Q1: 16 March (Shift 2) - Single Correct

The INCORRECT statements below regarding colloidal solutions is:

(1) A colloidal solution shows colligative properties.

(2) An ordinary filter paper can stop the flow of colloidal particles.

(3) The flocculating power of Al^{3+} is more than that of Na^{+}

(4) A colloidal solution shows Brownian motion of colloidal particles.

Q2: 17 March (Shift 1) - Single Correct

With respect to drug-enzyme interaction, identify the wrong statement:

(1) Non-Competitive inhibitor binds to the allosteric site

(2) Allosteric inhibitor changes the enzyme's active site

(3) Allosteric inhibitor competes with the enzyme's active site

(4) Competitive inhibitor binds to the enzyme's active site

Q3: 17 March (Shift 2) - Single Correct

For the coagulation of a negative sol, the species below, that has the highest flocculating power is:

(1) SO_4^{2-}

(2) Ba^{2+}

(3) Na^{+}

(4) PO_4^{3-}

Q4: 18 March (Shift 2) - Single Correct

The charges on the colloidal CdS sol and TiO_2 sol are, respectively:

(1) positive and positive

(2) positive and negative

(3) negative and negative

(4) negative and positive

Q5: 18 March (Shift 2) - Single Correct

A hard substance melts at high temperature and

is an insulator in both solid and in molten state. This solid is most likely to be a / an :

(1) Ionic solid

(2) Molecular solid

(3) Metallic solid

(4) Covalent solid

Answer Key

Q1 (2) **Q2** (3) **Q3** (2) **Q4** (4)

Q5 (4)