

# **Site Related Interview Question**

## **Question No. 1**

**What Do You Understand by M25 Concrete?**

⇒ According to IS 456: 2000, M refers to Mix, and 25 refers to the characteristic compressive. The strength of a concrete cube of **150 mm X 150 mm X 150 mm** tested at the end of 28 days should be a minimum of 25 N/mm<sup>2</sup>.

## **Question No. 2**

**What is the maximum allowable fresh concrete temperature until used as per ASTM?**

⇒ 32 °C

## **Question No. 3**

**What are the skills required to become an architect?**

⇒ Conceptual understanding of designing models Basic knowledge of computer and architect-related software programs Designing 3D models Engineering ability Business aptitude Legal knowledge.

## **Question No. 4**

**What is Guniting?**

⇒ It is a process in which a mixture of cement & sand in the proportion of 1:3 is shot on a concrete surface with the help of a cement gun under the pressure of 2 to 3 kg/cm<sup>2</sup>. It is a highly effective process for repairing concrete walls or damaged surfaces.

### **Question No. 5**

**For filling cracks in masonry structures, the type of bitumen is used?**

⇒ Plastic bitumen

### **Question No. 6**

**What is the bending moment (BM) & Shear force (SF)?**

⇒ A bending moment is the reaction induced in a structural element when an external force or moment is applied to the element causing the element to bend.

The most common or simplest structural element subjected to bending moments is the beam. Shear force is the force in the beam acting perpendicular to its longitudinal (x) axis.

For design purposes, the beam's ability to resist shear force is more important than its ability to resist an axial force. An axial force is the force in the beam acting parallel to the longitudinal axis.

### **Question No. 7**

**What's The Difference Between a One-Way Slab And a Two-Way Slab?**

⇒ The difference between a One-way slab and a Two-way slab is as follows:

**One-way slab:** Ratio of Longer Span / Shorter span  $> 2$

**Two-way slab:** when the Ratio of Longer span / shorter span  $\leq 2$

### **Question No. 8**

**What is the process of covering concrete placed on the exposed top of an external wall?**

⇒ Coping

**Question No. 9**

**A wall constructed to resist the pressure of an earth filling, is known as?**

⇒ Retaining wall

**Question No. 10**

**What is the minimum curing period?**

⇒ IS 456 – 2000 recommends that the curing duration of concrete must be at least 7 days in the case of Ordinary Portland Cement, and at least 10 days for concrete with Mineral admixtures.

It also recommends that the curing duration should not be less than 10 days for concrete of OPC exposed to dry and hot weather conditions and 14 days for concrete with mineral admixtures in hot and dry weather.

**Question No. 11**

**What is the minimum weight of fine aggregate for sieve analysis as per ASTM C136?**

⇒ 300 g

**Question No. 12**

**How many hours should CBR samples be soaked?**

⇒ 96 Hrs

**Question No. 13**

**What is the bearing capacity of soil?**

⇒ Bearing capacity is the capacity of soil to support the loads applied to the ground by the foundation of the structure.

#### **Question No. 14**

**What do you mean by honeycomb in concrete?**

⇒ A honeycomb, also known as an air pocket, is nothing but the air voids in concrete. It is usually formed during concrete casting.

#### **Question No. 15**

**What field tests are required for the quality check of cement?**

⇒ The quality of cement can be checked with color, physical properties, etc. Cement should have a grey color with a light greenish shade.

It should feel smooth when rubbed between fingers.

If the hand is inserted in a heap of cement or its bags, it should feel cool.

When a pinch of cement is thrown in Water the cement should float for some time before it sinks. Also, it should be lump free.

#### **Question No. 16**

**What are the types of cement?**

⇒ There are various types of cement which are:

- a. Ordinary Portland Cement (OPC)
- b. White Portland Cement (WPC)
- c. Portland Pozzolana Cement (PPC)
- d. Low Heat Portland Cement
- e. Colored Portland Cement
- f. Hydrophobic cement
- g. Rapid Hardening Cement
- h. Portland Slag Cement
- i. Sulphate resisting Portland Cement, etc.

### **Question No. 17**

#### **What Is The Slope Of The Staircase?**

⇒ As per IS 456, the slope or pitch of stairs should be between 25 degrees to 40 degrees.

### **Question No. 18**

#### **What Is A Crank Length In The Slab?**

⇒ The crank length in Slab is  $0.42 D$ . Where  $D = \text{Slab thickness} - (\text{Top cover} + \text{Bottom Cover})$

### **Question No. 19**

#### **What Is The Honeycombing Of Concrete?**

⇒ Honeycombs are hollow spaces and cavities left in concrete mass on the surface or inside the concrete mass where concrete could not reach. These look like honey bees' nests.

### **Question No. 20**

#### **What Do You Mean By Segregation?**

⇒ Segregation is the separation of cement and sand from the aggregate. This is caused due to Water cement ratio and when concrete is poured about more than 1.5m.

### **Question No. 21**

#### **What Is Bleeding In Concrete?**

⇒ Bleeding is one form of segregation, where water comes out to the surface of the concrete because it's the lowest specific gravity of water among all the ingredients of concrete.

### **Question No. 22**

#### **1 BHK Full Form?**

⇒ 1 Bedroom, 1 Hall, 1kitchen

### **Question No. 23**

#### **State The Applications Of Modulus Of Elasticity.**

⇒ The modulus of elasticity is related to the flexibility of the material. This value of modulus of elasticity is very important in the case of the deflection of different materials used in construction.

### **Question No. 24**

#### **How Do You Check The Quality Of Cement On The Site?**

⇒ Here is the check that you need to follow to check the quality of cement:

##### **a. Date of Mfg**

Cement strength decreases with its age so it is very important to check.

##### **b. Color**

The Colour should be grey with light greenish. color is an indication of excess lime or clay.

##### **c. Float test**

A good cement will float for some time and then sinks.

Also, When you put your hand in a cement bag you should feel cool.

### **Question No. 25**

#### **State The Building Codes.**

⇒ These codes are a set of specifications given by NBC (National Building Code) which states the dimensions and regulations of any building in India [Building codes vary from one country to another country]

### **Question No. 26**

#### **What is the Compressive Strength Of Brick?**

⇒ The compressive strength of brick is as follows:

First class brick- 10.5 N/mm<sup>2</sup>

Second class brick- 7 N/mm<sup>2</sup>

Third Class Brck- 3.5 N/mm<sup>2</sup>

Fire brick- 125 kg/cm<sup>2</sup>

### **Question No. 27**

#### **What Are The Main Reasons For Building Collapse?**

⇒ There are several reasons for building collapse. The passage of time is the main reason. Also weak foundations, Natural calamities like earthquakes, Tsunamis, etc.

### **Question No. 28**

#### **What Are The Basic Differences Between Absorption, Adsorption, And Sorption?**

⇒ Here is the main difference between them:

##### **Absorption:**

It is the conversion or mixing of one material into another state.

##### **Adsorption:**

The physical bonding of ions and molecules onto the surface of another phase

##### **Sorption:**

It is a physical and chemical process in which one substance becomes attached to another.

**Example:** cotton dipped in an ink bottle

