

**SECOND TERM EVALUATION 2024-25**

**BASIC SCIENCE MODEL QUESTION PAPER 1**

**Standard: VII**

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**Instructions:**

- Attempt any 6 activities out of the 8 given below.
  - Read the questions carefully before answering..
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**Activity 1**

1. What are the three methods of heat transmission? Define each briefly.
2. Complete the table:

Transmission Method	Example
Conduction	Heat traveling through a metal rod
Convection	_____
Radiation	_____

3. Why are cooking pots made of metals but their handles made of plastic?

**Activity 2**

1. List the five stages of nutrition in humans in the correct order.
2. Define peristalsis and explain its role in the digestive process.
3. Complete the flowchart:

Stage	Process
Ingestion	Food enters mouth
_____	Digestion begins in the stomach
Absorption	_____
Assimilation	Nutrients utilized by body cells
Egestion	_____

**Activity 3**

1. Which instrument is used to measure body temperature? What is the normal human body temperature?

2. Match the following:

Instrument	Use
Clinical Thermometer	(a) Measure atmospheric temperature
Laboratory Thermometer	(b) Measure body temperature

3. Explain why a clinical thermometer cannot be used to measure the temperature of boiling water.

#### Activity 4

- Construct a simple diagram of the human respiratory system and label the following parts: nostrils, trachea, bronchi, alveoli, and diaphragm.
- During inhalation, what changes occur in the thoracic cavity?
- Complete the table with the differences between inhaled and exhaled air:

Component	Inhaled Air (%)	Exhaled Air (%)
Oxygen	21	_____
Carbon Dioxide	0.04	_____

#### Activity 5

- Explain the working principle of a periscope.
- True or False:
  - The angle of incidence is equal to the angle of reflection.
  - A periscope works on the principle of refraction.
- Write a short note on the role of multiple reflections in forming images in a kaleidoscope.

#### Activity 6

- Compare the land breeze and sea breeze. Write one key difference for day and night.
- Why does sand heat up and cool down faster than water?
- Illustrate how a sea breeze occurs using a simple labeled diagram.

#### Activity 7

- What are the main components of blood, and what is the function of red blood cells?

2. Suggest two ways to maintain a healthy circulatory system.

3. Fill in the blanks:

Blood Component	Function
White Blood Cells	_____
Platelets	Help in blood clotting

### Activity 8

1. Why are transparent objects like glass used in windows, but translucent materials like frosted glass used in bathrooms?

2. Classify the following objects as transparent, translucent, or opaque:

- Butter paper
- Mirror
- Clear water
- Wood

3. How can you make a transparent glass sheet opaque? Write two methods.

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