

CBCS Scheme

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15CT562

Fifth Semester B.E. Degree Examination, Dec.2017/Jan.2018 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 types of special concrete. (08 Marks)
b. What are the applications of special concrete? (08 Marks)

OR

- 2 a. What are the different types of fibres used in concrete? (06 Marks)
b. What are the factors affecting fibre reinforced concrete? (06 Marks)
c. Mention the applications of fibre reinforced concrete. (04 Marks)

Module-2

- 3 a. What are the properties of high density concrete in fresh state and Hardened state? (06 Marks)
b. Explain the different methods of placement of high density concrete. (10 Marks)

OR

- 4 a. What do you understand by self compacting concrete? What are the advantages of self compacting concrete? (08 Marks)
b. Explain briefly the tests to be carried out for self compacting concrete. (08 Marks)

Module-3

- 5 a. What are the properties of light weight concrete? (06 Marks)
b. What are the uses of light weight concrete? (04 Marks)
c. Explain the different types of light weight aggregates used in the preparation of light weight aggregate concrete. (06 Marks)

OR

- 6 a. What are the special properties of polymers concrete. What are the uses of polymer concrete? (08 Marks)
b. Explain briefly the different types of polymer concrete. (08 Marks)

Module-4

- 7 a. Explain briefly the methods of making high strength concrete. (08 Marks)
b. What are the applications of high strength concrete? (08 Marks)

OR

- 8 a. Explain briefly the methods of making ultra high strength concrete. (08 Marks)
b. Describe any one methods of mix proportioning for high strength concrete. (08 Marks)

Module-5

- 9 a. What are the properties of high performance concrete in fresh state and hardened state? (10 Marks)
b. What are the applications of high performance concrete? (06 Marks)

OR

- 10 a. What is "high performance concrete"? how is it proportioned? Illustrate your answers with typical mix proportions of high performance concrete. (08 Marks)
b. List different mineral admixtures and their characteristics on high performance concrete. (08 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.