

37. Among the following, the INCORRECT statement about colloids is: [April 12, 2019 (II)]

- (a) They can scatter light.
- (b) They are larger than small molecules and have high molar mass.
- (c) The osmotic pressure of a colloidal solution is of higher order than the true solution at the same concentration.
- (d) The range of diameters of colloidal particles is between 1 and 1000 nm.

Ans. (c)

37. (c) Due to the association of solute molecule till they acquire colloidal dimensions, the osmotic pressure of a colloidal solution is of lower order than that of true solution at the same concentration.

$$\pi = iCRT$$

i (vant hoff factor) is less in colloidal solution than true solution. So, π (osmotic pressures) will also be less in colloidal solution.