Fifth Semester B.E. Degree Examination, Aug./Sept.2020
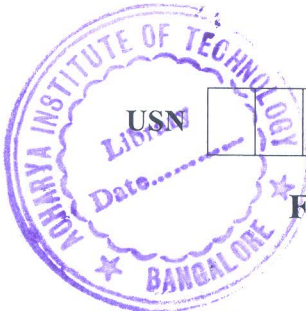## Special Concrete

Time: 3 hrs. Max. Marks: 100

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

Module-1

1 a. List different types of special concrete and mention the application of any four types of special concrete. **(12 Marks)**
   b. Write a note on the importance of special concrete in concrete technology. **(08 Marks)**

OR

2 a. Define fibre reinforced concrete. Explain the types of fibres used in fibre reinforced concrete. **(12 Marks)**
   b. Explain the properties of fiber concrete in fresh state. **(08 Marks)**

Module-2

3 a. Define High density concrete. Explain briefly the methods of placement of high density concrete and its application. **(12 Marks)**
   b. Explain the properties of High density concrete in wet and hardened state. **(08 Marks)**

OR

4 a. Explain the various tests on self compacting concrete with sketches if required. **(12 Marks)**
   b. What are the properties and applications of self compacting concrete? **(08 Marks)**

Module-3

5 a. Explain the three types of light weight concrete based in the method of making. **(12 Marks)**
   b. Write a note on different types of light weight aggregates used in LWC with examples. **(08 Marks)**

OR

6 a. Define polymer concrete mention the application of polymer impregnated concrete. **(08 Marks)**
   b. Write a note on types of polymer concrete. **(12 Marks)**

Module-4

7 a. Define high strength concrete. Explain the methods of making HSC. **(10 Marks)**
   b. What is the significance of HSC? Give any six applications of HSC. **(10 Marks)**

OR

8 a. Define ultra HSC. What are its applications? **(08 Marks)**
   b. Write a note on materials used in ultra HSC. Also mention the methods of manufacturing HSC. **(12 Marks)**

Module-5

9 a. Define high performance concrete. Explain the significance in special concrete technology. **(12 Marks)**

   b. Give advantages and disadvantages of HPC. **(08 Marks)**

OR

10 Write a short note on :
   a. Materials used in HPC
   b. Methods of making HPC
   c. Mix design criteria of HPC
   c. Applications of HPC **(20 Marks)**

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