

Supplementary examination (February-2019)

Total page No.....1.....

Roll No

END SEMESTER EXAMINATION

3rd SEMESTER

B.Tech [civil]

Sub:- ENGINEERING ANALYSIS AND DESIGN

CE - 207

Time: 3. Hours

Max. Marks : 50

Note :- Answer any ten question. All question are of equal marks. Assume any missing data suitably.

1. Discuss briefly the classification of surveying based on (1) Purpose (2) Instruments.
2. The fore bearings of the floor lines AB, CD, EF AND GH are, respectively, as under: (i) S 25° 30' W
(ii) N 30° W (iii) S 40° 30' W; (iv) N 70° 45' E. Determine the back bearings.
3. Explain the terms: (i) characteristic strength of material (ii) factored loads (iii) characteristic load (iv) limit state method (v) working stress method.
4. Explain (i) under reinforced design (ii) over reinforced design (iii) balanced section design des (iv) limit state of serviceability (v) limit state of collapse.
5. Distinguish between mechanical weathering and chemical weathering.
6. Explain briefly the object of classifying soils for engineering purposes.
7. What are the various surveys to be carried out before planning a highway system for a given area? Explain briefly.
8. Explain with sketches the various factors controlling the alignment of roads.
9. Explain with the help of a diagram the hydrologic cycle.
10. What is run-off? What are the factors that affect the run-off from a catchment area?
11. What are different types of transport modes. Write their merit and demerit.
12. Define (i) liquid limit (ii) plastic limit (iii) shrinkage limit (iv) void ratio (v) unit weight of material.
13. What is chain surveying? Write instruments used in chain surveying.