

Q1 Puzzolana \Rightarrow It is finely ground siliceous material which by itself does not possess any cementing property but in presence of water it reacts with calcium hydroxide i.e. lime at normal conditions and form compound of low solubility having cementing properties.

Types of Puzzolana —

- 1) Natural Puzzolana \Rightarrow It occurs as natural material as - volcanic tuffs, pumicite, diatomaceous earth, shales.
- 2) Puzzolanic Materials - There are various types of puzzolanic materials used —
 - 1) Fly Ash — Fly ash is finely divided residue produced in large quantities at various thermal power plants in India.
For concrete mix as replacement of cement.
 - 2) Surkhi \Rightarrow Calined clay puzzolana is manufactured by grinding the brick bat in grinding mills

until an impalpable powder is obtained. The purzolona is known as surki.

ii) This material was very much used in India for - economic construction work.

3) Rice Husk Ash \Rightarrow The combustion of the agricultural residues volatilises the organic matter and a silica-rich ash is produced.

Rice husk ash when mixed with lime, gives black cement.