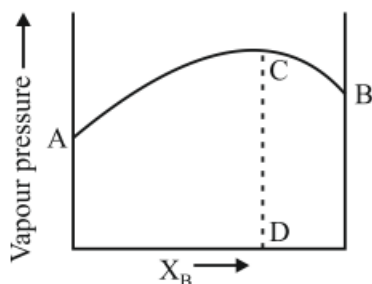


# CHEMISTRY CLASS 12 BATCH

## SOLUTIONS

DPP-04

1. The diagram given below is a vapour pressure composition diagram for a binary solution of A and B.



In the solution, A – B interactions are

- (1) similar to A – A and B – B interactions
  - (2) greater than A – A and B – B interactions
  - (3) smaller than A – A and B – B interactions
  - (4) unpredictable
2. Solution of methanol and ethanol will form
- (1) ideal solution
  - (2) non-ideal solution with positive deviation
  - (3) non-ideal solution with negative deviation
  - (4) none
3. A solution which boils at constant temperature is called
- (1) Azeotrope
  - (2) Ideal solution
  - (3) Saline water
  - (4) Alkaline solution
4. A mixture of water and benzene is a/an
- (1) ideal solution
  - (2) non-ideal solution with positive deviation
  - (3) non-ideal solution with negative deviation
  - (4) none of these
5. An azeotropic mixture of two liquids boils at a lower temperature than either of them when
- (1) it is saturated
  - (2) it does not deviate from Raoult's law
  - (3) it shows negative deviation from Raoult's law
  - (4) it shows positive deviation from Raoult's law
6. Which of the following is not a characteristic of non-ideal solution with positive deviation?
- (1)  $\Delta V_{\text{mix}} > 0$
  - (2)  $\Delta H_{\text{mix}} > 0$
  - (3)  $\Delta S_{\text{mix}} < 0$
  - (4)  $\Delta G_{\text{mix}} < 0$
7. A solution of strong acid and water is an
- (1) ideal solution
  - (2) non-ideal solution with positive deviation
  - (3) non-ideal solution with negative deviation
  - (4) none of the above
8. A non-ideal solution with negative deviation are called
- (1) maximum boiling azeotropes
  - (2) minimum boiling azeotropes
  - (3) both (1) & (2)
  - (4) none of these
9. Which of the following is a characteristic of non-ideal solution with negative deviation?
- (1)  $\Delta V_{\text{mix}} < 0$
  - (2)  $\Delta H_{\text{mix}} > 0$
  - (3)  $\Delta S_{\text{mix}} < 0$
  - (4)  $\Delta G_{\text{mix}} > 0$