

No. of Printed Pages : 4
Roll No.....

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Branch : CIVIL
Subject : Concrete Technology

Time : 3 Hrs.

M.M. : 100

SECTION-A

Note : Multiple choice questions. All questions are compulsory. (10x1=10)

- Q.1 Cement is used as _____ in cement concrete.
a) Mixer b) Binder
c) Strength d) Fine aggregate
- Q.2 The initial setting time of OPC is _____
a) 10 hrs b) 30 minutes
c) 1 hr d) 40 minutes
- Q.3 Chemical reaction between cement & water is known as _____
a) Concreting b) water-cement reaction
c) Hydration of cement d) Both C & B
- Q.4 Freshly prepared concrete is known as
a) Liquid concrete b) Grey concrete
c) Green concrete d) Both A & C
- Q.5 Tensile strength of concrete is _____ of compressive strength
a) 10% b) 80%
c) 20% d) 90%
- Q.6 As per IS:456-2000 minimum grade of concrete required for RCC work is _____

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- a) M20 b) M10
c) M30 d) M15
- Q.7 Sugar is used as _____ admixture in a concrete mix.
a) Retarder b) Plasticizers
c) Accelerator d) Damp proofing
- Q.8 In cold weathering concreting _____ can be used
a) Retarder b) Plasticizers
c) Accelerator d) Damp proofing
- Q.9 The last and final operation of finishing is termed as _____.
a) Compaction b) Trowelling
c) Finishing d) Stripping
- Q.10 The standard size of concrete mould for testing is _____
a) 10cm b) 15cm
c) 20cm d) 25cm

SECTION-B

Note : Objective type questions. All questions are compulsory. (10x1=10)

- Q.11 Strength of concrete _____ with time.
- Q.12 Consistency of the cement is determined with the help of _____ apparatus.
- Q.13 Water-cement ratio is generally expressed in _____ units.
- Q.14 Bleeding _____ permeability of concrete.
- Q.15 Work test is performed on concrete collected from work site (True/False)
- Q.16 Fly ash has pozzolanic properties (True/False)

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- Q.17 Polymer concrete helps in _____ of structures.
 Q.18 RMC stands for _____.
 Q.19 The range of Ph value of water used for making concrete is _____.
 Q.20 Measurement of cover to the reinforcement can be measured with the help of _____ Testing.

SECTION-C

Note : Short answer type questions. Attempt any twelve questions out of fifteen questions. (12x5=60)

- Q.21 a) Write down five advantages of concrete.
 b) What is hydration of cement.
 Q.22 Enlist the names of various properties of aggregates which influence the properties of concrete.
 Q.23 Write a short note on compounds of cement.
 Q.24 a) Write a short note on initial setting time & final setting time.
 b) What is water - cement ratio.
 Q.25 Explain Slump test.
 Q.26 a) Write a short note on properties of concrete in plastic stage.
 b) What are plasticizers.
 Q.27 Write a short note on proportioning of materials as per IS 456-2000.
 Q.28 a) What are preliminary tests of concrete.
 b) What are retarders.
 Q.29 What are the effects of hot weather on concreting?
 Q.30 Write down some applications of polymer concrete.
 Q.31 a) What is fibre reinforced concrete.
 b) What is screeding.

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- Q.32 What is stripping and stripping time?
 Q.33 Write a short note on transportation of concrete.
 Q.34 What is batching? Explain two ways of batching.
 Q.35 a) What is rebound hammer test?
 b) What is curing of concrete?

SECTION-D

Note : Long Answer type question. Attempt any two questions. (2x10=20)

- Q.36 a) Define the following :
 1) Creep 2) Plastic concrete
 3) Co-efficient of thermal 4) Shrinkage
 b) What is workability? Give factors affecting workability of concrete.
 Q.37 Differentiate between nominal and controlled concrete mix. What are the main objective of proportioning of normal concrete?
 Q.38 Determine the size of warehouse to accommodate 1000 bags of cement.
 b)

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