Course Number and Name BCE066 - PREFABRICATION AND CONSTRUCTION TECHNIQUES												
Credits and Contact Hours 3 & 45												
3 & 45 Course Coordinator's 1	Tares											
Mr.P.Dayakar	vame											
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Text Books and Refere												
• REFERENCI	ES:											
• Levitt. M., Precast concrete - Materials, Manufacture Properties and Usage, Applied Science Publs. 1982,												
• Konex.T., Handbook of Pre-cast Construction, Vol.1.2&3.												
• Richardson, J.G., Pre-cast concrete Production, Cement and Concrete Association, London, 1973.												
• Madhava Rao.A-G., Modern Trends in Housing in Developing Countries, Oxford & UBH												
 Publishing co., 1985 Lewicki.B., Building with Large Pre-fabrications, Elsevier Publishers. 												
 Lewicki.B., Building with Large Pre-Tabrications, Elsevier Publishers. Large Panel Prefabricated Constructions, Proc. of Advance Course conducted by SERC, Madras. 												
 Bruggeling.A.S.G., & Huyghe.G.F., Prefabrication with Concrete, A.s.A., Balkema Publishers, 												
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Course Description												
To bring about an understanding of the prefabrication and construction techniques adopted												
Prerequisites Co-requisites												
Building Construction Technology NIL												
	requir	ed, elect	ive, or s	elected	elective	(as per	Table 5	-1)				
G 0 (G0	`											
Course Outcomes (COs)												
CO1 Know the	Know the standardization and tolerances-system for prefabrication											
CO2 Understa	Understand the Pre-casting and handling techniques											
CO3 Know the	Know the Curing techniques including accelerated curing.											
CO4 Know the	Know the Pre-cast and pre-fabricating technology for low cost and mass housing schemes.											
CO5 Understand the Repairs and economical aspects on prefabrication												
CO5 Understand the Repairs and economical aspects on prefabrication												
Student Outcomes (SC		riterion		ed by th		e						
COs/SOs a	b	c	d	e	f	g	h	i	j	k		
CO1 M		M		Н				L				
CO2 M		M		Н								
CO3 M		M		Н								
CO4 M		M		Н								
CO5 M		M		Н								
List of Topics Cover	ed		•								1	

UNIT I INTRODUCTION

9

Materials - Modular co-ordination, standardization and tolerances-system for prefabrication. Pre-cast concrete manufacturing techniques, Moulds –construction design, maintenance and repair.

UNIT II TECHNIQUES OF PRE-CASTING

9

Pre-casting techniques - Planning, analysis and design considerations - Handling techniques - Transportation Storage and erection of structures.

UNIT III INDUSTRIAL STRUCTURES

9

Joints -Curing techniques including accelerated curing such as steam curing, hot air blowing etc., -Test on precast elements - skeletal and large panel constructions - Industrial structures.

UNITIV APPLICATIONS

9

Pre-cast and pre-fabricating technology for low cost and mass housing schemes. Small pre-cast products like door frames, shutters, Ferro-cement in housing - Water tank service core unit.

UNIT V QUALITY CONTROL

9

Quality control - Repairs and economical aspects on prefabrication.