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Question Paper Code: 43012

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Third Semester

Civil Engineering

14UCE302 – CONSTRUCTION TECHNIQUES AND PRACTICES

(Regulation 2014)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

(Use of IS 10262:2009 and IS 456:2000 code books are permitted)

PART A - (10 x 1 = 10 Marks)

1. A badly mixed cement concrete results in
(a) segregation (b) bleeding (c) honey combing (d) none of these
2. In the manufacture of cement, the dry or wet mixture of calcareous and argillaceous materials is burnt at a temperature between
(a) $900^{\circ}C$ to $1000^{\circ}C$ (b) $1000^{\circ}C$ to $1200^{\circ}C$
(c) $1200^{\circ}C$ to $1500^{\circ}C$ (d) $1500^{\circ}C$ to $1600^{\circ}C$
3. The form work from the underside of slabs, can be removed only after
(a) 1 day (b) 4 day (c) 7 day (d) 14 day
4. The minimum thickness of a wall in stone masonry should not be less than
(a) 100 mm (b) 200 mm (c) 350 mm (d) 450 mm

5. In ordinary residential and public buildings, the damp proof course is generally provided at
- (a) Ground level (b) Plinth level
(c) Water table level (d) Midway ground level and water-table level
6. The timber having maximum resistance against white ants, is obtained from
- (a) Chir (b) Shisham (c) Sal (d) Teak
7. Pieces of stones are called
- (a) Ballast (b) Spalls (c) Crushed stone (d) None of these
8. Corrosion involves exchange of electrons in _____ corrosion.
- (a) Chemical (b) Electrochemical
(c) Both (a) & (b) (d) Neither (a) nor (b)
9. To attain the required shape of the tunnel section
- (a) Easers (b) Trimmers (c) Cut holes (d) Chisels
10. In a graph if $e=[u, v]$, Then u and v are called
- (a) endpoints of e (b) adjacent nodes (c) neighbors (d) all the above

PART - B (5 x 2 = 10 Marks)

11. What does the grade of cement denote?
12. What are the requirements of good floor?
13. Define dampness.
14. What do you meant by modernization and rehabilitation?
15. Give a list of equipments needed in the construction of tall structures.

PART - C (5 x 16 = 80 Marks)

16. (a) Describe the processes in the manufacture of ordinary Portland cement. (16)
- Or
- (b) Write the procedure for of mix design as per IS10262:2009. (16)

17. (a) Explain the various types of flooring with neat sketches. (16)

Or

(b) Briefly explain the sequence of activities to be done in construction. (16)

18. (a) Explain the various methods of providing DPC? Also state the requirements of an ideal material for Damp proofing. (16)

Or

(b) Explain in detail about Dampness and its prevention. (16)

19. (a) Explain the classification of cracks and how the cracks can be measured and reported. (16)

Or

(b) Explain the various types of defects and their repair technique. (16)

20. (a) Discuss the role of tractors in earth moving. What considerations govern the selection of wheel type or crawler type tractor on a job? Compare their applications. (16)

Or

(b) What are the factors must be taken into account during selection of earthwork equipment? (16)
