



Reg. No. : .....

Name : .....

**Combined First and Second Semester B.Tech. Degree  
Examination, May 2015  
(2013 Scheme)  
13.106 : BASIC CIVIL ENGINEERING (ABEFHMNPRSTU)**

Time : 3 Hours

Max. Marks : 100

**Instruction :** Answer *all* questions in Part – A and *one full* question from *each* Module in Part – B.

**PART – A**

1. What is ranging ? Explain reciprocal ranging in detail.
2. Explain Trapezoidal rule and Simpsons rule for Area Computation.
3. List the various material used for partition and explain the method of selecting an ideal material.
4. What is workability of concrete ? What are the factors controlling workability ?
5. Write short note on Green building. (5x4=20 Marks)

**PART – B  
Module – I**

6. a) What is distonant ? Explain its uses.
- b) Explain the principles of surveying.
- c) What is GPS ? Explain its uses.



7  
6  
7

OR

7. The following staff readings were taken with a dumpy level on a 4 m levelling staff over a continuously sloping ground. The first reading is taken on a BM of 100.00 Enter the staff reading on a page of field book and reduced the levels of all other points. 3.850, 3.115, 2.810, 2.110, 1.650, 0.970, 3.470, 2.910, 2.320, 1.990, 0.815, 0.350, 3.180, 2.650, 2.150, 1.125, 0.750 and 0.250.

20

P.T.O.

**Module – II**

8. List the various components of building. Explain the uses of any five components. 20

OR

9. a) Compare the merits and demerits of English Bond and Flemish bond. 10

b) Explain the method of plastering of a brick masonry wall. 10

**Module – III**

10. a) What is initial and final setting time of cement ? How will you test it ? 10

b) Explain the advantages of R.C.C. over P.C.C. 10

OR

11. a) Explain the method of testing the compressive strength of concrete. 10

b) List the ingredients of concrete and explain the function of each ingredient. 10

**Module – IV**

12. a) Explain the various causes of water pollution. Also list the water quality standards. 12

b) What are recycled materials ? Give examples. 8

OR

13. a) Explain the different types of air pollution. 10

b) Write short note on Environmental Ethics. 10

