



# CBCS SCHEME

15CT562

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Fifth Semester B.E. Degree Examination, Dec.2019/Jan.2020

## Special Concrete

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

### Module-1

- 1 a. Explain briefly special concrete. (05 Marks)  
b. What are the different types of special concrete? (05 Marks)  
c. What are the applications of special concrete? (06 Marks)

OR

- 2 a. Briefly explain the application of fibre reinforced concrete. (10 Marks)  
b. What are the different types of fibers used in concrete? (06 Marks)

### Module-2

- 3 a. Describe the methods of placing high density concrete, with their merits and demerits. (10 Marks)  
b. What is high density concrete? Discuss the need of using high density concrete for radiation shielding. (06 Marks)

OR

- 4 a. Mention the need for self compacting concrete. (06 Marks)  
b. What are the tests conducted in fresh self compacting concrete and why? (10 Marks)

### Module-3

- 5 a. List different types of aggregate considered for light weight concrete along with the properties of aggregates. (10 Marks)  
b. Describe the salient properties of light weight concrete with its merits and demerits. (06 Marks)

OR

- 6 a. Explain briefly different types of polymer concrete. (10 Marks)  
b. What are the applications of polymer impregnated concrete. (06 Marks)

### Module-4

- 7 a. What are the methods for making high strength concrete? (10 Marks)  
b. What techniques are used for producing ultra high strength concrete? (06 Marks)

OR

- 8 a. What are the different manufacturing considerations of high strength concrete? (10 Marks)  
b. What are the applications of high strength concrete? (06 Marks)

### Module-5

- 9 a. Explain briefly high performance concrete. (06 Marks)  
b. What are the advantages of high performance concrete? (10 Marks)

OR

- 10 a. What are the properties of high performance concrete? (10 Marks)  
b. What are the applications of high performance concrete? (06 Marks)

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Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.  
2. Any revealing of identification, appeal to evaluator and /or equations written eg. 42+8 = 50, will be treated as malpractice.