Roll No. .....

24197

B.Tech 4th Semester (Civil Engineering)

Examination – May, 2013

DESIGN OF CONCRETE STRUCTURES

Paper : CE-206-F

Time : Three hours] *[Maximum Marks : 100*

Before answering the question, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard, will be entertained after examination.

Note : Attempt ***five*** questions in all, selecting at least ***one*** question from each Unit. Question No. 1 is ***compulsory***. All questions carry equal marks.

1. Answer the following questions : $5 \times 4 = 20$

(a) Describe inverted flanged beam.

(b) Discuss spacing of reinforcement.

(c) Discuss non-rectangular slabs.

(d) Discuss limit state of crack width.

UNIT– I

2. Explain the design contraction of one way and two way slabs for distributed and concentrated loads. 20

3. (a) Discuss slenderness and vibrations. 10

(b) Discuss curtailment of reinforcement. 10

UNIT– II

4. Explain design consideration of singly and doubly reinforced rectangular and flanged beame in flexure. 20

5. (a) Explain basic assumption of limit state method. 10

(b) Discuss min & max reinforcement requirements. 10

UNIT– III

6. (a) Describe spacing of reinforcement. 10

(b) Describe reinforcement splicing. 10

7. (a) Discuss isolated and well footing. 10

(b) Discuss control of deflections. 10

UNIT– IV

8. (a) Discuss curtailment of reinforcement. 10

(b) Discuss serviceability limit state. 10

9. (a) Discuss stiffness. 10

(b) Discuss shear reinforcement. 10
