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ET-522

## \_ B.Tech. Civil (Construction Management)

0014

## **Term-End Examination**

## December, 2013

## ET-522 : CONCRETE TECHNOLOGY AND CONSTRUCTION TECHNIQUES

ne : 3 Hours

Maximum Marks : 70

ote: Answer any five questions. All questions carry equal marks. Support your answer with neat sketches, wherever necessary.

(a)	What are the various types of cement ? Explain properties of any one type in brief.	7
(b)	Explain the soundness test for cement.	7
(a)	What is meant by grading of aggregates ? Why is it important for concrete ?	7
(b)	Explain various steps in manufacture of cement briefly.	7
(a)	What is an admixture ? Write the names of various types of admixtures.	7
(b)	What is meant by workability of concrete ? What are the factors affecting it ?	7
(a)	What is meant by curing of concrete ? Explain water curing.	7
(b)	What are the various factors affecting strength of concrete ? Discuss the role of any one of these briefly.	7

- **5.** (a) Describe Non-Fines concrete briefly.
  - (b) What is polymer impregnated concrete ? How is it different from normal concrete ?
- 6. (a) Explain under water concreting in brief.
  - (b) Why do we need ready mixed concrete ? Write various precautions taken while transporting it.
- 7. Write short notes on the following :  $3\frac{1}{2}x4$ 
  - (a) Sheet piling
  - (b) Scaffolding
  - (c) Compaction of concrete
  - (d) Pre-cast concrete construction