

Roll No .....

**MVCT/MBCT/MVCP-104**

**M.E./M.Tech. I Semester**

**Examination, December 2016**

**Construction Technology**

*Time : Three Hours*

*Maximum Marks : 70*

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

1. a) Why formwork is necessary? Explain the requirements of formwork. Which are the materials used for preparing formwork?  
b) What is slip formwork? Explain their operation, uses, and advantages.  
c) Briefly explain the process of electro-osmosis for dewatering the foundation trenches.
2. Explain the various equipment's used for the construction of high rise building make a neat sketch of any two of the Hauling Equipment's/earthmoving machine/hoisting equipment.
3. a) What is pretension concrete? Where it is used and why?  
b) Define two types of prestressing system mention their advantages and disadvantages.

4. Write a short notes on the following:
  - a) Non-displacement piles
  - b) Special pretensioning techniques
  - c) Internal and external prestressing steel
  - d) Disposal of spoils and its balancing
5. a) What are the advantages and disadvantages of shop and insitu steel construction.  
b) Explain the erection process of truss.
6. a) Describe the construction of High rise building.  
b) What is the importance of clearances and tolerances?
7. a) Discuss various safety measures adopted in construction work.  
b) Describe some advanced techniques used in construction of dam.
8. a) Explain in details the slip form techniques for the construction of bridge.  
b) Explain in details stripping and removal of formwork.

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