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

Question Paper Code : 91279

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019
Eighth Semester
Civil Engineering
CE 6016 – PREFABRICATED STRUCTURES
(Regulations 2013)
(Common to PTCE 6016 – Prefabricated Structures for BE – (Part-Time) – Seventh Semester – Civil Engineering – Regulations – 2014)

Time : Three Hours | Maximum : 100 Marks

(Use of IS 15916)
Answer ALL questions.

PART – A **(10×2=20 Marks)**

1. Explain Modular coordination.
2. Write about the components of prefabricated structures.
3. What is shear wall and its advantages ?
4. What are the types of precast floors ?
5. Explain disuniting of structures.
6. Define joint flexibility.
7. What is meant by expansion joint ?
8. What are the different types of connections ?
9. Write about the effects of earthquake on pre-fabricated structures ?
10. Explain abnormal loads.

PART – B **(5×13=65 Marks)**

11. a) Briefly explain different types of prefabrication system.

(OR)

b) Describe the different precasting methods with neat sketch.

12. a) Briefly explain the essential requirements of point in precast construction.

(OR)

b) Write briefly large panel construction with neat sketches.

13. a) How do the design principles of precast structures differ from that in-situ construction ?

(OR)

b) Describe briefly the allowance for joint deformation of precast structures.

14. a) Classify and explain with neat sketches the different types of joining of structures.

(OR)

b) Explain with neat sketch for column to footing connection of precast construction.

15. a) Describe briefly code provision of progressive collapse.

(OR)

b) Explain equivalent design load procedure for seismic effects of precast construction.

PART – C **(1×15=15 Marks)**

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

(OR)

b) Discuss and narrate the various precast elements involved in the construction of industrial framed structures.