

## **BMC Basic Questions**

**Q.1. what is the meaning of civil engineering?**

**Ans.** Civil means dealing with civilians at large caters of the building and structure laying of road, railways, bridge, canal, dam and provide ideal environment for comfortable living after detail tool proof design and meticulous execution and leisurely construction.

**Q.2. what is hydration?**

**Ans.** Hydration is the reaction between cement and water.

**Q.3. what is curing of concrete?**

**Ans.** curing is the application of water to the concrete surface for the proper hydration to occur

**Q.4. what is the method of curing?**

**Ans.** Generally water is applied by various mean. The common method of curing are'

- Spraying.
- Wet covering of surface.
- Ponding.
- Application of curing compound.
- Steam curing.

**Q.5. when an aggregate may be called as flaky?**

**Ans.** When the least dimension of the aggregate less than 60% then aggregate may be called flaky.

**Q.6. what for quality control of cement what test are done.**

**Ans.** The tests that are required to quality check of the cement.

- Initial and final setting time.
- Soundness.
- Consistency.
- Tensile strength.

**Q.7. what is cooping.**

**Ans.** Cooping is a arrangement wall to protect the wall from water and environment.

**Q.8. Define Quality Assurance and Quality control.**

**Ans.** Quality assurance:- QA is a set activities for ensuring quality in the processes by which product are developed.

Quality control:- QC is a set of activities for ensuring quality in products. The activities focus on identifying defect in the actual product produced.

**Q.9. what is the deflection and deformation.**

**Ans.** Deflection is the temporary displacement and deformation is the permanent displacement.

**Q.10. what is the development length?**

**Ans.** Development length is an embedded e extra length.

**Q.11. what is the difference b/w working stress method and limit state design method?**

**Ans.** Working stress method is consider elasticity of material never loaded beyond the elasticity limit where limit state design method based on plasticity method.

**Q.12. what may be the mix proportion of M10 grad of concrete.**

**Ans.** Cement : Sand : Aggregate--- 1:3:6

**Q.13. what is shuttering?**

**Ans.** To place the permanent structure a temporary structure of specified shape and dimension is built on the site which termed as shuttering.

**Q.14. why I section beam are preferred?**

**Ans.** I section preferred b/c

- It provide large stiffener in lateral direction.
- It has large moment of inertia.
- I section has lowest shape factor.

**Q15. what is the specific gravity of cement.**

**Ans.** 3.5 in general.

**Q.16. What is mean by open graded cement?**

**Ans.** Open graded agg. are have coarser size agg. And as a result of concrete produced more air void.

**Q.17. what is meant by TMT bar?**

**Ans.** TMT means thermo mechanically treated. This bar has high strength and high corrosion resistance to the exposed environment.

**Q.18. what happens to ordinary cement after casting?**

**Ans.** Ordinary cement shrink after drying.

**Q.19. with what compound of cement the hydration take place?**

**Ans.** Silicate ( tricalcium silicate and dicalcium silicate) tricalcium aluminate and tricalcium alumina ferrite.

**Q.20. what are the least provide for different Rcc member?**

**Ans.**

- Footing: 50mm Minimum
- Column: 40mm Minimum
- Beam: 25mm Minimum
- Slab: 20mm Minimum

**Q.21. when the possibility segregation is must?**

**Ans.** Segregation of concrete may occur if the mix is.

- If the mix to wet.
- If the ratio of coarser aggregate is much more than the other proportion.
- Coarser grading.

**Q.22. how to calculate Atmospheric pressure?**

**Ans.** Absolute pressure is equal to atmospheric pressure or – gauge pressure

i.e.  $ABP = ATM \text{ (or) } - \text{ Gauge Pressure.}$

**Q.23. what are function of a column in building?**

**Ans.** Column is a vertical member of a building which support structural load transferred by the whole structure through beams. Than after column transferring those load to the footing and foundation through to the land.

**Q.24. how many bricks are used in 1 meter cube?**

**Ans.** In 1 meter cube brick are required 480- 500 brick.

**Q.25. what are the slump test gauge are required?**

**Ans.** The slump recommended for mass of concrete is about 25mm to 50mm.