UNIT NO 3 → Processed Construction mat

(ii) POP (Plaster of paris) :→

↳ Plaster of paris is a white powder made of gypsum.

↳ It is mainly used for making casts for broken bones but has other application.

↳ When pop mixed with water, it forms a thick paste that can be moulded into any shape

↳ It dries quickly and sets hard making it an ideal material for casting body parts.

(iii) Fiber Reinforced plastics :→

A types of plastic embedded with fibre such as thin wire so as to increase the tensile strength of the plastic; known as fibre reinforced plastics.

(ii) Properties of fibre reinforced plastic :→

(1) Corrosion resistance
(2) Light weight
(3) Easy installation
(4) Electrical insulation
(5) Posses good strength.

(6) low maintenance.
(7) Non conductive

(#) Application or uses of fibre reinforced plastics :→

(1) It is used in aerospace
(2) It is used in automotive
(3) It is used in marine.
(4) It is used in construction industries.

(##) Paint and distemper :→ RCC Academy channel youtube

(#) Cladding material :→ (आवरण)

Cladding means providing an additional layer do the surface to protect it from water rain, sunlight etc.

(##) Types of cladding material :→

(i) wood cladding
(ii) Tile cladding
(iii) Glass cladding
(iv) Aluminum cladding etc.

The End

Unit - 04 Special Construction material

(10) Water Proofing material :-

↳ A type of material that resist water, known as water proofing material.

↳ Types of water proofing material :-

① Sheet membrane water proofing material

② Liquid water proofing membrane material.

③ Cement based water proofing material

④ Polyurethene liquid membrane water proofing material.

(11) Termites proofing material :-

↳ A types of material that resist termites known as "termites proofing material"

↳ Types of termites proofing material

① Cedar :-

Cedar is a low density wood that is great for termite control.

② Redwood :-

Redwood is a strong that is naturally resistant to termites

③ Teak

(11) Sound Proofing material :-

↳ A types of material that resist sound ; known as "sound proofing material.

↳ Types of sound proofing material :-

① fibre glass
② sound proof drywall (plaster board)
③ Accoustic mineral wool cavity insulation
④ Accoustic membrane

(12) Geopolymer cement :-

↳ Geopolymer cement has an environmentally friendly substitute for traditional cement.

↳ Made by blending industrial by products like fly ash and ground granulated blast furnace slag.

Properties of geopolymer cement :-

① Compressive strength → 70 to 80 or 70 N/mm²

② Drying shrinkage → Geopolymer ce... experiences. significantly less drying shrinkage.

③ Heat of hydration :- Geopolymer cement exhibit a lower heat of hydration.

④ Fire resistance → Geopolymer cement resist fire.

⑤ Acid resistance → Geopolymer cement resist Acid.

⑪ Application or uses of Geopolymer cement :-

① Infrastructure Project :- Geopolymer Cement is used in bridges, funnels and highway.

② Residential Construction
③ Industrial building
④ Marine and coastal structures.

⑫ Epoxy Resin :- Epoxy resin is a type of resin that posseses tough mechanical properties, good chemical resistance and high adhesive strength, which makes it highly useful for various applications

Epoxy resin's uses are :→

(i) Metal Coating
(ii) use in electronic and electrical compone
(iii) Electrical insulators
(iv) fibre reinforced plastic material
(v) structural adhesives

(iii) Non shrink Grout :→

↳ Non shrink grout some times called Construction grout.

↳ It should be noted that it is required to have non shrink property.

↳ It Sometimes acts as the load transfer medium in structures.

↳ Non shrink grout is a types of material that does not shrink.

↳ This is a cementitious material that does not reduce its volume when it getting harden like normal concrete.

Application or uses of non shrink Grout :→

(1) Anchor bolt installation
(2) Honeycomb repair

③ steal bearing plates
④ filling under the base plates
⑤ filling cavities in concrete.