

Seat No.	
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T.E. (Civil Engineering) (Semester - V) Examination, December - 2014
CONCRETE TECHNOLOGY (New)
Sub. Code : 45539

Day and Date : Tuesday, 16 - 12- 2014

Total Marks : 100

Time : 2.30 p.m. to 5.30 p.m.

- Instructions :
- 1) Solve any Three questions from each section.
 - 2) Figures to the right indicate full marks

SECTION - I

- Q1) a)** Explain the modern method of cement manufacturing. [8]
- b) Explain:
- i) Setting Times and
 - ii) Soundness of cement [8]
- Q2) a)** Explain:
- i) Grading of Aggregates
 - ii) Bulking of sand [8]
- b) Explain 'Alkali-Aggregate Reaction'. How it is controlled? [8]
- Q3) a)** Enlist the steps of manufacture of concrete. Explain any one in detail. [8]
- b) What is 'Workability of concrete'? How it is measured on the site? [8]
- Q4) a)** Write an exhaustive note on 'Superplasticizers' [8]
- b) Explain the factors affecting the strength of concrete. [10]

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SECTION - II

- Q5)** a) Enlist the data required for Concrete Mix Design. Explain any one method of Concrete Mix Design. [10]
- b) Explain 'Durability of Concrete and factors affecting it' [8]
- Q6)** a) Write notes on: [8]
- i) Sulphate attack
- ii) Corrosion of steel
- b) Explain: [8]
- i) Hot weather concreting
- ii) High Performance Concrete
- Q7)** a) Explain the types of shrinkage in concrete. [8]
- b) Explain 'Vacuum Concrete' with a neat sketch. [8]
- Q8)** a) Explain 'Rebound Hammer Test' in detail. [8]
- b) Explain 'U.P.V. Test' in detail. [8]

