

Exemplar Problems

Q13. By adding gypsum to cement

- (a) setting time of cement becomes less.
- (b) setting time of cement increases.
- (c) colour of cement becomes light.
- (d) shining surface is obtained.

Sol: (b) Raw materials for cement are limestone, clay and gypsum. Cement is a dirty greyish heavy powder containing calcium aluminates and silicates.

Gypsum ($\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$) is added to the components to increase the setting time of cement so that it gets sufficiently hardened. Setting of cement is an exothermic process and involves hydration of calcium aluminates and , silicates.
