

NIL

SE-Civil  
Sem IV (old)  
C.T.

15/12/2014

**(OLD COURSE)**

**QP Code :14453**

(3 Hours)

Maximum Marks : 100

Instructions: 1. Question no. 1 is compulsory and solve any four questions out of remaining six questions.

2. Draw neat sketches wherever necessary.

3. Figures to the right indicate full marks.

- 1(a) Define high performance and high strength concrete. 20  
(b) Write any five advantages of ready mixed concrete.  
(c) Define Segregation and Bleeding of concrete.  
(d) Explain the importance of non destructive testing of concrete  
(e) Enlist any five properties for coarse and fine aggregates.
- 2 (a) Explain in detail manufacturing process of concrete. 10  
(b) Explain in detail various properties of hardened concrete. 10
- 3 (a) Explain in detail various factors affecting workability of concrete. 10  
(b) Explain step by step procedure to design concrete mix for compressive strength as per IS: 10262-1984. 10
- 4 (a) What are the various Non destructive tests carried out on concrete? Explain any one test in detail. 10  
(b) Draw flow diagram for ready mixed concrete plant and explain each operation in detail. 10
- 5(a) Explain in detail Hot weather and cold weather concreting? 10  
(b) Enlist any five types of admixtures commonly used and explain them in detail. 10
- 6 Write short notes on the following  
(a) Under water concreting. 5  
(b) Roller compacted concrete 5  
(c) Fibre reinforced concrete 5  
(d) Polymer concrete 5
- 7( a) What are the factors affecting durability of concrete? 5  
(b) What is carbonation of concrete? 5  
(c) Explain in detail crack repair technique. 5  
(d) Explain various methods adopted for curing of Concrete members. 5

**LM-Con.:11457-14.**