Methods of Separation

A. Choose the Correct Answer:

- 1. Which method is used to separate solid impurities like stones from rice or wheat?
 - A) Sieving
 - B) Winnowing
 - C) Handpicking
 - D) Filtration

2. What process is used to separate lighter husk particles from heavier grains using wind?

- A) Sedimentation
- B) Filtration
- C) Winnowing
- D) Decantation

3. Which method is used to separate tea leaves from tea after boiling?

- A) Sieving
- B) Filtration
- C) Decantation
- D) Handpicking

B. Fill in the Blanks:

- 1. The process of separating small stones from rice or pulses by hand is called
- 2. Lighter impurities like husk can be removed from grains using ______.
- The process used to separate sand and water by allowing the sand to settle down is called ______.

C. Case Study:

Rahul's mother was preparing lemonade at home. She mixed water, lemon juice, and sugar in a glass. However, when she added ice cubes, Rahul noticed that some sugar was still settled at the bottom. He also observed that when she poured the lemonade through a strainer, the ice cubes were left behind.

Case Study Questions:

- 1. What method is used to separate ice cubes from lemonade?
- 2. Why did the sugar settle at the bottom instead of mixing completely?

- 3. How could Rahul's mother ensure that all the sugar dissolves in the lemonade?
- 4. Name another daily-life example where filtration is used.

D. Short Answer Questions:

- 1. What is sieving, and where is it used in daily life?
- 2. How does winnowing help farmers?
- 3. Why is filtration important in water purification?

E. Long Answer Questions:

- 1. Explain different methods of separation with examples.
- 2. Describe the importance of separation techniques in everyday life.
- 3. How do farmers use different separation methods in agriculture?