

Civil/IV/CBGS/CT

10.8.14

QP Code : NP-19821

(3 Hours)

[Total Marks : 80

	Instructions: 1. Question no. 1 is compulsory and solve any three questions out of remaining five questions. 2. Draw neat sketches wherever necessary. 3. Figures to the right indicates full marks.	
1(a)	Explain in brief various methods of curing of concrete.	20
(b)	Explain in brief any four properties of Ordinary Portland Cement.	
(c)	Explain in brief fineness modulus of coarse and fine aggregates.	
(d)	Define high performance and high strength concrete.	
(e)	What are the mineral admixtures? Explain in brief.	
2 (a)	Explain in detail various properties of hardened concrete.	10
(b)	Explain in detail various factors affecting workability of concrete.	10
3 (a)	Explain in detail manufacturing process of concrete in RMC plant.	10
(b)	Explain step by step procedure to design concrete mix for compressive strength as per IS: 10262.	10
4 (a)	Enlist any five types of chemical admixtures commonly used and explain them in detail.	10
(b)	What is NDT of concrete? Explain any one method of NDT with sketch in detail.	10
5(a)	Explain the effect of aggregate properties on concrete quality.	7
(b)	Explain in detail Hot weather and cold weather concreting.	6
(c)	What is durability of concrete? Explain the effect of W/C Ratio on durability of concrete.	7
6	Write short notes on the following (a) Roller compacted concrete. (b) Distress in concrete structures. (c) Ferrocement. (d) Fibre reinforced concrete (e) Explain concept of retrofitting.	20