

ARWACHIN BHARTI BHAWAN SR SEC SCHOOL

UNIT TEST – 2 (SESSION 2026-2027)

SUBJECT – SCIENCE

CLASS – VIII

(SET-A)

Time:-1hr.

M.M-20

Q-1 Tick the correct answer.

5M

- a) Which of the following is NOT a characteristic of a solution?
 - i)The solute particles are visible.
 - ii)It is a homogeneous mixture.
 - iii)The solute particles are evenly distributed.
 - iv)The solute particles cannot be separated by filtration.
- b) Which observation best differentiates a mixture from a compound?
 - i) Presence of particles
 - ii) Ability to occupy space
 - iii) Retention of original properties by components
 - iv) Existence in solid state only
- c) A student prepared a saturated solution at high temperature and allowed it to cool undisturbed. What is most likely to happen?
 - i)The solute disappears permanently
 - ii) The solvent changes chemically
 - iii) Excess solute may separate out as crystals
 - iv) The solution becomes an element
- d) A student mixed oil, sand, and salt with water. Which substance would remain dissolved after filtration?
 - i) Oil
 - ii) Sand
 - iii) Salt
 - iv) None of these
- e) Which statement correctly explains why air is not considered a compound?
 - i) It contains only gases
 - ii) Its composition is not fixed
 - iii) It cannot be separated
 - iv) It has no particles

Q-2 Assertion and reason question.

2M

- a) Both A and R are true, and R is the correct explanation of A
- b) Both A and R are true, but R is not the correct explanation of A
- c) A is true, but R is false
- d) A is false, but R is true

i) Assertion (A): Compounds always show properties similar to the elements present in them.

Reason (R): Chemical combination changes the nature of the substances involved.

ii) Assertion (A): A saturated solution can dissolve more solute when heated.

Reason (R): Solubility of most solids increases with increase in temperature.

Q-3 Answer the following questions.

10M

- a) A substance cannot be broken into simpler substances by any chemical method. What can you conclude about the substance?
- b) Why is seawater not considered a pure substance even though it appears uniform?
- c) A student mixed salt and sand together. Another student prepared salt by combining sodium and chlorine chemically. Which sample can be separated physically and why?
- d) A student mixed oil and water and called it a solution. Is the statement correct? Explain why or why not.
- e) Why are compounds considered pure substances even though they contain more than one element?

Q-4 A solution was prepared by dissolving a solid in water. After evaporation, the solid was recovered unchanged. What does this prove about the nature of dissolving and solutions?

Define Dilute and Concentrated solution. .

3M