

B.E DEGREE EXAMINATIONS: DEC 2014

(Regulation 2009)

Third Semester

CIVIL ENGINEERING

CEE105: Construction Technology

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The line of the other wall which is perpendicular to the long wall can be marked by setting out right angles is
 - a) Outer line
 - b) offset line
 - c) Centre line
 - d) boundary line
2. The common size of hollow blocks generally adopted for construction of buildings is
 - a) (39x19x30)cm
 - b) (39x10x30)cm
 - c) (30x10x30)cm
 - d) (39x19x39)cm
3. The roofing material is fixed to the common rafters of king post truss is used for spans of
 - a) 6m to 10m
 - b) 10m to 15m
 - c) 9m to 14m
 - d) 5m to 9m
4. Roof finishing accessories also include flashing, also known as
 - a) Weather proofing
 - b) Water proofing
 - c) Fire proofing
 - d) Sound proofing
5. In a situation where pipes have to be laid deeper in ground than 3 to 7 meters, the technique adopted is
 - a) Box jacking
 - b) Trenching
 - c) Jacked box tunneling
 - d) Pipe jacking
6. The process of placing props against the side of a structure, or beneath or above anything, to prevent shrinking or sagging is
 - a) Underpinning
 - b) Scaffolding
 - c) Shoring
 - d) Shuttering

7. The principal function of a bridge deck is to provide support to local vertical loads and transmit these loads to the
 - a) Piers of the bridge
 - b) primary superstructure of the bridge
 - c) primary substructure of the bridge
 - d) Footing of the bridge
8. A structural system used to transfer lateral loads to shear walls or frames primarily through in-plane shear stress is
 - a) Truss
 - b) Strut member
 - c) Frames
 - d) Diaphragm
9. Machines designed primarily for cutting and pushing the material over short distance is
 - a) Bull dozer
 - b) Scraper
 - c) Excavator
 - d) Compactor
10. Piles which are used to transfer load through water or soft soil to a suitable bearing stratum
 - a) Friction piles
 - b) End bearing piles
 - c) Compaction piles
 - d) Compaction and friction pile

PART B (10 x 2 = 20 Marks)

11. Name some of the machines that help in excavation process.
12. Define pressure grouting.
13. Mention the advantages of slip forms.
14. List the types of roof trusses.
15. State the necessity of box jacking technique.
16. Differentiate cofferdam and caisson.
17. What do you mean by articulated structure?
18. Name some of the equipments used for aerial transportation.
19. Write the different operations that can be performed by the motor grader.
20. What is mucking?

PART C (5 x 14 = 70 Marks)

21. a) Define stone masonry. Explain the different types of stone masonry with neat sketch.

(OR)

- b) (i) What are the causes for dampness? Discuss. (7)
- (ii) Explain the construction joints in buildings with sketches. (7)

22. a) (i) Enumerate the procedure of constructing cement concrete and mosaic flooring with suitable sketches. (10)
(ii) Write short notes on requirements of good acoustics. (4)

(OR)

- b) Name the different types of scaffolding and describe any three with neat sketches.

23. a) Describe in detail the various tunneling techniques with neat sketch.

(OR)

- b) Explain the process of dewatering the trenches.

24. a) (i) Give the general requirements in launching girders. (7)

- (ii) Write short notes on shell roof structure. (7)

(OR)

- b) Illustrate about the support structures for heavy equipment and conveyors.

25. a) (i) List the factors governing the selection of equipment for earthwork. (4)

- (ii) Classify the compaction equipment and explain any two type of equipment in detail. (10)

(OR)

- b) Describe in detail the various pile driving processes with neat sketch.
