

1) (i) We perform crushing for separation of minerals. However, based on properties of minerals, we can use other tech. like magnetic separation.

(ii) By gravity separation method like sedimentation or by the use of sieve

(iii) By gravity separation method like centrifugation, we can separate oil and water. We can separate them by their difference in ρ too.

(iv) Evaporation / Crystallisation are the methods appropriate for this separation

(v) By stirrer and heating

(vi) Due to the diff in the B.P's of naphtha and crude oil we perform distillation (destructive distillation)

2) (i) There are various stages involved in separation of minerals some involve physical while some involve thermodynamic prop. Considering only the first stage, it's using physical properties

(ii), (iii) → Physical properties
(iv) → Thermodynamic properties
(v) → Thermodynamic properties
(vi) → Thermodynamic properties

3) First three are based on physical properties while last three are based on mass transfer operations.