   a. Burning of paper is a physical change.
   b. Evaporation is a slow process.
5. What is fermentation?
6. What are physical properties?
7. Analogy:
   a. Animal cells: Centrioles :: Plant cells : _____
   b. Amoeba : Unicellular :: Coconut tree : _____
8. Why do plant cells have a regular shape?
9. Define stem cells.

**III. Answer in brief: (any 4)** **4 x 4 = 16**

1. Difference between analog and digital thermometer.
2. What are the characteristics of a good thermometric liquid?
3. Explain endothermic and exothermic changes using an example each.
4. What is the difference between plant and animal cells?
5. Why is the mitochondria known as the powerhouse of the cell?

**IV. Answer in detail: (any 2)** **2 x 5 = 10**

1. With a neat diagram explain the principle, construction, and working of a clinical thermometer.
2. Differentiate between freezing and crystallization.
3. Describe the structure and function of the nucleus.