## B.E.(with Credits)-Regular-Semester 2012 - Civil Engineering Sem IV **CE-403 - Concrete Technology**

	ages : e : Th	2 nree Hours  * 3 9 9 7 *	GUG/W/16/3872 Max. Marks : 80
	Note	es: 1. All questions carry equal marks. 2. All questions are compulsory. 3. Due credit will be given to neatness and adequate dimensions. 4. Assume suitable data wherever necessary.	
1.	a)	Explain hydration of cement with reactions and illustrate your answer showing representations.	ing graphical 8
	b)	Explain with neat sketch impact value test for aggregates.	8
		OR	
2.	a)	Explain bulking of sand and its importance.	8
	b)	Discuss the water requirement for Hydration of cement.	8
3.	a)	Explain in brief Vee-Bee consistometer test.	8
	b)	Explain different methods of curing.	8
		OR	
4.	a)	Explain in brief flow table test.	8
	b)	Explain temperature effect on curing and strength.	8
5.	a)	Explain relation between compressive and tensile strength of concrete.	8
	b)	Explain accelerated curing test.	8
		OR	
6.	a)	Explain ultrasonic pulse velocity test with its limitations.	10
	b)	Explain corrosion and its effects.	6
7.	a)	Explain different statistical factors used in mix Design.	8
	b)	Explain the objectives of mix design in brief.	8
		OR	
8.	a)	Explain Degree of quality control and How to achieve it.	8
	b)	Explain I.S. code method stepwise for mix Design.	8

9.	a)	Explain in brief grouting agents used in concrete.	8
	b)	Explain the factors affecting shrinkage.	8
		OR	
10.	a)	Explain creep and shrinkage.	8
	b)	Explain the influence of curing on shrinkage in brief.	8

\*\*\*\*\*