

- (v) Specific gravity of cement – 3.15
 (vi) Bulk density – 1450 kg/m³
 (vii) Fine aggregate – natural river sand conforming to zone – III
 (viii) Aggregate properties

	FA	CA
SP gravity	2.60	2.65
Bulk density (kg/m ³)	1700	1800
Free surface moisture (%)	2.0	1.0
Fineness modulus	2.2	6.0

Any missing data may be assumed suitably.

(16 Marks)

OR

- 8 a. List the variable factors to be considered in connection with specifying a concrete mix of proportioning of mix. (04 Marks)
 b. Explain briefly the steps involved in concrete mix design as per IS-10262-2009. (12 Marks)

Module-5

- 9 a. Define Ready Mixed Concrete (RMC). Name the admixture type commonly used in the production of RMC with two examples. Sketch the typical layout of the site for RMC plant. (08 Marks)
 b. Define Self Compacting Concrete (SCC). Explain any one test method to determine workability properties of SCC. (08 Marks)

OR

- 10 a. What do you mean by Light Weight Concrete? Explain the three ways of producing Light Weight Concrete. Mention the applications of Light Weight Concrete. (08 Marks)
 b. Write a note on Fibre Reinforced Concrete. (08 Marks)
