Chapter 5

Surface Chemistry

(Assertion and Reason Questions)

Directions: These questions consist of two statements, each printed as Assertion and Reason. While answering these questions, you are required to choose any one of the following four responses.

- **(a)** If both Assertion and Reason are correct and the Reason is a correct explanation of the Assertion.
- **(b)** If both Assertion and Reason are correct but Reason is not a correct explanation of the Assertion.
- **(c)** If the Assertion is correct but Reason is incorrect.
- (d) If both the Assertion and Reason are incorrect.
- **Q.1. Assertion:** Detergents with low CMC are more economical to use.

Reason: Cleansing action of detergents involves the formation of micelles. These are formed when the concentration of detergents becomes equal to CMC.

Q.2. Assertion: An ordinary filter paper impregnated with collodion solution stops the flow of colloidal particles.

Reason: Pore size of the filter paper becomes more than the size of colloidal particle.

Q.3. Assertion : The value of colligative properties are of small order for colloids as compared to true solution.

Reason: Number of particles in colloidal solution is comparatively smaller than true solutions.

ANSWER KEY

Q.1: (a) **Q.2**: (c)

Q.3: (a) Colligative properties depend upon number of particles.