

Reg. No. :

--	--	--	--	--	--	--	--	--	--	--

**Question Paper Code : L60236**

B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2020  
Seventh/Eighth Semester

Civil Engineering

CE 2045/CE 1007/10111 CEE 44/CE 805/080100060 – PREFABRICATED STRUCTURES  
(Regulations 2008/2010)

(Common to PTCE 2045/10111CEE44 – Prefabricated Structure for B.E. (Part–Time)  
Seventh Semester – Civil Engineering – Regulations 2009/2010)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions.

PART – A

(10×2=20 Marks)

1. Give the different types of modular grids.
2. List out the limitations of modular coordination in precast elements.
3. Name a few prefabricated components.
4. Define a shear wall.
5. What is joint flexibility ?
6. Explain disuniting of structures.
7. Write the necessity of detailing in prefabrication.
8. Differentiate joints and connections.
9. What is meant by progressive collapse ?
10. Differentiate between intensity and magnitude of earthquake.

PART – B

(5×16=80 Marks)

11. a) i) Enumerate the need of prefabrication. (8)  
ii) Explain the principle of prefabrication. (8)  
(OR)  
b) Discuss the process of production, transportation and erection of prefabrication. (16)



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

(OR)

b) Explain the behaviour of roof and floor slabs construction with suitable sketches.

13. a) Design principles of disuniting of structures and explain in detail.

(OR)

b) What is joint flexibility and allowance for joint deformation ? Explain problems in design.

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

(OR)

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

15. a) Discuss the codal provisions in the design for structures subjected to earthquakes.

(OR)

b) Explain a situation for occurrence of progressive collapse. How do you avoid progression collapse ?

---