Roll No .....

MVSE - 302(B)

M.E./M.Tech. III Semester

Examination, December 2014

Design of Tall Structures (Elective-II)

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.
ii) All questions carry equal marks.
iii) Assume suitable data if missing.

1. a) Discuss the classification of tall buildings and assumptions involved in its analysis.
   b) What are the different static and dynamic loads acting on tall structures? Explain.

2. a) Discuss in detail the Von Karman vertex in tall structures.
   b) Write down the uncertainties in earthquake design.

3. a) What is shear wall. Discuss the classifications of shear wall.
   b) Discuss the ductility and reinforcement details in the shear walls.

4. a) What are the codal provisions for EQ resistant design of chimneys?
   b) Discuss the design criteria for T.V. towers.

5. Give case study of any tall structure.

6. A chimney of height 80 m is proposed to be built over a hill top at Jaipur. The height of the hill is 600 m and it has a gradient of 1:4.5. The horizontal approach is 2 km from G.L. Calculate the design wind pressure.

7. Discuss in detail the continuous method of analysis of shear wall with openings.

8. Write notes on any four of the following
   a) Gust factor.
   b) Regorlans method
   c) Tabular structures
   d) Various bracing used in tower
   e) Khan and sbarro unit method

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