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

Question Paper Code : 91210

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Eighth Semester

Civil Engineering

CE 2045/CE 805/CE 1007/080100060/10111 CEE 44 — PREFABRICATED STRUCTURES

(Regulation 2008/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define standardization in prefabrication system.

2. What is handling stress?

3. Mention any four prefabricated components.

4. What is large panel construction?

5. Define disuniting of structures for prefabrication.

6. List the factors governing joint deformations.

7. Write the necessity of detailing in prefabrication.

8. Differentiate joints and connections.

9. What is equivalent design load?

10. Give the causes of progressive collapse in prefabricated buildings.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the merits and demerits of prefabrication systems.

Or

(b) Explain the two types of prefabrication systems in detail.

12. (a) Discuss the importance and types of shear walls.

Or

(b) Compare the behaviour of conventional and prefabricated structural components.

13. (a) Explain the method of disuniting of structures.

Or

(b) Explain the method of evaluating the efficiency of materials for prefabrication.

14. (a) Explain the types of joints in prefabricated buildings.

Or

(b) Explain the steps involved in the design of expansion joints.

15. (a) Explain the method of determining equivalent design loads for considering the abnormal effects due to cyclones.

Or

(b) Discuss the importance of avoidance of progressive collapse in prefabricated systems.