Chemical Engineering Mass Transfer MCQ Questions & Answers

1. Dew point of a gas vapour mixture

- (A) increases with increase in pressure
- (B) decreases with decrease in pressure
- (C) increases with temperature rise
- (D) decreases with temperature rise

Ans: decreases with decrease in pressure

2. A wet solid over a long period of time by unsaturated air of nonzero constant relative humidity. The moisture content eventually attained by the solid is termed as the

- (A) equilibrium moisture content
- (B) free moisture content
- (C) bound moisture content
- (D) unbound moisture content

Ans: equilibrium moisture content

Question: 3

Humidification involves mass transfer between a pure liquid phase and a fixed gas, which is

- (A) at a fixed temperature
- (B) non ideal in nature
- (C) soluble in the liquid
- (D) insoluble in the liquid

Ans: insoluble in the liquid

Question: 4

Reverse osmosis is also called

- (A) ultrafiltration
- (B) diffusion
- (C) electrodialysis
- (D) dialysis

Ans: ultrafiltration

5. Steady state equimolal counter diffusion occurs in case of

- (A) liquid-liquid extraction
- (B) binary phase distillation
- (C) absorption
- (D) leaching

Ans: binary phase distillation

6. Moisture contained by a substance in excess of the equilibrium moisture is called the _____ moisture.

- (A) free
- (B) critical
- (C) bound
- (D) unbound

Ans: free

7. The operating line for an absorber is curved, when plotted in terms of

- (A) partial pressure
- (B) mole ratios
- (C) mass fractions
- (D) mole fraction

Ans: partial pressure

8. Large scale drying of sugar is done in a _____ dryer.

- (A) truck
- (B) rotary
- (C) spouted bed
- (D) tray

Ans: rotary

9. Fenske equation determines the

- (A) optimum reflux ratio
- (B) height of the distillation column
- (C) maximum number of ideal plates
- (D) minimum number of theoretical plates

Ans: minimum number of theoretical plates

10. With increasing liquid viscosity, liquid hold up in a packed column.

- (A) decreases
- (B) increases
- (C) unpredictable
- (D) remain unchanged

Ans: increases