



Reg. No. :

Name :

**Combined First and Second Semester B.Tech. Degree
Examination, October 2014
(2013 Scheme)
13.106 : BASIC CIVIL ENGINEERING (ABEFHMNPRSTU)**

Time : 3 Hours

Max. Marks : 100

PART – A

Answer **all** questions, each question carries **4** marks.

1. Give a brief description of a Total Station.
2. What are the advantages of reinforced cement concrete over plain cement concrete ?
3. List and explain three major environmental concerns of today.
4. Write a note on popular roof covering materials.
5. Draw a sketch of a one brick thick wall of English bond. Label and explain the terms. (5×4 = 20 Marks)

PART – B

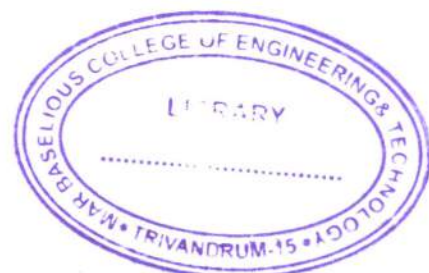
Module – I

6. a) Explain the principles of levelling. 5
- b) Explain the temporary adjustments of a dumpy level. 15

OR

7. The following perpendicular offsets were taken at 10 m. intervals from a survey line to an irregular boundary line. 3.82, 4.37, 6.82, 5.26, 7.59, 8.90, 9.52, 8.42, 6.43 and 7.50 m. Calculate the area in square metres enclosed between the survey line, irregular boundary line and the first and last offset by the application of Trapezoidal rule. 20

P.T.O.



**Module – II**

8. What are the different types of foundations ? How do you choose among them ? 20

OR

9. a) Discuss the features of some of the most common types of partition materials. 10
b) Bring out the differences between enamel, emulsion and distemper. 10

Module – III

10. a) Give the tests and specifications for assessing the quality of cement. 15
b) Differentiate between mild steel and HYSD. 5

OR

11. What makes up concrete ? What are the desirable properties of each of the ingredients of concrete ? 20

Module – IV

12. Explain the multidisciplinary nature of environmental studies. 20

OR

13. Explain the sources, types and effects of air pollution. How can that be controlled ? 20
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