Total No. of Questions : 8] *[Total No. of Printed Pages : 2*

Roll No .....

MVSE - 302(B)

M.E./M.Tech., III Semester

Examination, June 2017

Design of Tall Structures

(Elective-II)

Time : Three Hours

Maximum Marks : 70

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

1. Discuss the behaviour of tall buildings under different static and dynamic loads.

2. What is shear wall? Discuss its classification and ductile detailing.

3. Explain in detail, Gust response factor and Von-Karman vertices in tall structures.

4. A chimney of height 100 m is proposed to built over a hill top at Jabalpur. The height of the hill is 600 m and it has a gradient of 1:4.5. The horizontal approach is 2 km from ground level. Calculate the design wind pressure.

5. Discuss in detail the design criteria for T.V. Towers.

6. a) What are codal provisions for earth-quake resistant design of chimneys?

b) What are codal provisions for hydro-dynamic analysis of elevated water tank?

7. Explain the procedure of modeling of high-rise buildings, by taking an example.

8. Write short notes on any TWO of the following :
   a) Regorlens method of analysis
   b) Behaviour of tabular structures under lateral load
   c) Khan and Sbarro unit method

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