### CE-225

## B.E. IV Semester

## Examination, June 2017

# Choice Based Credit System (CBCS)

## Concrete Technology

Time: Three Hours] [Maximum Marks: 60

#### Note:

- i) Attempt any five questions.
- ii) All questions carry equal marks.
- iii) Assume suitable data if not provided.
- 1. a) What do you understand by grade of concrete? Discuss with example.
- b) Enumerate properties of fresh and hardened concrete.
- 2. a) What is admixture? Explain the uses of any four admixtures.
- b) Explain in detail the thermal properties of concrete.
- 3. a) Differentiate between mix design and nominal mix design of concrete.
- b) Write short note on:
- i) Micro-cracking of concrete
- ii) Factors affecting workability
- 4. What are various methods of concrete mix design? Describe any one of them in detail.
- 5. a) Discuss various factors influencing the choice of mix design.
- b) Describe statistical quality control of concrete.
- 6. a) Describe the various techniques used for concreting under water.
- b) Explain ready mix concrete. State the method of its production.
- 7. What do you understand by non-destructive test of concrete? Explain any two methods of NDT.
- 8. Write short notes on (any four):
- a) Light weight concrete
- b) Shotcrete
- c) Computer Aided design of concrete mix
- d) Rheology of concrete
- e) Polymer concrete
- f) Inspection and testing of concrete.

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