Combined First and Second Semester B.Tech. Degree Examination, March 2018
(2008 Scheme)
08-106 : BASIC CIVIL ENGINEERING (CMNPHERARUFBS)

Time : 3 Hours

Max. Marks : 100

PART - A

Answer all questions, each question carries 5 marks.

1. What is parallax error? How can it be eliminated?

2. What are offsets? List the different types of offset.

3. What are contour lines? Elaborate on their uses.

4. What are the desirable qualities of a good building stone?

5. What is meant by curing of concrete? What are the different methods adopted for it?

6. What is meant by raft or mat foundation? What are the situations under which raft foundations are preferred?

7. What is “bulking of sand”?

8. What are the requirements of a good stair? (8×5=40 Marks)
Each question carries 20 marks.

9. a) Explain Simpson's rule and Trapezoidal rule?
   
b) The following offsets were taken from a survey line to a boundary:
   
   Chainage: 0 15 30 50 70 90 110 120 130
   Offset:  4.6 3.8 2.9 4.2 5.2 6.1 5.8 4.5 3.6
   
   Calculate the area between the survey line, boundary and the first and last offset by
   i) Trapezoidal rule  ii) Simpson's rule.

   OR

10. a) Briefly explain:
   i) Total station
   ii) GPS.
   
b) Fill the missing figures and complete the level of book page. Apply usual arithmetic check:

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Module – II

11. a) What are the ingredients of a paint? Explain the method of painting a new plastered surface.
   b) Draw the plan and elevation of a two thick brickwall in English and Flemish bond.

   OR

12. a) What are the different types of roof covering materials used in building construction? Explain.
   b) Draw the sectional elevation of a King Post timber truss and mark the salient features.

Module – III

13. a) Explain the different methods adopted for proportioning of concrete.
   b) What is meant by M20 concrete. How will you determine the strength of concrete in the laboratory?

   OR

14. a) Write short notes on:
      i) Septic tank
      ii) Sock pit.
   b) What are the different types of stairs? Draw the plan and sectional elevation of a stair and mark the salient features.