

No. of Printed Pages : 4

Roll No.

220731

3rd Sem. / Civil

Subject : Concrete Technology

Time : 3 Hrs.

M.M. : 60

SECTION-A

Note: Multiple choice questions. All questions are compulsory (6x1=6)

Q.1 The cyclopean aggregate has size more than _____ (CO2)

- a) 75mm
- b) 20mm
- c) 40mm
- d) 60mm

Q.2 Finer the cement (CO5)

- a) Higher the rate of hydration
- b) More its surface area
- c) Both a & b
- d) None of the above

Q.3 Low heat Portland cement is usually used in (CO5)

- a) Mass Concreting
- b) Under water
- c) Both a & b
- d) None of these

Q.4 The mixture of cement and water is known as(CO5)

- a) Water cement ratio
- b) Water Aggregate ratio
- c) Aggregate to cement ratio
- d) None of these

Q.5 Concrete gains strength due to (CO3)

- a) Chemical reaction of cement with sand and coarse aggregates
- b) Evaporation of water from concrete
- c) Hydration of cement
- d) All of the above

Q.6 Le chatelier apparatus used for measuring the _____ (CO5)

- a) Soundness
- b) Tensile strength of cement
- c) Compressive strength of cement
- d) None of these

SECTION-B

Note: Objective/ Completion type questions. All questions are compulsory. (6x1=6)

Q.7 Strength of concrete _____ with age. (CO3)

(1)

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(2)

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- Q.8 Volume of one bag of cement _____. (CO3)
- Q.9 As the slump increase workability _____. (CO2)
- Q.10 Water-cement ratio law is only valid concrete is _____ compacted. (CO3)
- Q.11 Retarders to concrete decrease the _____. (CO4)
- Q.12 The aggregates retained on _____ sieve is called coarse aggregate. (CO1)

SECTION-C

Note: Short answer type questions. Attempt any eight questions out of ten questions. (8x4=32)

- Q.13 What do you mean by controlled concrete? (CO3)
- Q.14 Explain briefly rebound hammer test. (CO6)
- Q.15 What are the main objectives of mix design? (CO3)
- Q.16 What do you mean by curing? What are its objectives? (CO3)
- Q.17 Write a note on silica fume concrete with advantages. (CO4)
- Q.18 Explain the Hydration process of cement. (CO5)
- Q.19 Define bleeding of concrete. Explain its causes and prevention. (CO4)
- Q.20 Write a brief note on Fly Ash as admixture with its uses. (CO5)

- Q.21 Discuss classification of aggregates according to shape and size in brief. (CO2)
- Q.22 Briefly describe limitations of W/c ratio law. (CO5)

SECTION-D

Note: Long answer type questions. Attempt any two questions out of three questions. (2x8=16)

- Q.23 Explain the factors affecting workability of concrete. (CO3)
- Q.24 Explain the tremie method for under water concreting with the help of diagram. (CO4)
- Q.25 a) Explain advantages and disadvantages of concrete (CO3)
b) Define compaction factor test of workability of concrete. (CO3)

(Note: Course outcome/CO is for office use only)