Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 20180

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2012.

Eighth Semester

Civil Engineering

CE 2045/ CE 1007/080100060 — PREFABRICATED STRUCTURES

(Regulation 2008)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List the advantages and disadvantages of prefabricated system.

2. List the system for prefabrication,

3. What are the types of prefabricated components?

4. Explain the term lift-slab construction.

5. Explain joint deformation.

6. Explain joint flexibility.

7. What are connection?

8. Write note on Expansion joint.

9. Explain Equivalent design loads.

10. What is meant by progressive collapse?

PART B — (5 × 16 = 80 marks)

11. (a) Discusses the concept of production techniques.

Or

(b) What are erection stresses? How are they reduced or eliminated?

12. (a) Classify the structure of building based on the load distribution and briefly explain the different types of such prefabricated building.

Or

(b) Explain the methods of construction of roof and floor slab.

13. (a) Discuss the necessity of disuniting of structures and explain in detail with a sketch.

Or

(b) Explain the problem in design because of joint flexibility. Discuss with regard to various location.

14. (a) Explain expansion and contraction joint in retaining wall.

Or

(b) What are the essential requirements of joints in precast construction?

15. (a) Mention in detail the codal provision for considering the effect of earthquake and cyclones

Or

(b) Explain strong column and weak beam.