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

Question Paper Code : 40753

B.E./B.Tech. DEGREE EXAMINATION, APRIL/MAY 2018
Eighth Semester
Civil Engineering
CE 6016 – PREFABRICATED STRUCTURES
(Regulations 2013)

Time : Three Hours | Maximum : 100 Marks

Answer ALL questions

PART – A **(10×2=20 Marks)**

1. Define modular co-ordination in prefabrication system.
2. State the methods for manufacturing of precast concrete elements.
3. Write short notes about cross wall system.
4. Explain the classification of roofing members in the prefabricate structures.
5. Why disuniting of structures is necessary in the prefabricate structures ?
6. What is meant by joint flexibility in prefabricate structures ?
7. Explain the connection system for post tensioned elements.
8. What is meant by tolerance ?
9. Define equivalent design loads for prefabricate structures.
10. Explain the important and response reduction factor used in static analysis for calculation of design seismic force.

PART – B **(5×16=80 Marks)**

11. a) Discuss in detail about the concept precast concrete building.

(OR)

b) Discuss the process of production and transportation of prefabrication.

12. a) Explain the behavior of large panel construction with suitable sketches.

(OR)

b) Explain the methods of construction of roof and floor slab. Explain the precautions taken during the manufacturing process.

13. a) Explain about design of cross section based on efficiency.

(OR)

b) Explain about shear wall precast method.

14. a) Explain the joints for different structural connections.

(OR)

b) Explain the various types of beam column connection.

15. a) Explain the codal provision for progressive collapse and detail the importance of avoidance of progressive collapse.

(OR)

b) How are explosive loads different from loads typically used in building design ?
