

Roll No

MVSE - 203**M.E./M.Tech., II Semester**

Examination, July 2015

Advance Concrete Technology*Time : Three Hours**Maximum Marks : 70*

- Note :** i) Answer any five questions.
ii) All questions carry equal marks.
iii) Any data required but not provided may be assumed.

1. What is concrete? What are its main components? What is the function of binding material in concrete? What factors control the proportion of concrete mix?
2. List the principal requirements of good aggregate. Explain the significance of grading of a combined aggregate. Why reactive aggregates should normally not be used in concrete? What is the maximum size of aggregate permitted in reinforced concrete work?
3. a) What is the difference between "Workability" and "Consistency"? Explain the method of determination.
b) Explain stability, mobility and compatibility of concrete.
4. Describe different manufacturing steps for concrete.
5. Discuss various factors influencing the choice of mix design. Discuss any one method of mix design.

6. What is high performance concrete? Discuss.
7. Write notes on the following:
 - a) Shrinkage and creep of hardened concrete
 - b) Concrete at low temperature
8. Write short notes on any two of the following:
 - a) Non destruction testing of concrete.
 - b) Special concrete and their properties.
 - c) Compaction of concrete.
