

B.Tech. Civil (Construction Management)

Term-End Examination

June, 2018

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

Time : 3 hours

Maximum Marks : 70

Note : Answer any five questions. All questions carry equal marks. Support your answers with neat sketches wherever necessary.

1. (a) Enumerate different types of cement along with their uses. 7
- (b) Explain alkali-aggregate reaction. 7
2. (a) Write about super plasticizers. 7
- (b) What are the factors affecting workability of concrete ? 7
3. (a) What are the different types of curing methods ? 7
- (b) Write about permeability of concrete. 7
4. (a) What are the types of concrete cracks ? 7
- (b) Write about fiber reinforced concrete. 7

5. (a) How can concreting be done under water ? 7
(b) What is ferro cement ? What are the advantages and applications of ferro cement ? 7
6. (a) What are sheet piles ? What are the different types of cotter dams ? 7
(b) Give the classification of piles. 7
7. (a) What is formwork ? What are the requirements of good formwork ? 7
(b) Write about precast cellular unit. 7
8. Write short notes on any **four** of the following : $4 \times 3 \frac{1}{2} = 14$
- (a) Hydration of cement
 - (b) Aggregate crushing value test
 - (c) Creep of concrete
 - (d) Pre-packed concrete
 - (e) Under reamed piles
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