USN :

CMR Institute of Technology, Bangalore
DEPARTMENT OF CIVIL ENGINEERING
III - INTERNAL ASSESSMENT

Semester: 4-CBCS 2018
Subject: CONCRETE TECHNOLOGY (18CV44)
Faculty: Mr Ruchir

Date: 30 Jul 2021
Time: 01:00 PM - 03:40 PM
Max Marks: 50

Instructions to Students :

Answer all question

Answer All Questions

Q.No		Marks	CO	PO	BT/CL
1	What is light weight concrete? State the advantages of light weight concrete	10	CO5	PO1	L2
2	Mention the materials used in Self-compacting concrete. State advantages and disadvantages of self-compacting concrete.	10	CO5	PO1	L2
3	Briefly discuss the advantages and disadvantages of Ready-mix concrete.	10	CO5	PO1	L2
4	Design a concrete mix for grade M 25 a. Grade designation: M 25 b. Type of cement: OPC 43 grade. c. Max. nominal size of aggregates 20mm down d. Min cement content: 300kg/m3 e. Water cement ratio :0.5 f. Workability: 75mm slump g. No chemical admixture h. Fine aggregate: zone II i. Exposure condition: moderate j. Method of concrete placing: manual k. Max cement content :450kg/ m3 l. Specific gravity of cement: 3.15 m.Specific gravity of coarse aggregate :2.80 n. Water absorption of coarse aggregate :1% o. Free surface moisture: nil p. Specific gravity of fine aggregate :2.65 q. Water absorption of fine aggregate: 2% r. Free surface moisture: 2% (assume any missing Data)	20	CO4	PO3	L3