If dichloromethane (DCM) and water (H_2O) are used for differential extraction, which one of the following statements is correct ?

A DCM and H_2O would stay as upper and lower layer respectively in the separating funnel (S.F.)

B DCM and H_2O will make turbid/colloidal mixture

C DCM and H_2O would stay as lower and upper layer respectively in the separating funnel(S.F.).

D DCM and H_2O will be miscible clearly

Explanation

Density of DCM = 1.39 and density of H_2O = 1.0.

As density of DCM is higher than H_2O so DCM will stay lower in separating funnel.