

Roll No

MVCT/MBCT/MVCP-202**M.E./M.Tech. II Semester**

Examination, July 2015

Prefabrication Design and its Construction Technology*Time : Three Hours**Maximum Marks :70*

- Note :** i) Attempt all questions, internal choices are given.
ii) Any missing data assumed suitably and stated clearly.

Unit-I

1. Describe the suitability of prefabricated construction technique in major and minor projects of civil engineering. Also explain the advantages and disadvantages of prefabricated constructions. 14

OR

2. a) Name different materials used in precast construction, state the properties of any one. 7
b) Describe the various requirements of an industrial building. 7

Unit-II

3. Explain Modular planning for an Industrial building or for construction of a road. What are the advantages of modular planning. 14

OR

4. a) State national building code specifications, in relation to modular grid system. 7
b) Write short note on Modular grid system. 7

Unit-III

5. Describe following with neat sketches.

- a) Prefabricated foundations 7
b) Prefabricated beams 7

OR

6. Describe various box prefabricates with neat sketches and explain the procedure of erection of these prefabricates. 14

Unit-IV

7. Explain the design forces to be considered in the design of following prefabricates.

- a) Wall panel 7
b) Lift point 7

OR

8. Describe the design of following joints.

- a) Joint to transfer axial force only 7
b) Joint to transfer axial force and moment and shear force 7

Unit-V

9. Describe the following with neat sketches.

- a) Silber-kuhi system 7
b) Lift slab system 7

OR

10. Write short notes on :

- a) Equipments used in vertical and horizontal transportation of prefabricated component. 7
b) Precaution to be consider during prefabricated construction. 7
