

B.Tech. Civil (Construction Management)

Term-End Examination

December, 2011

**ET-522 : CONCRETE TECHNOLOGY &
CONSTRUCTION TECHNIQUES**

Time : 3 hours

Maximum Marks : 70

Note : Answer *any five* questions. All questions *carry equal* marks. support your answer with neat sketches, wherever necessary. The answer shall be in your own language.

1. (a) How can you manufacture cement in wet process ? Explain. 7
- (b) List the tests that are conducted on cement. Explain any two of them. 7
2. (a) Explain various parameters of quality of water for concreting. 7
- (b) What is an air entraining agent ? What are their different types ? Name the factors affecting amount of air entraining agents. 7

3. (a) What is workability of concrete ? What are the factors affecting the workability of concrete ? 7
- (b) Explain the different methods of compaction of concrete. 7
4. (a) What are the different tests to be conducted on concrete for its strength ? Explain. 7
- (b) What is NDT of concrete ? Explain any one method of it. 7
5. (a) What is Light weight concrete ? What are the different types ? Explain. 7
- (b) What is polymer concrete ? Write the advantages of polymer concrete. 7
6. (a) What is Polymer Impregnated Concrete (PIC) ? What are their types ? Explain any one of them. 7
- (b) Explain the method of concreting in cold weather. 7
7. Write short notes on the following : **4x3½=14**
- (a) Chemical Grouting
- (b) Pile driving
- (c) Steel form work.
- (d) Compaction of soils.