

- (i) Which one of the given substances may be separated by using a water condenser ?
- (ii) How can gases be separated that are present in air?
- (iii) If sample of urea has melting point 129°C , then:
 - (a) It is impure (b) it is pure (c) It can not be predicted (d) The compound is not urea.
- (iv) Which of the following will have boiling point 100°C ?
 - (a) distilled water (b) sea water (c) river water (d) well water.

Q3. Assertion –Reason questions:

Note – Read the assertion and reason statements carefully and write the correct option out of the following options :

- (a) If both assertion and reason are true and the reason is the correct explanation of the assertion.
- (b) If both the assertion and reason are true but the reason is the correct explanation of the assertion.
- (c) If assertion is true but reason is false .
- (d) If both assertion and reason are false .

Assertion : Hydrogen is colourless , odourless and non-combustible gas.

Reason : Constituents of a mixture cannot be separated easily by physical methods.

Assertion : Carbon and silicon are non-metals.

Reason : Non- metals conduct heat and electricity.

Q4. Answer the following questions :

1. What are the components of a solution?
2. List two points of difference between homogeneous and heterogeneous mixtures.
3. Air is a chemical compound or mixture? Support your answer by suitable facts.
4. Explain what happens when a beam of light is passed through a colloidal solution.
5. What is meant by aqueous and non-aqueous solution? Give one example each.
6. State one instance in which water undergoes a physical change and one in which it undergoes a chemical change.