

Roll No ..

MVCT/MBCT/MVCP-202

M.E./M.Tech. II Semester Examination, June 2016

Prefabrication Design and its Construction Technology

Time : Three Hours

Maximum Marks :70

- Note :** i) Attempt any five questions.
ii) All questions carry equal marks.

1. a) Explain ,why prefabricated construction is required. 6
b) Enlist the advantages and disadvantages of prefabricated constructions over conventional method of construction. <http://www.rgpvonline.com> 8
2. Describe followings: .
a) Limitations of precast construction in India. 7
b) Modular grid system of construction as per National Building code of India. 7
3. Describe plant layout, machines and mould used for precast
a) Frame members beams and columns 7
b) Wall elements 7
4. Classify prefabricates. Give commercially available dimensions of each one of them. Also describe their permissible tolerances and deviations. 14
5. Explain the design of footings, columns, beams and slabs as prefabricates. How their joints are designed? 14
6. Describe the following prefabricates construction techniques: $3\frac{1}{2} \times 4 = 14$
a) Lift slab system b) Jack-block system
c) V-plate system d) Silber-Kuhi system
7. Explain the difference in the design of prefabricates, if the lifting points of beam or column is
a) Two b) Three 14
8. Write short notes on any four of the following: $3\frac{1}{2} \times 4 = 14$
a) Clay units
b) Failure of precast constructions
c) Horizontal and vertical transportation equipments
d) Modular planning for a residential apartment
e) Box fabricates