

Course Number and Name													
BCE051 - CONCRETE TECHNOLOGY													
Credits and Contact Hours													
3 & 45													
Course Coordinator's Name													
Dr. R. Venkata Krishnaiah													
Text Books and References													
REFERENCES:													
1. Neville, A.M. Properties of Concrete, Pitman Publishing Limited, Lnclon.													
2. Shetty M.S., Conrete Technology, S. Chand and Company Ltd. Delhi.													
3. Rudhani G., Light Weight Concrete Academic Kiado, Publishing Home of Hungarian Academy of Science, 1963.													
Course Description													
<ul style="list-style-type: none"> To study the properties of concrete making materials, tests, mix design, special concretes and various methods for making concrete. 													
Prerequisites						Co-requisites							
Building Construction						NIL							
required, elective, or selected elective (as per Table 5-1)													
Course Outcomes (COs)													
CO1	To learn about concrete making material IS specifications.												
CO2	To know about properties of fresh concrete and hardened concrete.												
CO3	To understand the principles and methods of concrete mix design												
CO4	To know about the various types of special concrete.												
CO5	To understand process of manufacturing of concrete.												
Student Outcomes (SOs) from Criterion 3 covered by this Course													
	COs/SOs	a	b	c	d	e	f	g	h	i	j	k	
	CO1	H		H	H								
	CO2	H	M	H	H	H							
	CO3	H	M	H	H		M						
	CO4	H		H	H								
	CO5	H	M	H	H	H							
List of Topics Covered													
UNIT I											CONCRETE MAKING MATERIALS		9
Aggregates, IS Specifications, Properties, Grading, Methods of combining aggregates, specified grading. Cement, Grades of cement. Chemical composition, Hydration of cement, structure of hydrated cement, Special cements - Water Chemical admixtures. Mineral admixtures.													

