

MCQs of Concrete Technology

Question No. 01

The window usually provided near the main roof of a room and opens above the adjoining verandah, is called ?

- a. Dormer window
- b. Corner window
- c. Bay window
- d. Clerestorey window**

Question No. 02

The failure of the foundation of a building is due to?

- a. With drawl of subsoil moisture
- b. Unequal settlement of soil
- c. Lateral escape of the supporting material
- d. All of these**

Question No. 03

The addition of surfactants in the concrete mix results in ?

- a. Decrease in the water-cement ratio
- b. Increase in the strength of concrete
- c. Increase in the density of concrete
- d. All of these**

Question No. 04

When the walls are subjected to heavy loading and the bearing capacity of the soil is very low, then the wall is constructed on ?

- a. Reinforced concrete footing**
- b. Column footing
- c. Lean concrete footing
- d. None of these

Question No. 05

For a structure subjected to the action of seawater, the cement used is ?

- a. Rapid hardening cement
- b. Low heat cement
- c. High alumina cement**
- d. Sulphate resisting cement

Question No. 06

The degree of grinding of cement is called?

- a. Fineness**
- b. Soundness
- c. Impact value
- d. Bulking

Question No. 07

The cement, widely used in retaining walls, is?

- a. Rapid hardening cement
- b. Low heat cement**
- c. Sulphate resisting cement
- d. Ordinary Portland cement

Question No. 08

The inert mineral material used for the manufacture of mortars and concretes is ?

- a. Cement
- b. Water
- c. Aggregate**
- d. Admixture

Question No. 09

High percentage of tricalcium silicate and low percentage of dicalcium silicate in cement results in?

- a. Rapid Hardening
- b. High early strength
- c. High heat generation
- d. All of these**

Question No.10

The presence of dicalcium silicate in cement?

- a. Hydrates the cement slowly
- b. Generates less heat of hydration
- c. Has more resistance to sulphate attack
- d. All of these**

Question No.11

The initial setting time of ordinary Portland cement is?

- a. 15 min
- b. 30 min**
- c. 60 min
- d. 10h

Question No.12

The gypsum is added to the cement for ?

- a. Providing high strength to the cement
- b. Controlling the initial setting time of cement
- c. Lowering the clinkering temperature
- d. All of the above**

Question No.13

A suitable admixture was added at the time of preparing the concrete?

- a. Water-proof
- b. Acid proof
- c. Highly strong
- d. All of these**

Question No.14

The cement concrete prepared by mixing aluminium in it, is called?

- a. Air-entrained concrete
- b. Cellular concrete
- c. Aerated concrete
- d. Any one of these**

Question No.15

The type of lime used in lime concrete is ?

- a. Fat lime
- b. Poor lime
- c. Slaked lime
- d. Hydraulic lime**

Question No.16

The aggregate is said to be flaky when?

- a. its least dimension is three-fifth of its mean dimension**
- b. its least dimension is equal to its mean dimension
- c. its length is equal to its mean dimension
- d. its length is equal to 1.8 times its mean dimension

Question No.17

The knowledge of a standard consistency of a cement paste is essential to perform?

- a. Setting time test
- b. Soundness test
- c. Compressive strength test
- d. All of these**

Question No.18

The aggregate which passes through 75 mm IS sieve and entirely retains on a 4.75 mm IS sieve is known as?

- a. Cyclopean aggregate
- b. Coarse aggregate**
- c. Fine aggregate
- d. All-in-aggregate

Question No.19

Which of the following statement is correct?

- a. Sulphate resisting cement is particularly used for canal lining.
- b. Low heat cement should not be used for thin concrete structures
- c. Rapid hardening
- d. All of the above**

Question No.20

Rapid hardening cement is used ?

- a. Where high early strength is desired
- b. Where formwork is to be removed as early as possible
- c. for constructing road pavements
- d. all of the above**

Question No.21

Efflorescence in cement is caused due to the excess of ?

- a. Silica
- b. Lime
- c. Alkalies**
- d. Iron oxide

Question No.22

The material used as an ingredient of concrete is usually ?

- a. Cement
- b. Aggregate
- c. Water
- d. All of these**

Question No.23

The cement concrete, from which entrained air and excess water are removed after placing it in position, is called?

- a. Vacuum concrete**
- b. Lightweight concrete
- c. Prestressed concrete
- d. Sawdust concrete

Question No.24

In making precast structural units for partition and wall lining purposes, the concrete should be?

- a. Sawdust concrete
- b. Air-entrained concrete
- c. Light-weight concrete**
- d. Vacuum concrete

25. The hardening is the phenomenon by virtue of which?

- a. The cement does not undergo a large change in volume when treated with water
- b. The plastic cement paste changes into a hard mass
- c. The cement paste sets and develops strength**
- d. None of the above

Question No.26

Ferro-concrete is another name given to ?

- a. Plain cement concrete
- b. Reinforced cement concrete**
- c. Prestressed cement concrete
- d. none of these

Question No.27

The importance of batching is to obtain?

- a. Strength
- b. Workability
- c. Durability
- d. All of these**

Question No.28

The strength and durability of concrete depend upon the?

- a. Size of aggregates
- b. Grading of aggregates
- c. Moisture contents of aggregates
- d. All of these**

Question No.29

The continuous strain, that the concrete undergoes due to the application of external loads, is called ?

- a. Workability
- b. Bleeding
- c. Segregation
- d. Creep**

Question No.30

Reinforced cement concrete is equally strong in taking?

- a. Tensile and compressive stresses
- b. Compressive and shear stresses
- c. Tensile, compressive and shear stresses**
- d. Tensile and shear stresses

Question No.31

In order to provide colour, hardness and strength to the cement, the ingredient used is?

- a. lime
- b. silica
- c. Alumina
- d. Iron oxide**

Question No.32

In the manufacture of cement, the dry or wet mixture of calcareous and argillaceous materials burnt at a temperature between?

- a. 900°C to 1000°C
- b. 1000°C to 1200°C
- c. 1200°C to 1500°C
- d. 1500°C to 1600°C**

Question No.33

The capacity of a warehouse depends upon the?

- a. floor area occupied by one cement bag
- b. height to which the cement bags are piled
- c. either (a) and (b)
- d. both (a) and (b)**

Question No.34

The cement concrete in which high compressive stresses are artificially induced before its actual use, is called?

- a. Plain cement concrete
- b. Reinforced cement concrete
- c. Prestressed cement concrete**
- d. Lime concrete

Question No.35

The presence of tricalcium silicate in cement ?

- a. Hydrates the cement rapidly**
- b. Generates less heat of hydration
- c. Offers high resistance to sulphate attack
- d. All of these

Question No.36

The importance of storing the various ingredients of concrete is?

- a. to maintain the uniformity of grading
- b. to maintain the uniformity of moisture
- c. to maintain the strength of materials
- d. both (a) and (b)**

Question No.37

Which of the following cement is expected to have the highest compressive strength after 3 days?

- a. Ordinary Portland cement
- b. Rapid hardening cement
- c. High alumina cement**
- d. Sulphate resisting cement

Question No.38

Pozzolana is essentially a silicious material containing clay up to?

- a. 20%
- b. 40%
- c. 60%
- d. 80%**

Question No.39

Too much fineness of cement?

- a. Results cracks in concrete
- b. Generates greater heat
- c. Develops early strength
- d. both (a) and (b)**

Question No.40

The measuring 50 litres of aggregate, the inner dimensions of a form should be?

- a. 25 cm x 25 cm x 40 cm
- b. 29 cm x 29 cm x 48 cm
- c. 30 cm x 30 cm x 50 cm
- d. 31 cm x 31 cm x 52 cm**

Question No.41

Low percentage of tricalcium silicate and a high percentage of dicalcium silicate in cement salts in?

- a. Rapid hardening
- b. High early strength
- c. High heat generation
- d. None of these**

Question No.42

In designing a warehouse, it is assumed that?

- a. Each bag contains 50 kg of cement
- b. Floor area occupied by one bag of cement is 0.3 m²
- c. Height of each cement bag containing 35 litres of cement is 0.18 m
- d. All of the above**

Question No.43

The chemical ingredient of cement which provides quick setting property to the cement is ?

- a. Lime
- b. Silica
- c. Alumina**
- d. Iron oxide

Question No.44

According to Indian standard specifications for the compressive strength test of cement, the cement and standard sand mortar in the ratio of..... is used?

- a. 1:1**
- b. 1:2
- c. 1:3
- d. 1:4

Question No.45

For continuous transportation of concrete, the method used is?

- a. Transport of concrete by pans
- b. Transport of concrete by wheelbarrows
- c. Transport of concrete by belt concrete conveyors**
- d. Transport of concrete by pumps

Question No.46

The function of aggregates in concrete is to serve as?

- a. Binding Material
- b. Filler**
- c. Catalyst
- d. All of these

Question No.47

The sound absorption coefficient of lightweight concrete is near..... than that of ordinary concrete?

- a. Twice**
- b. Three times
- c. Four times
- d. Six times

Question No.48

The number of bags of cement required per cubic metre of 1:2:4 concrete will be approximately?

- a. 2 to 3
- b. 3 to 4
- c. 4 to 5
- d. 5 to 6**

Question No.49

The breaking up of cohesion in a mass of concrete is called ?

- a. Workability
- b. Bleeding
- c. Segregation**
- d. Creep

Question No.50

The removal of excess air after placing concrete helps in increasing the strength of concrete by?

- a. 15 to 20%**
- b. 20 to 30%
- d. 30 to 50%
- e. 50 to 70 %