Roll No .....

## MVCT-301(B) M.E./M.Tech. III Semester

Examination, December 2014

## Multi Storey Buildings (Elective-I)

Time: Three Hours

Maximum Marks: 70

**Note**: i) Attempt any five questions.

- ii) All questions carry equal marks.
- iii) Assume suitable data, if found missing.
- 1. What do you mean by structural systems? Discuss their types and suitability in multi-storeyed buildings.
- 2. Describe basic concept of Matrix Method. Explain Matrix methods for analysis of building frames.
- 3. a) What are the different static and dynamic loads acting on Multi-storeyed buildings?
  - b) Write down the procedure for determining the earthquake forces to different floor levels of the multi-storeyed building.
- What do you understand by shear wall structures? What are
  the various types of shear walls? Discuss behaviour of shear
  wall buildings. http://www.rgpvonline.com

- 5. Write a detailed note on yield line analysis of RCC slab.
- 6. Discuss the effects of earthquake on multi-storeyed buildings? What are the codal provisions for earthquake resistant design of multi-storeyed buildings?
- 7. Write a detailed note on the following:
  - i) Analysis of loads by approximate method
  - Structural design criteria in planning
- 8. Write notes on the following (any four):
  - i) Foundation super structure interaction
  - ii) Detailing of joints
  - iii) Concept of moment redistribution in RCC slab
  - iv) Computer programming for analysis of building frames
  - v) Design for ductility

\*\*\*\*\*