

V71/BCP108/EE/20160525

Time : 3 Hours

Marks : 80

Instruction :

1. All Questions are Compulsory.
 2. Each Sub-question carry 5 marks.
 3. Each Sub-question should be answered between 75 to 100 words. Write every questions answer on separate page.
 4. Question paper of 80 Marks, it will be converted in to your programme structure marks.
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1. Solve any **four** sub-questions.
 - a) What do you mean by hydration of cement. 5
 - b) What is segregation and bleeding of concrete. 5
 - c) What are precautions to be taken while mixing transporting and placing concrete in formwork. 5
 - d) Explain cold-weather concreting. 5
 - e) What is the role of air-entraining admixtures? 5

2. Solve any **four** sub-questions.
 - a) What is storing of cement? What precaution are necessary when cement stored at site? 5
 - b) Differentiate between weight batching and volume batching. 5
 - c) What is compaction of concrete and how it is done? 5
 - d) What is Ready Mix Concrete? Where is it used? 5
 - e) What is fibre reinforced concrete? Write any two applications. 5

3. Solve any **four** sub-questions.
 - a) Write short note on rapid hardening cement. 5
 - b) How is silt content determined in the laboratory? Explain with the help of neat sketch. 5

- c) What is impact value? How it is found for aggregates? 5
- d) Explain the procedure of Abrasion value test. 5
- e) Explain non destructive testing of concrete structures? 5

4. Solve any **four** sub-questions.

- a) Explain properties of aggregates. 5
- b) Draw a sketch of timber form work for column. 5
- c) Explain different methods of Mix design and application of mix design of concrete? 5
- d) What is grading of concrete? Give different grades? 5
- e) What is workability of concrete? 5

