Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

ME - SEMESTER- II(New course) • EXAMINATION (Remedial) - WINTER- 2015

Subj	ect (Code: 2721401 Date: 08/12/2015	
		Name: Advanced Civil Engineering Materials	
		30 pm to 5:00 pm Total Marks: 70	
Instru	1. 2.		
Q.1	(a)	construction industry.	07
	(b)	Enlist and explain various applications of Fly ash in construction industries.	07
Q.2	(a)	Enlist various IS tests used for Cement. Explain any one IS test of cement in detail.	07
	(b)	Explain various properties and uses of ferrous metals. OR	07
Q.3	(b) (a)	decade to provide backbone to construction industry.	07 07
_	(b)	Write significance of adhesive as building material. Support your answer with beneficial features of Adhesive.	07
		OR	
Q.3	(a)	Construction to sustainable construction.	07
	(b)	Discuss the economy and durability factors for the comparison of various alternative materials used in construction industries. Support your answer with suitable example.	07
Q.4	(a)	Explain briefly the physical properties of building materials.	07
	(b)	What do you understand by Self compacting concrete? Enlist various features and benefits of self compacting concrete. OR	07
Q.4	(a)	Discuss about sound insulation materials and their applications in detail	07
	(b)	Enlist and explain various features of Ready Mix Concrete (RMC). Draw the typical sketch showing various components of RMC Plant.	07
Q.5	(a)		07
	(b)	Discuss following effects on steel with reference to IS-9077-1979 (1) Effect of Alkalinity of concrete on steel (2) Effect of Chloride on steel	07
		OR	
Q.5	(a)	(1) Reinforced Polymer and its features(2) Admixtures used for water proofing.	07
	(b)	Discuss protecting coating of reinforcement bars. Also discuss the IS-9077-1979 procedure for the application of protective coating of reinforced bars.	
