



B.E DEGREE EXAMINATIONS: APRIL 2015

(Regulation 2009)

Eighth Semester

CIVIL ENGINEERING

CEE216:Prefabricated Structures

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The process of disuniting of members and assembling them in site is called
 - a) Prestressing
 - b) Prefabrication
 - c) Disuniting
 - d) Post tensioning
2. The transportation cost of a prefabricated member to the site is
 - a) 10-15% of the total cost
 - b) Equal to the total cost
 - c) 20-30% of the total cost
 - d) 50% of the total cost
3. The curing of prefabricated members is done by
 - a) Autoclaves
 - b) Hydrochloric acid
 - c) Cold water
 - d) Salt water
4. While joining a column to the foundation, the connection is made using
 - a) Calyx
 - b) Warsa
 - c) Stasa
 - d) Toubro
5. The construction of arched trusses can be carried out in the _____ position only.
 - a) Inclined
 - b) Both a & b
 - c) Vertical
 - d) Horizontal
6. The joints which require concreting after erection are called
 - a) Dry joints
 - b) Rigid joints
 - c) Flexible joints
 - d) Butt joints
7. If the two points of a frame are not hoisted exactly at the same time, the frame will be affected by
 - a) Bending moment
 - b) Torsion
 - c) Shear
 - d) Both a & b

8. Vertical wall panels are called
- a) Lying panels
 - b) Narrow panels
 - c) Standing panels
 - d) Both a) and c)
9. The first prefabrication plant is set in Tamilnadu by
- a) CCCL constructions
 - b) Chennai Silks
 - c) L & T constructions
 - d) Not yet
10. The large RC roofing members rests _____ on the main girder of hall structures.
- a) Partially
 - b) Indirectly
 - c) Both a) and b)
 - d) Directly

PART B (10 x 2 = 20 Marks)

- 11. Summarize the advantages of Prefabrication.
- 12. Define Modular-co ordination.
- 13. What are the types of prefabricated components?
- 14. List the classification of wall panels.
- 15. Explain briefly the disuniting of structures?
- 16. Write the classification of homogeneous prefabrication?
- 17. What is the need for expansion joint in precast structures?
- 18. What are the different types of joints?
- 19. Define Progressive collapse.
- 20. What are the causes of abnormal loads?

PART C (5 x 14 = 70 Marks)

21. a) What is meant by modular co-ordination and briefly explain about it.

(OR)

- b) What are the principles or concept of prefabrication technique and explain detail

22. a) Classify 'the structure of the building based on load distribution

(OR)

- b) Write the details about large panel construction in prefabrication components.

23. a) Explain the steps involved in the process of disunity of prefabricated structures?

(OR)

b) Explain the methods of construction components of column, beam and floor slab.

24. a) Explain in detail the different structural connections in precast buildings

(OR)

b) How stresses can be eliminated during erection of precast elements.

25. a) Define abnormal loads. Explain the causes of progressive collapse?

(OR)

b) Explain the codal provisions for Progressive collapse.
