

Section-2

Ans.2 Seasoning of Timber :

Seasoning is the process of reducing the moisture content (drying) of timber in order to prevent the timber from possible fermentation and making it suitable for use.

* Natural Seasoning :

Following are two methods of natural seasoning :

Air Seasoning :

- In this method, water or the moisture is driven out from the timber by a very slow process of evaporation. In this process, the timber balks are stacked under a shed.
- The timber balks should be kept perfectly horizontal, to avoid twisting of timber during seasoning.
- The stack should be made on damp proof materials, preferably on cast iron, stones, concrete block etc. The stacks should be kept up from ground at least by 30 cm.

* Artificial Seasoning :

There are different methods of artificial seasoning :

Water Seasoning :

- In this method, the logs are kept immersed in ponds or in running streams with

the root ends upstream for three to four weeks. Maximum sap is washed out by this process.

- (b) The logs should be kept entirely down under water by chaining them. Now after that these logs are kept under shed for free air circulation.
- (c) It is a quick process but the elastic properties and strength of the wood are reduced.

Mc Neills Seasoning:

- (a) Timber seasoned by this method is rendered harder, denser and proof against dry rot. But, it is a costly method of seasoning timber.
- (b) The time required varies with the nature of the timber, usually from 15 days to two months.
- (c) In this process, the timbers are stacked in a chamber with one-third air space and containing a large water surface to produce vapour by various hot gases as the products of combustion of fuel in the fireplace within the chamber.

Hot Air Seasoning:

- (a) In this process, the timbers are stacked in racks in a hot chamber heated with steam pipes on the floor.
- (b) Within the hot chamber the timbers are subjected to a swiftly moving current of air passing over the hot pipes.

(c) The timbers are kept there for about three days at a constant temperature of 90°C. The hot air absorbs sap or moisture content of the timbers.

Seasoning by Boiling in Water:

- (a) Water-seasoning can be hastened by using boiling water. The timber is kept immersed in boiling water for four hours.
- (b) By this process the strength and elasticity of the timber is reduced, although there is less shrinkage.

* Seasoning by Steaming:

This is similar to seasoning by boiling, but the timber dries soon after the steaming prevents dry rot in timber, but it is expensive.