

Total No. of Questions : 10] [Total No. of Printed Pages :

Roll No.

BE-205

B. E. (First/Second Semester)

EXAMINATION, June, 2010

(Common for all Branches)

BASIC CIVIL ENGINEERING

(BE – 205)

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Answer *five* questions in all. All questions carry equal marks. Assume suitable data if necessary.

1. (a) Describe the engineering properties of stones with the prescribed engineering values. 10
- (b) Mention any *one* test to assess quality of the following 10
 - (i) Brick
 - (ii) Cement

Or

2. (a) Describe the engineering properties of timber with prescribed engineering values. 10
- (b) Describe the following : 10
 - (i) Paints and Varnishes
 - (ii) R. C. C.
3. (a) Differentiate between stones masonry and brick masonry. 10
- (b) Describe various types of deep foundations. 10

P. T. O.

Or

4. Describe any *two* of the following : 20
- (i) Bearing capacity of soil
 - (ii) Orientation of Building
 - (iii) Staircase
 - (iv) Brick Bonds
5. (a) Describe the following : 10
- (i) Survey stations
 - (ii) Survey lines
 - (iii) Forward bearing
 - (iv) Change point
- (b) Describe any *one* instrument used for electronic distance measurement. 10

Or

6. Describe the following : 20
- (i) Local attraction
 - (ii) Rise and fall method
 - (iii) Theodolite and its use
 - (iv) Plane table survey
7. (a) Describe uses and characteristics of 'Contours'. 10
- (b) Describe Remote sensing and its application. 10

Or

8. (a) Perpendicular offsets at 50 m intervals to the hedge are 10.6, 15.4, 20.00, 15.00, 16.00, 16.75, 20.4, 25.8, 30.5, 20.8 and 17.00 m. Calculate the area between the chain line and hedge by : 10
- (i) Average ordinate rule
 - (ii) Trapezoidal rule

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- (b) Describe various formulas used for calculation of volumes. 1
9. (a) Describe how you plan a fire resistant building. 10
- (b) Describe any *two* I. S. Codes used in building design and construction. 10

Or

10. Describe the following : 20
- (i) Earthquakes and its effect
- (ii) Natural disasters