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Roll No .....

**MVSE-302(B)**  
**M.E./M.Tech., III Semester**  
 Examination, December 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. What are the criteria for design of Chimneys?
2. Discuss the various approaches for analysis of the tall structures.
3. a) Discuss Vortex shedding phenomenon and gust response factor.  
 b) Discuss the uncertainties in Earthquake design.
4. a) Explain in detail the Von Karman vortex in tall structures.  
 b) Explain the modelling for approximate and accurate analysis of a tall structure.
5. a) What is Tubular structure and how this behaves under lateral load?  
 b) What are coupled shear walls?

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6. a) What is hydrodynamic analysis of elevated water tank and codal provisions for this?  
 b) Discuss the ductility and reinforcement details in the shear walls.
7. Give case study of any Tall structure.
8. Write short notes on the following :  
 a) Behaviour of Tall structures under static loads  
 b) Regorlans method of analysis for wind forces  
 c) Modeling of Tall structures  
 d) Hydrodynamic analysis of elevated water tank

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