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## **Top Civil Engineering Interview Questions**

Hi Civil Engineer, you are on this page because you are attending an interview tomorrow or preparing yourself to face an interview. Well, I am posting the Top interview questions asked by top recruiters from Top MNCs to small construction companies. To gather these questions, I have referred top websites and asked my friends regarding this and gathered these questions. While some of them are easy and some of them are very hard still I am trying to crack those questions as a part of 1st step.

### **What is the Unit Weight of concrete?**

The unit weight of concrete depends on the type of aggregates and amount of voids. As per IS : 456-2000 Unit weight of PCC is  $24\text{KN/m}^3$  and RCC is  $25\text{KN/m}^3$

### **What is the unit weight of Steel?**

The unit weight of Steel is  $78.5\text{KN/m}^3$

### **What are the Nominal Concrete Mix proportions for different grades?**

M20-1 : 1.5 : 3

M7.5- 1 : 4 : 8

M5- 1 : 5 : 10

M25- 1 : 1 : 2

M30-1 : 1 : 3

All in ratio of Cement : Sand : Aggregate

### **What is ductility?**

Ductility is the Ability to deform under tensile stress.

### **What's the difference between one-way slab and two-way slab?**

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

Two way slab: Ratio of Longer span/ shorter span  $\leq 2$

### **What is flat slab?**

The slab which is supported on columns (Flat slab don't have beams)

### **What do you mean by One storied, Two storied building?**

The building which has two floors is called two storied building.

### **What's the height of each floor?**

3 Meters

### **What's the length of rise and tread in Stair case?**

Rise – 150mm to 200mm

Tread – 250mm to 300mm

### **What is a crank length in the slab?**

The crank length in Slab is  $0.42D$ .

Where  $D$  is Depth of Slab = Top cover – Bottom Cover.

### **What are the types of a slump?**

**True Slump:** The concrete mass after the test when slumps evenly all around without disintegration is called the true slump.

**Shear Slump:** When one-half of the concrete mass slide down the other is called the shear slump. This type of slump is obtained in a lean concrete mix.

**Collapse Slump:** When the sample is collapsed due to adding excessive water, it is known as collapse slump.

**Zero Slump:** For very stiff or dry mixes it does not show any changes of the slump after removing the slump cone.

### **What is grouting?**

Grout is a fluid form of concrete which is used to fill the voids.

What is allowable moisture content in Fine aggregate for the concrete mix?

We won't use the aggregate if its moisture content is more than 5%.

### **What do you mean by segregation?**

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

### **What is Seepage?**

Slow percolation of water through soil is called Seepage.

### **How do you check the quality of cement on the site?**

1. Date of Mfg: Cement strength decreases with its age.
2. Color: Colour should be grey with light greenish shade and it should be uniform. Color gives an indication of excess lime or clay.
3. Float test: A good cement won't float if you throw a cement in water.
4. When you put your hand in cement bag you should feel cool.

### **What is Initial & final setting time of concrete?**

Initial Setting time : 30mins

Final setting time : 10hrs

### **What is durability?**

Ability to withstand under pressure is called Durability.

### **What are the concrete tests?**

Slump test

Compressive strength test

Water permeability test

Water absorption test

### **What is bleeding in concrete?**

Bleeding is one form of segregation, where water comes out to the surface of the concrete, being lowest specific gravity among all the ingredients of concrete.

**What is the name of the machine to get compression test?**

Universal testing machine (UTM)

**When we go for Pile foundation?**

Pile foundation is adopted when the Soil bearing capacity is less than 24KN/M<sup>3</sup>

**NOTE:** The questions here are just likely questions make sure you know more than this when going for an interview as a Civil engineer.

Thanks for Reading.

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