

B.E. DEGREE EXAMINATIONS: NOV/DEC 2010

Third Semester

CIVIL ENGINEERING

CEE105: Construction Technology

Time: Three Hours

Maximum Marks: 100

Answer ALL Questions:-

PART A (10 x 1 = 10 Marks)

1. The interlocking arrangement of stone (or) brick so as to avoid the occurrences of continuous vertical joint is known as _____
a) Corbel b) Bond c) Cornice d) Coping
2. One of the methods of damp proofing is
a) Grouting b) Guniting c) Concreting d) Throating
3. A very light type of scaffolding and can be used only for maintenance works is known as
a) Steel scaffolding b) Mason's scaffolding
c) Suspended scaffolding d) Cantilever scaffolding
4. The simplest form of Pitched Roof is
a) Lean to Roof b) Couple Roof c) Couple Close Roof d) Collar Beam Roof
5. The Pile used in the Black cotton soil surface is
a) Friction Pile b) Sheet Pile c) Screw Pile d) Under Reamed Pile
6. Generally _____ foundations are used in the larger water front structures
a) Raft b) Caisson c) Inverted arch d) Grillage
7. The operation of removal of excavated material in tunneling work is known as
a) Mucking b) Scaling c) Rock bolting d) Stemming
8. The Overhead Crane widely used in factories and workshops is
a) Gantry crane b) Hydraulic crane c) Tower crane d) Derrick crane
9. The most commonly used pump for dewatering is
a) Centrifugal pump b) Gear pump c) Air jet pump d) Submergible pump
10. The self sufficient machine which can dig, load, haul and discharge the material in uniform thick layer is known as
a) Tipper b) Scrapper c) Tracer d) Dozer

PART B (10 x 2 = 20 Marks)

11. Differentiate Stone Masonry and Brick Masonry
12. What do you mean by Granolithic flooring?
13. Define the term 'Joint in concrete' and state its purposes
14. What are the important points to be considered while constructing the Brick Masonry?

15. What are the circumstances under which Raft Foundation is provided?
16. Define the term 'Grouting'
17. Name the various operation involved in Hard Rock Tunneling.
18. Give any three Compaction Equipments in construction
19. What do you mean by 'RMC' and 'R.C.C'?
20. What is the purpose of providing False Ceiling in an auditorium?

PART C (5 x14 = 70 Marks)

21. a) (i) Mention the ill effects of Dampness in a building. (7)
 (ii) What are the factors to be considered before selecting a type of Flooring? (7)
 (OR)
- b) State the various types of Foundations and explain any four types with neat sketches.
22. a)(i) Define the term 'Slip Forms' state the uses of the slip forms in modern construction.(7)
 (ii) What are the advantages of constructing Steel Roofs over Timber Trusses? (7)
 (OR)
- b) (i) List out the various Roof Coverings which are generally used for pitched roofs and explain any two with the aid of neat sketches. (7)
 (ii) Explain in detail about the different types of Centering and Shuttering Works. (7)
23. a) (i) What are the main objectives of Shoring ? (4)
 (ii) Explain with the aid of neat sketches, how a Raking Shore is provided to support an unsafe wall. (10)
 (OR)
- b) (i) Explain in detail any two methods of Tunneling in soft soils. (10)
 (ii) State the uses of Sheet Piles. (4)
24. a) (i) What do you mean by a Framed Structures? Briefly explain its advantages. (7)
 (ii) Explain in detail about the Support Structures for heavy equipments. (7)
 (OR)
- b) (i) Enumerate the problems of Tall Buildings. Write a detailed note on design considerations of tall buildings. (10)
 (ii) What do you mean by Well Point System? Mention the uses of the system? (4)
25. a) (i) Enumerate different types of Hoisting Equipments. Briefly explain different types of Cranes used in Building Industry
 (OR)
- b) Write short notes on:
 - (i) Belt Conveyors (4)
 - (ii) Sheep Foot Roller (4)
 - (iii) Drop Hammers and its advantages (6)
