

Total No. of printed pages = 2

CT-502/Concrete Tech/5th Sem/2014/N

## CONCRETE TECHNOLOGY

Full Marks – 70

Pass Marks – 28

Time – Three hours

The figures in the margin indicate full marks for the questions.

Answer any *five* questions.

1. Elaborate : 14
  - (a) Heat of hydration
  - (b) Sulphate attack
  - (c) Soundness of aggregate
  - (d) Bleeding and segregation.
  
2. Discuss classification of aggregates in detail. Briefly explain each of them. 14
  
3. (a) Name and explain some important OPC based cement. 7
  - (b) Explain the parameters those define the characteristics of aggregates. 7

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4. (a) Define workability. What are the generally used tests for workability ? 6
- (b) Define grading of aggregates. Make a well defined explanation. 8
5. (a) What are the main components of Portland cement ? Explain the basic properties of these compounds. 7
- (b) Discuss physical properties of Portland cement. 7
6. (a) Discuss production of concrete. What are the phases those complete the production of concrete ? 7
- (b) What are the advantages and disadvantages of concrete ? Define quality control in concrete. 7