



Concrete Technology (113103)

P. Pages :2

Time : Three Hours

Max. Marks : 80

Instructions to Candidates :

1. Do not write anything on question paper except Seat No.
2. Answer sheet should be written with blue ink only. Graph or diagram should be drawn with the same pen being used for writing paper or black HB pencil.
3. Students should note, no supplement will be provided.
4. Solve **any two** questions from each unit.
5. Answer all the questions of a unit at one place.
6. Figures to right indicate full marks.
7. Assume suitable additional data if necessary.

UNIT - I

1. a) List the types of cement and explain any two in brief 8
b) What are the test conducted on Aggregates, Explain any one with sketch. 8
c) Explain 8
i) Qualities of water for concrete.
ii) Chemical composition of cement.

UNIT - II

2. a) Explain about fresh concrete & its properties in detail. 8
b) List the test conducted on hardened concrete, explain any one. 8
c) Explain shrinkage of concrete & creep in detail. 8

UNIT - III

- a) Explain about self compacting and high performance concrete in detail. 8
b) Explain about Transparent concrete in detail. 8

- c) Explain 8
 i) Admixtures
 ii) Under water concreting.

UNIT - IV

4. a) What are the objectives of mix design in detail? 8
 b) Explain mix design by IS (10262 - 456) in detail. 8
 c) Explain 8
 i) Factors to be considered for mix design.
 ii) IRC method in brief.

UNIT - V

5. a) Explain about Non - destructive testing of concrete in detail. 8
 b) Explain Deterioration of concrete in detail. 8
 c) Explain 8
 i) Corrosion of reinforcement
 ii) Pull out test
