PRATHYUSHA ENGINEERING COLLEGE
PO ATTAINMENT 2016-2020 BATCH
DEPARTMENT OF BIOTECHNOLOGY

SEM	COURSE NAME		Cos	Cos Attainment in %	CO Result	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	HS6151	Technical English – I	CO1	3.0	YES															
			CO2	2.00	YES							2.0			2.0	2.0	2.0			
			CO3	3.00	YES							1.3			2.0	2.0	2.0			
			CO4	3.00	YES										2.0					
			CO5	3.00	YES							1.0								
	MA6151	Mathematics – I	CO1	3.00	YES	3.0	2.0								3.0	3.0	3.0			
			CO2	3.00	YES	3.0	2.0													
			CO3	3.00	YES															
			CO4	3.00	YES															
			CO5	3.00	YES	3.0	2.0													
	PH6151	Engineering Physics – I	CO1	3.00	YES	3.0	2.0		2.0	2.0										
			CO2	3.00	YES	3.0	2.0		2.0	2.0										
			CO3	3.00	YES															
			CO4	3.00	YES															
			CO5	3.00	YES	3.0	2.0		2.0	2.0										
	CY6151	Engineering Chemistry – I	CO1	3.00	YES	3.0	2.0		2.0											
			CO2	3.00	YES	3.0	1.0		1.0											
			CO3	3.00	YES															
			CO4	3.00	YES															
			CO5	3.00	YES	2.0			2.0											
	GE6152	Engineering Graphics	CO1	3.00	YES	3.0	2.0													
			CO2	3.00	YES		3.0							1.0	1.0					
			CO3	3.00	YES		3.0											1.0		
	GE6151	Computer Programming	CO1	2.00	YES	2.0	2.0	2.0	1.3	2.0								2.0	2.0	
			CO2	3.00	YES	2.0	2.0	2.0	2.0	2.0								2.0	2.0	
			CO3	2.00	YES			2.0	1.3	2.0								1.3	1.3	
			CO4	3.00	YES	2.0									2.0	2.0	2.0			
II	HS6251	Technical English – II	CO1	2.00	YES	2.0										2.0	2.0			
			CO2	1.00	YES	1.0										1.0	1.0			
			CO3	3.00	YES	3.0	2.0													
	MA6251	Mathematics – II	CO1	2.00	YES	2.0	1.3													
			CO2	3.00	YES															
			CO3	3.00	YES															
			CO4	3.00	YES	3.0	2.0													
			CO5	3.00	YES	3.0	2.0		2.0	2.0										
	PH6252	Physics of Materials	CO1	3.00	YES	3.0	2.0		2.0	2.0										
			CO2	3.00	YES	3.0	2.0		2.0	2.0										
			CO3	3.00	YES	3.0			2.0											
	CY6252	Chemistry for Technologists	CO1	2.00	YES	2.0			1.3											
			CO2	2.00	YES	2.0														
			CO3	2.00	YES	2.0														
			CO4	2.00	YES	2.0			1.3											
			CO5	2.00	YES					1.3									3.0	

Sem	Code	Course	CO	Value	Approved	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	BT6201	Biochemistry	CO1	2.00	YES								1.3	2.0					
			CO2	1.00	YES	0.7			1.0	0.7									
			CO3	3.00	YES	2.0			3.0	2.0									
			CO4	2.00	YES	1.3			2.0	1.3									
			CO5	2.00	YES	2.0	1.3			1.3									
	BT6202	Microbiology	CO1	3.00	YES					2.0									
			CO2	3.00	YES	3.0	2.0			2.0									
			CO3	3.00	YES	3.0	2.0			2.0									
III	MA6351	Transforms and Differential Equation	CO1	2.00	YES	1.3				1.3	1.3								
			CO2	2.00	YES					1.3									
			CO3	2.00	YES			2.0		1.3									
	BT6301	Stoichiometry and Fluid Mechanics	CO 1	3.00	YES	2.0	3.0		3.0	2.0	2.0	2.0							
			CO 2	3.00	YES					2.0						2.0			
			CO 3	3.00	YES					2.0									
			CO 4	2.00	YES					1.3									
	BT6302	Bioorganic Chemistry	CO1	3.00	YES	2.0				2.0									
			CO2	3.00	YES					2.0	3.0								
			CO3	2.00	YES					1.3					3.0				
			CO4	3.00	YES	3.0													
			CO5	3.00	YES				2.0		3.0								
	BT6303	Cell Biology	CO1	3.00	YES									2.0			2.0		
			CO2	3.00	YES											2.0			
			CO3	2.00	YES													1.3	
			CO4	2.00	YES						2.0								
	BT6304	Basic Industrial Biotechnology	CO1	3	YES				3.0					2.0	2.0				
			CO2	3	YES				2.0	2.0		1.0			2.0				
			CO3	3	YES				2.0	2.0									
			CO4	3	YES				2.0	2.0									
	GE2021	Environmental Science And Engineering	CO1	3.00	YES														
			CO2	3.00	YES	3.0	2.0												
			CO3	3.00	YES	3.0	2.0												
IV	MA6468	Probability and Statistics	CO1	3.00	YES	3.0	2.0												
			CO2	3.00	YES	2.0	3.0			2.0									
			CO3	3.00	YES		3.0			2.0								2.0	
	BT6401	Analytical Methods and Instrumentation	CO1	3.00	YES								3.0						3.0
			CO2	3.00	YES	2.0	3.0			2.0									3.0
			CO3	3.00	YES	2.0	2.0				2.0								
			CO4	3.00	YES	1.0				2.0									
	BT6402	Applied Thermodynamics for Biotechnologists	CO1	3.00	YES					2.0	3.0								
			CO2	3.00	YES					2.0									
			CO3	1.00	YES	2.0													
			CO4	2.00	YES		2.0												
			CO5	3.00	YES					2.0						2.0			
	BT6403	Heat Transfer Operations	CO1	3.00	YES														
			CO2	3.00	YES	2.0													
			CO3	2.00	YES		3.0											3.0	
			CO4	3.00	YES					3.0	3.0			2.0				2.0	
			CO5	3.00	YES										2.0			2.0	
	BT6404	Enzyme Technology and	CO1	3.00	YES				2.0	3.0				2.0				3.0	
			CO2	2.00	YES				1.3					1.3					

Sem	Code	Course	CO	Value	Status	1	2	3	4	5	6	7	8	9	10	11	12	13
	BT6404	Biotransformation	CO3	2.00	YES			1.3	2.0			1.3						
			CO4	2.00	YES				2.0			1.3					2.0	
	BT6405	Bioprocess Principles	CO1	3.00	YES		3.0											
			CO2	3.00	YES				3.0				2.0					
			CO3	3.00	YES						2.0							
			CO4	3.00	YES					2.0								
			CO5	3.00	YES	3.0			2.0	2.0								
V	BT6501	Protein Structure Function and Proteomics	CO1	3.00	YES		2.0						2.0		2.0			
			CO2	3.00	YES					2.0								
			CO3	3.00	YES		3.0							3.0				
			CO4	3.00	YES									2.0				
			CO5	3.00	YES										2.0			
	BT6502	Bioprocess Engineering	CO1	3.00	YES											3.0		
			CO2	2.00	YES	2.0					1.3							
			CO3	1.00	YES	1.0		1.0		0.7	0.7							
			CO4	3.00	YES			3.0			2.0							
			CO5	2.00	YES						1.3						1.3	
	BT6503	Mass Transfer Operation	CO1	3.00	YES				2.0									
			CO2	1.00	YES				2.0			2.0				0.7		2.0
			CO3	1.00	YES				2.0						3.0			3.0
			CO4	1.00			3.0											
			CO5	1.00	YES				2.0									
	BT6504	Molecular Biology	CO1	3.00	YES						2.0			2.0				
			CO2	3.00	YES													
			CO3	2.00	YES													2.0
			CO4	3.00	YES						3.0							
	BT6006	Biopharmaceutical Technology	CO1	3.00	YES						3.0							
			CO2	3.00	YES								2.0	3.0	1.0			
			CO3	3.00	YES										2.0			
			CO4	3.00	YES	2.0		3.0			2.0	2.0						
			CO5	3.00	YES	2.0		3.0			2.0	2.0						
	BT6003	Principles of food processing	CO1	2.00	YES			1.3	2.0			1.3	1.3					
			CO2	3.00	YES				2.0	3.0			2.0					
			CO3	3.00	YES						3.0		2.0	2.0			2.0	
			CO4	3.00	YES						3.0		2.0	1.0	2.0			
			CO5	3.00	YES						2.0							3.0
VI	BT6601	Total Quality Management for Biotechnologists	CO1	3.00	YES				2.0	3.0								
			CO2	3.00	YES						3.0			3.0			2.0	3.0
			CO3	2.00	YES						2.0			3.0				
			CO4	2.00	YES						2.0			0.7	2.0			
			CO5	3.00	YES	3.0					2.0		2.0					
	BT6602	Immunology	CO1	2.00	YES	2.0					1.3		1.3					
			CO2	2.00	YES	2.0					1.3		1.3					
			CO3	3.00	YES	3.0					2.0		2.0					
			CO4	3.00	YES			3.0	3.0		2.0		2.0				3.0	
			CO5	3.00	YES			3.0	3.0		2.0		2.0				3.0	
	BT6603	Genetic Engineering and Genomics	CO1	2.00	YES	2.0	2.0				1.3		1.3				2.0	
			CO2	2.00	YES	2.0	2.0				1.3		1.3				2.0	
			CO3	3.00	YES	3.0	3.0				3.0			3.0		2.0	3.0	
			CO4	1.00	YES	1.0	1.0				1.0			1.0		0.7	1.0	

Sem	Code	Course	CO	Value	Map	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	BT6604	Chemical Reaction Engineering	CO1	2.00	YES															
			CO2	3.00	YES					3.0										
			CO3	2.00	YES				2.0			1.3	1.3					2.0		
			CO4	2.00	YES															
			CO5	3.00	YES				3.0			2.0	2.0							1.3
	BT 6007	Animal Biotechnology	CO1	3.00	YES					3.0		2.0	2.0						2.0	
			CO2	3.00	YES					3.0		2.0	2.0						2.0	
			CO3	3.00	YES					2.0		2.0							2.0	
			CO4	3.00	YES			3.0											3.0	
	BT 6010	Plant Biotechnology	CO1	3.00	YES											1.0		3.0		
			CO2	3.00	YES			2.0		2.0								3.0		
			CO3	3.00	YES					3.0								3.0		
			CO4	3.00	YES			2.0										3.0		
			CO5	3.00	YES													3.0		
VII	BT6701	Bioinformatics and Computational Biology	CO1	2.00	YES				2.0	2.0		2.0						3.0		
			CO2	2.00	YES				2.0	2.0		2.0				2.0		2.0		
			CO3	3.00	YES					3.0						1.3		2.0		
			CO4	1.00	YES				1.0	1.0		1.0				3.0		3.0		
			CO5	2.00	YES	1.3			3.0	2.0						1.0		1.0		
	BT6702	Downstream processing	CO1	2.00	YES	0.7			1.3	2.0	3.0							2.0		2.0
			CO2	2.00	YES	3.0			1.3		3.0		3.0					2.0		
			CO3	1.00	YES	0.3			0.3		0.7		3.0						3.0	
			CO4	1.00	YES								0.7		0.7	1.0	1.0	1.0	1.0	
			CO5	3.00	YES								3.0		2.0	3.0	3.0	3.0	3.0	1.0
	BT6703	Creativity, Innovation and New Product Development	CO1	3.00	YES														3.0	
			CO2	3.00	YES												3.0			
			CO3	3.00	YES								3.0		2.0	3.0	3.0	3.0	3.0	
			CO4	3.00	YES			2.0												
			CO5	3.00	YES				3.0									3.0	3.0	1.0
	BT 6014	Bioindustrial Entrepreneurship	CO1	1.00	YES										2.0				3.0	
			CO2	2.00	YES				2.0			2.0						2.0		
			CO3	3.00	YES				3.0			3.0						3.0		
			CO4	3.00	YES				3.0			3.0						3.0		
			CO5	3.00	YES				3.0			3.0						3.0		
	BT 6017	Tissue Engineering	CO1	3.00	YES				3.0			3.0						3.0		
			CO2	3.00	YES				3.0	3.0	3.0									
			CO3	3.00	YES				3.0	3.0	3.0									
			CO4	3.00	YES				3.0	3.0	3.0									
	BT 6811	Project work	CO1	3.00	YES				3.0	3.0	3.0									
			CO2	3.00	YES				3.0	3.0	3.0									
			CO3	3.00	YES			3.0	3.0	3.0	3.0	2.0								
			CO4	3.00	YES			3.0	3.0	3.0	3.0	2.0								
			CO5	3.00	YES			3.0	3.0	3.0	3.0	2.0								2.3
		AVERAGE				2.3	2.2	2.3	2.0	2.1	1.9	2.1	1.6	2.0	2.0	2.1	2.0	2.4	2.4	30.66
		CONVERT TO 0.4				30.66	29.3	30.66	26.66	28	25.3	28	21.33	26.66	26.66	28	26.66	32	32	28.17692

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF BIOTECHNOLOGY

PO ATTAINMENT 2016-2020 BATCH

PO /PSO No	Method assessment	Direct assessment (80%)			Indirect Assessment (20%)			
		Internal Assessment (40%)	Semester End Examination	Direct Assess	End of Course	Student Exit	Indirect Assessme	% PO /PSO Attainment
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	31	49	64	17	19	18	82
PO 2	Ability to identify, formulate and solve bio-engineering problems	29	44	59	16	19	18	76
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental,	31	50	65	17	19	18	83
PO 4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	27	48	60	16	19	18	77
PO 5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	28	48	61	14		14	75
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent	25	51	61	15	17	16	77
PO 7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	28	48	61	17	18	18	78
PO 8	Ability to have understanding of professional and ethical responsibility	21	47	55	13	17	15	70
PO 9	Possess ability to function in multi-disciplinary teams	27	49	61	15		15	76
PO 10	Ability to communicate effectively	27	50	61	15	18	17	78
PO 11	Ability to engage themselves in life-long learning	28	47	60	18	18	18	78
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	27	52	63	16		16	79
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with	32	56	70	19		19	89
PSO 2	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	32	50	66	16	18	17	83
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	28	60	71	20	18	19	90

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
OVERALL PO ATTAINMENT 2016-2020 BATCH

'O /PSO N	Method assessment	Target (%)	Attained (%)	% PO /PSO Attained
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	70	82	Yes
PO 2	Ability to identify, formulate and solve bio-engineering problems	70	76	Yes
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	70	83	Yes
PO 4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	70	77	Yes
PO 5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	70	75	Yes
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	70	77	Yes
PO 7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	70	78	Yes
PO 8	Ability to have understanding of professional and ethical responsibility	70	70	yes
PO 9	Possess ability to function in multi-disciplinary teams	70	76	Yes
PO 10	Ability to communicate effectively	70	78	Yes
PO 11	Ability to engage themselves in life-long learning	70	78	Yes
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	70	79	Yes
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a	70	89	Yes
PSO 2	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	70	83	Yes
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	70	90	Yes

Target - 60% of the students will get above 65%

P2?DHASARATHAN M.Sc., M.Tech.,
Head, Department of Biotechnology
Prathyusha Engineering College
Tiruvallur-602025, Tamilnadu, INDiA

SEM	COURSE NAME		Cos	Cos Attainment in %	CO Result	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	HS6151	Technical English – I	CO1	2.0	YES							1.3			2.0	2.0	2.0			
			CO2	2.0	YES							1.3			2.0	2.0	2.0			
			CO3	2.0	YES										2.0					
			CO4	2.0	YES															
			CO5	2.0	YES							1.0			2.0	2.0	2.0			
	MA6151	Mathematics – I	CO1	3.0	YES	3.0	2.0													
			CO2	3.0	YES	3.0	2.0													
			CO3	3.0	YES															
			CO4	2.0	YES															
			CO5	3.0	YES	3.0	2.0													
	PH6151	Engineering Physics – I	CO1	2.0	YES	2.0	1.3		1.3	1.3										
			CO2	2.0	YES	2.0	1.3		1.3	1.3										
			CO3	2.0	YES															
			CO4	3.0	YES															
			CO5	2.0	YES	2.0	1.3		1.3	1.3										
	CY6151	Engineering Chemistry – I	CO1	3.0	YES	3.0	2.0		2.0											
			CO2	2.0	YES	2.0	1.0		1.0											
			CO3	2.0	YES															
			CO4	2.0	YES															
			CO5	2.0	YES	2.0			1.3											
	GE6152	Engineering Graphics	CO1	2.0	YES	2.0	2.0													
			CO2	2.0	YES		2.0							1.0	1.0					
			CO3	3.0	YES		3.0											1.0		
			CO4	2.0	YES	2.0	2.0	2.0	1.3	2.0							2.0	2.0		
			CO5	2.0	YES	2.0	2.0	2.0	1.3	2.0							1.3	1.3		
	GE6151	Computer Programming	CO1	2.0	YES			2.0	1.3	2.0							1.3	1.3		
			CO2	2.0	YES	2.0									2.0	2.0	2.0			
			CO3	2.0	YES	2.0										2.0	2.0			
			CO4	2.0	YES	2.0										2.0	2.0			
II	HS6251	Technical English – II	CO1	2.0	YES	2.0	1.3													
			CO2	2.0	YES	2.0	1.3													
			CO3	2.0	YES															
	MA6251	Mathematics – II	CO1	2.0	YES															
			CO2	3.0	YES	3.0	2.0													
			CO3	3.0	YES	3.0	2.0		2.0	2.0										
			CO4	2.0	YES	2.0	1.3		1.3	1.3										
			CO5	2.0	YES	2.0	1.3		1.3	1.3										
	PH6252	Physics of Materials	CO1	2.0	YES	2.0			1.3											
			CO2	2.0	YES	2.0			1.3											
			CO3	2.0		2.0														
			CO4	2.0	YES	2.0														
	CY6252	Chemistry for Technologists	CO1	2.0	YES	2.0			1.3											
			CO2	2.0	YES					1.3									3.0	
			CO3	2.0	YES						1.3	2.0								

Sem	Code	Course	CO	Avg	Mapped	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
			CO4	3.0	YES	2.0			3.0	2.0										
			CO5	3.0	YES	2.0			3.0	2.0										
	BT6201	Biochemistry	CO1	3.0	YES	2.0			3.0	2.0										
			CO2	2.0	YES	2.0	1.3			1.3										
			CO3	2.0						1.3										
			CO4	2.0	YES	2.0	1.3			1.3										
	BT6202	Microbiology	CO1	2.0	YES	2.0	1.3			1.3										
			CO2	2.0	YES	1.3				1.3	1.3									
			CO3	2.0	YES					1.3										
			CO4	2.0	YES		2.0			1.3										
III	MA6351	Transforms and Differential Equation	CO1	2.0	YES	1.3	2.0	2.0		1.3	1.3	1.3								
			CO2	2.0	YES					1.3								1.3		
			CO3	2.0	YES					1.3										
			CO4	2.0	YES					1.3										
			CO5	2.0	YES	2.0				1.3										
	BT6301	Stoichiometry and Fluid Mechanics	CO1	2.0	YES					1.3	3.0									
			CO2	3.0	YES					2.0							3.0			
			CO3	3.0	YES	3.0														
			CO4	3.0	YES			2.0			3.0									
	BT6302	Bioorganic Chemistry	CO1	2.0	YES										1.3			2.0		
			CO2	2.0	YES												2.0			
			CO3	2.0	YES														1.3	
			CO4	2.0	YES						2.0									
			CO5	2.0	YES				2.0						2.0	2.0				
	BT6303	Cell Biology	CO1	2.0	YES				1.3	1.3			1.0		2.0					
			CO2	2.0	YES				1.3	1.3										
			CO3	2.0	YES				1.3	1.3										
			CO4	2.0	YES															
			CO5	2.0	YES	2.0	1.3													
	BT6304	Basic Industrial Biotechnology	CO1	3.0	YES	3.0	2.0													
			CO2	3.0	YES	3.0	2.0													
			CO3	3.0	YES	2.0	3.0			2.0										
			CO4	2.0	YES		2.0			1.3									1.3	
	GE6351	Environmental Science And Engineering	CO1	2.0	YES										2.0					
			CO2	2.0	YES	1.3	2.0			1.3										3.0
			CO3	2.0	YES	1.3	2.0				2.0									3.0
			CO4	3.0	YES	1.0				2.0										
IV	MA6468	Probability and Statistics	CO1	3.0	YES					2.0	3.0									
			CO2	3.0	YES					2.0										
			CO3	3.0	YES	2.0														
	BT6401	Analytical Methods and Instrumentation	CO1	3.0	YES		2.0													
			CO2	3.0	YES					2.0						2.0				
			CO3	3.0	YES															
			CO4	3.0	YES	2.0														
	BT6402	Applied Thermodynamics for Biotechnologists	CO1	3.0	YES		3.0												3.0	
			CO2	2.0	YES					3.0	3.0			2.0					2.0	
			CO3	2.0	YES										2.0				2.0	
			CO4	2.0	YES				1.3	2.0				1.3					2.0	
			CO5	3.0	YES				2.0					2.0						
	BT6403	Heat Transfer Operations	CO1	3.0	YES				2.0	3.0				2.0						
			CO2	2.0	YES					2.0				1.3					2.0	
			CO3	3.0	YES			3.0												
			CO4	2.0	YES					3.0				1.3						

Sem	Code	Course	CO	Value	Approved	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13
V	BT6404	Enzyme Technology and Biotransformation	CO1	2.0	YES				2.0									
			CO2	3.0	YES					2.0								
			CO3	3.0	YES	3.0		2.0	2.0									
			CO4	3.0	YES		2.0		2.0						2.0			
	BT6405	Bioprocess Principles	CO1	3.0	YES				2.0									
			CO2	3.0	YES		3.0						3.0					
			CO3	3.0	YES								2.0					
			CO4	3.0	YES										2.0			
			CO5	3.0	YES											3.0		
	BT6501	Protein Structure Function and Proteomics	CO1	2.0	YES	2.0				1.3								
			CO2	2.0	YES	2.0	2.0		1.3	1.3								
			CO3	2.0	YES		2.0			1.3								
			CO4	3.0	YES					2.0							2.0	
	BT6502	Bioprocess Engineering	CO1	2.0	YES			2.0										
			CO2	2.0	YES			2.0			2.0					1.3		2.0
			CO3	2.0	YES			2.0						3.0				3.0
	BT6503	Mass Transfer Operation	CO1	2.0	YES	3.0												
			CO2	2.0	YES			2.0										
			CO3	3.0	YES				2.0				2.0					
			CO4	2.0	YES													
			CO5	2.0	YES												2.0	
	BT6504	Molecular Biology	CO1	2.0	YES				2.0									
			CO2	3.0	YES					3.0								
			CO3	3.0	YES					2.0	3.0	1.0						
			CO4	2.0	YES										2.0			
			CO5	2.0	YES	1.3	2.0			1.3	1.3							
	BT6006	Biopharmaceutical Technology	CO1	3.0	YES	2.0	3.0			2.0	2.0							
			CO2	3.0	YES	2.0	3.0			2.0	2.0							
			CO3	2.0	YES		2.0	2.0			1.3							
			CO4	3.0	YES				3.0		2.0		2.0				2.0	
			CO5	2.0	YES				2.0		1.3		0.7	2.0				
	BT6003	Principles of food processing	CO1	3.0	YES					2.0								3.0
			CO2	2.0	YES		2.0	2.0										
			CO3	2.0	YES				2.0				3.0			1.3		
			CO4	2.0	YES				2.0				3.0					3.0
			CO5	2.0	YES				2.0				0.7	2.0				
VI	BT6601	Total Quality Management for Biotechnologists	CO1	3.0	YES	3.0			2.0		2.0							
			CO2	2.0	YES	2.0			1.3		1.3							
			CO3	2.0	YES	2.0			1.3		1.3							
			CO4	3.0	YES	3.0			2.0		2.0							
			CO5	2.0	YES	2.0	2.0		1.3		1.3					2.0		
	BT6602	Immunology	CO1	3.0	YES	3.0			2.0		2.0					3.0		
			CO2	3.0	YES	3.0	3.0		2.0		2.0					3.0		
			CO3	2.0	YES	2.0	2.0		1.3		1.3					2.0		
			CO4	3.0	YES	3.0	3.0		3.0				3.0		2.0	3.0		
			CO5	3.0	YES	3.0	3.0		3.0				3.0		2.0	3.0		
	BT6603	Genetic Engineering and Genomics	CO1	2.0	YES													
			CO2	2.0	YES					2.0			2.0			1.3		
			CO3	2.0	YES			2.0		1.3	1.3						1.3	
				2.0														
			CO4	2.0	YES			2.0		1.3	1.3						1.3	
			CO1	2.0	YES			2.0		1.3	1.3						1.3	
			CO2	2.0	YES			2.0		1.3	1.3						1.3	

Mapping matrix (Course Outcomes → Programme Outcomes / Programme Specific Outcomes). Values as read; blank cells indicate no mapping. Columns: PO1–PO12 and PSO1–PSO3.

Sem		Code	Course	CO	Target	Addressed	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
III	VII	BT6604	Chemical Reaction Engineering	CO3	2.0	YES			2.0		2.0										
				CO4	2.0	YES		2.0												2.0	
				CO5	2.0	YES									1.0				2.0		
		BT 6007	Animal Biotechnology	CO1	2.0	YES		1.3		2.0									2.0		
				CO2	3.0	YES				3.0									2.0		
				CO3	3.0	YES		2.0											3.0		
				CO4	3.0														3.0		
				CO5	2.0	YES			2.0	2.0		2.0							3.0		
		BT 6010	Plant Biotechnology	CO1	2.0	YES			2.0	2.0		2.0				2.0			2.0		
				CO2	2.0	YES					2.0					1.3			2.0		
				CO3	2.0	YES			2.0	2.0		2.0				2.0			2.0		
				CO4	2.0	YES	1.3			3.0	2.0					2.0			2.0		
				CO5	3.0	YES	1.0			2.0	3.0	3.0							2.0		
		BT6701	Bioinformatics and Computational Biology	CO1	3.0	YES	3.0			2.0		3.0	3.0								2.0
				CO2	2.0	YES	0.7			0.7		1.3	3.0								
				CO3	2.0	YES							1.3			1.3	2.0	2.0	2.0	3.0	
				CO4	3.0	YES							3.0			2.0	2.0		2.0	2.0	
				CO5	3.0	YES											2.0	3.0	3.0	3.0	3.0
		BT6702	Downstream processing	CO1	2.0	YES													3.0		1.0
				CO2	2.0	YES								2.0		1.3	2.0	2.0	2.0		
				CO3	2.0	YES			2.0								2.0	2.0	2.0	2.0	
				CO4	2.0	YES					3.0										
				CO5	3.0	YES										2.0			3.0	3.0	1.0
		BT6703	Creativity, Innovation and New Product Development	CO1	3.0	YES				3.0			3.0						3.0		
				CO2	3.0	YES				3.0			3.0						3.0		
				CO3	3.0	YES				3.0			3.0						3.0		
				CO4	3.0	YES				3.0			3.0						3.0		
				CO5	3.0	YES				3.0			3.0						3.0		
		BT 6014	Bioindustrial Entrepreneurship	CO1	3.0	YES				3.0	3.0	3.0									
				CO2	3.0	YES				3.0	3.0	3.0									
				CO3	3.0	YES				3.0	3.0	3.0									
				CO4	2.0	YES				2.0	2.0	2.0									
				CO5	3.0	YES				3.0	3.0	3.0									
		BT 6017	Tissue Engineering	CO1	3.0	YES		3.0	3.0	3.0	3.0	3.0	2.0								
				CO2	3.0	YES		3.0	3.0	3.0	3.0	3.0	2.0								
				CO3	3.0	YES		3.0	3.0	3.0	3.0	3.0	2.0								
				CO4	3.0	YES		3.0	3.0	3.0	3.0	3.0	2.0								
		BT 6811	Project work	CO1	3.0	YES	3.0	3.0	3.0					2.0		2.0			3.0	3.0	3.0
				CO2	3.0	YES	3.0	3.0	3.0					3.0		2.0			3.0	3.0	3.0
				CO3	3.0	YES	3.0	3.0	3.0					3.0		2.0			3.0	3.0	3.0
				CO4	3.0	YES	3.0	3.0	3.0					3.0		2.0			3.0	3.0	3.0
				CO5	3.0	YES	3.0	3.0	3.0					3.0		2.0			3.0	3.0	3.0
			AVERAGE				2.2	2.2	2.4	1.9	2.1	1.9	2.3	1.6	2.0	1.9	2.3	2.2	2.4	2.3	2.4
IV			**CONVERT TO 0.4**				30	29	31	25	28	25	30	21	26	26	30	29	32	31	33

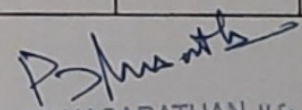## PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
PO ATTAINMENT   2015-2019 BATCH

PO /PSO No	Method assessment	Direct assessment (80%)			Indirect Assessment (20%)				% PO /PSO Attainment
		Internal Assessment (40%)	Semester End Examination (60%)	Direct Assessment (80%)	End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	30	48	62	18	20		19	81
PO 2	Ability to identify, formulate and solve bio-engineering problems	29	48	62	16	20		18	80
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	31	43	59	17	20		19	78
PO 4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	25	49	59	16	20		18	77
PO 5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	28	47	60	14			14	74
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	25	47	58	15	20		18	75
PO 7	engineering solutions in societal and environmental contexts	30	50	64	17	20		19	83
PO 8	Ability to have understanding of professional and ethical responsibility	21	47	54	13	17		15	69
PO 9	Possess ability to function in multi-disciplinary teams	26	47	58	15			15	73
PO 10	Ability to communicate effectively	30	48	62	15		18.97	15	77
PO 11	Ability to engage themselves in life-long learning	26	49	60	18	20		19	79
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	30	46	61	16			16	77
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with desired qualities.	32	51	66	19			19	85
PSO 2	separate the components obtained at the end of biological process.	31	50	65	16	20	18	18	83
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	33	54	70	20	15		18	87

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF BIOTECHNOLOGY

OVERALL PO ATTAINMENT 2015-2019 BATCH

PO /PSO No	Method assessment	Target (%)	Attained (%)	% PO /PSO Attained
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	70	81	Yes
PO 2	Ability to identify, formulate and solve bio-engineering problems	70	80	Yes
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic,	70	78	Yes
PO 4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	70	77	Yes
PO 5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	70	74	Yes
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the	70	75	Yes
PO 7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	70	83	Yes
PO 8	Ability to have understanding of professional and ethical responsibility	70	69	No
PO 9	Possess ability to function in multi-disciplinary teams	70	73	Yes
PO 10	Ability to communicate effectively	70	77	Yes
PO 11	Ability to engage themselves in life-long learning	70	79	Yes
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a	70	77	Yes
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule	70	85	Yes
PSO 2	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	70	83	Yes
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	70	87	Yes

Target - 60% of the students will get above 65%

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Justification for PO Attainment

PO identified to be not attained	Action taken for improvement
PO-8	Professional ethical responsibility is to be improved by providing more industry instiitute interaction by

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY- CO ATTAINMENT (2014-2018 Batch)

SEM	COURSE NAME		Cos	Cos Attainment in %	CO Result	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	HS6151	Technical English – I	CO1	2.0	YES							1.3			2.0	2.0	2.0			
			CO2	2.0	YES							1.3			2.0	2.0	2.0			
			CO3	2.0	YES															
			CO4	2.0	YES															
			CO5	2.0	YES							1.3			2.0	2.0	2.0			
	MA6151	Mathematics – 1	CO1	3.0	YES	3.0	2.0													
			CO2	3.0	YES	3.0	2.0													
			CO3	3.0	YES															
			CO4	2.0	YES															
			CO5	3.0	YES	3.0	2.0													
	PH6151	Engineering Physics – 1	CO1	2.0	YES	2.0	1.3		1.3	1.3										
			CO2	2.0	YES	2.0	1.3		1.3	1.3										
			CO3	2.0	YES	2.0	1.3		1.3	1.3										
	CY6151	Engineering Chemistry – I	CO1	2.0	YES	2.0	1.3		1.3											
			CO2	2.0	YES	2.0			1.3											
			CO3	2.0	YES	2.0			1.3											
	GE6152	Engineering Graphics	CO1	2.0	YES	2.0	2.0													
			CO2	2.0	YES			2.0							1.0	1.0				
			CO3	2.0	NO		2.0												1.0	
	GE6151	Computer Programming	CO1	2.0	YES	2.0	2.0	2.0	1.3	2.0								1.3	1.3	
			CO2	2.0	YES	2.0	2.0	2.0	1.3	2.0								1.3	1.3	
			CO3	2.0	YES	2.0	2.0	2.0	1.3	2.0								1.3	1.3	
II	HS6251	Technical English – II	CO1	2.0	YES	2.0									2.0	2.0	2.0			
			CO2	2.0	YES	2.0									2.0	2.0	2.0			
			CO3	2.0	YES	2.0									2.0	2.0	2.0			
	MA6251	Mathematics – II	CO1	2.0	YES	2.0	1.3													
			CO2	3.0	YES	3.0	2.0													
			CO3	3.0	YES															
			CO4	2.0	YES															
			CO5	2.0	YES	2.0	1.3													
	PH6252	Physics of Materials	CO1	2.0	YES	2.0	1.3		1.3	1.3										
			CO2	2.0	YES	2.0	1.3		1.3	1.3										
			CO3	2.0	YES	2.0	1.3		1.3	1.3										
	CY6252	Chemistry for Technologists	CO1	2.0	YES	2.0			1.3											
			CO2	2.0	YES	2.0			1.3											
			CO3	2.0	YES															
			CO4	2.0	YES															
			CO5	2.0	YES	2.0			1.3											
	BT6201	Biochemistry	CO1	2.0	YES	1.3	1.3		2.0											
			CO2	2.0	YES							1.3							3.0	
			CO3	3.0	YES								2.0	3.0						
	BT6202	Microbiology	CO1	2.00	YES	1.3		2.0	1.3											
			CO2	2.00	YES	1.3		2.0	1.3											

Sem	Code	Course	CO	Avg	Mapped	1	2	3	4	5	6	7	8	9	10	11	12	13	14
			CO3	2.00	YES	1.3		2.0	1.3										
III	MA6351	Transforms and Differential Equation	CO1	2.0	YES	2.0	1.3		1.3										
			CO2	2.0	YES	2.0	1.3		1.3										
			CO3	2.0	YES	2.0	1.3		1.3										
	BT6301	Stoichiometry and Fluid Mechanics	CO 1	2.0	YES	1.3				1.3									
			CO 2	2.0	YES		2.0		1.3										
			CO 3	2.0	YES	1.3	2.0	2.0		1.3	1.3								
			CO 4	3.0	YES														
	BT6302	Bioorganic Chemistry	CO1	2.0	YES	2.0									2.0				
			CO2	3.0	YES			2.0	3.0										
			CO3	3.0	YES											3.0			
	BT6303	Cell Biology	CO1	3.0	YES	3.0													
			CO2	3.0	YES		2.0		3.0										
			CO3	2.0	YES								1.3				2.0		
			CO4	2.0	YES									2.0					
	BT6304	Basic Industrial Biotechnology	CO1	2.0	YES									2.0					
			CO2	3.0	YES				3.0									1.3	
			CO3	2.0	YES		2.0						2.0	2.0					
	GE6351	Environmental Science And Engineering	CO1	2.0	YES			1.3	1.3			1.0		2.0					
			CO2	3.0	YES			2.0	2.0										3.0
			CO3	2.0	YES			1.3	1.3										3.0
IV	MA6468	Probability and Statistics	CO1	2.0	YES	2.0	1.3												
			CO2	2.0	YES	2.0	1.3												
			CO3	2.0	YES	2.0	1.3												
	BT6401	Analytical Methods and Instrumentation	CO1	2.0	YES	1.3	2.0		1.3										
			CO2	3.0	YES		3.0		2.0									2.0	
			CO3	2.0	YES								2.0						
			CO4	2.0	YES	1.3	2.0		1.3										
	BT6402	Applied Thermodynamics for Biotechnologists	CO1	2.0	YES	1.3	2.0			2.0									
			CO2	2.0	YES	1.0			2.0										
			CO3	3.0	YES				2.0	3.0									
			CO4	2.0	YES				2.0										
	BT6403	Heat Transfer Operations	CO1	3.0	YES	2.0													
			CO2	2.0	YES		2.0												
			CO3	3.0	YES				2.0					2.0					
			CO4	2.0	YES														3.0
	BT6404	Enzyme Technology and Biotransformation	CO1	3.0	YES	2.0													
			CO2	3.0	YES		3.0										3.0		
			CO3	3.0	YES			3.0	3.0				2.0						
			CO4	3.0	YES									2.0			2.0		
	BT6405	Bioprocess Principles	CO1	3.0	YES			2.0	3.0				2.0				3.0		
			CO2	2.0	YES			1.3					1.3						
			CO3	2.0	YES			1.3	2.0				1.3						
			CO4	2.0	YES				2.0				1.3				2.0		
	BT6501	Protein Structure Function and Proteomics	CO1	3.0	YES		3.0												
			CO2	3.0	YES				3.0				2.0						
			CO3	3.0	YES					2.0									
			CO4	3.0	YES						2.0								
			CO1	2.0	YES	2.0			2.0	2.0									

Sem	Code	Subject	CO	Avg	Active	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
V	BT6502	Bioprocess Engineering	CO2	2.0	YES		1.3					2.0								
			CO3	2.0	YES				1.3								2.0			
	BT6503	Mass Transfer Operation	CO1	2.0	YES		2.0													
			CO2	2.0	YES								2.0							
			CO3	2.0	YES								1.3							
			CO4	3.0	YES										1.3					
	BT6504	Molecular Biology	CO 1	3.0	YES	3.0						2.0					3.0			
			CO 2	2.0	YES	2.0	2.0				1.3	1.3								
			CO 3	2.0	YES		2.0					1.3								
			CO 4	2.0	YES							1.3								
	BT 6006	Biopharmaceutical Technology	CO1	2.0	YES			2.0									1.3			
			CO2	2.0	YES			2.0		2.0						1.3			2.0	
			CO3	3.0	YES			2.0						3.0		1.3			2.0	
	BT 6003	Principles of food processing	CO1	3.0	YES	3.0								3.0				3.0		
			CO2	2.0	YES			2.0												
			CO3	2.0	YES				2.0				1.3							2.0
			CO4	2.0	YES														2.0	2.0
VI	BT6601	Total Quality Management for Biotechnologists	CO1	3.0	YES						3.0									
			CO2	2.0	YES					2.0										
			CO3	3.0	YES					2.0		3.0	1.0							
			CO4	2.0	YES										2.0					
	BT6602	Immunology	CO1	2.0	YES	1.3	2.0				1.3	1.3								
			CO2	2.0	YES	1.3	2.0				1.3	1.3								
			CO3	3.0	YES	2.0	3.0				2.0	2.0								
	BT6603	Genetic Engineering and Genomics	CO1	2.0	YES		2.0	2.0												
			CO2	2.0	YES					2.0					2.0			1.3		
			CO3	2.0	YES					2.0			0.7		2.0					
			CO4	2.0	YES					1.3										
	BT6604	Chemical Reaction Engineering	CO1	2.0	YES		2.0	2.0												
			CO2	2.0	YES					2.0			3.0					1.3		
			CO3	2.0	YES					2.0			0.7		2.0					
	BT 6007	Animal Biotechnology	CO1	3.0	YES	3.0				2.0		2.0								
			CO2	2.0	YES	2.0				1.3		1.3								
			CO3	2.0	YES	2.0				1.3		1.3								
			CO4	2.0	YES	2.0				1.3		1.3								2.0
	BT 6010	Plant Biotechnology	CO1	2.0	YES		2.0			1.3		1.3						2.0		
			CO2	2.0	YES		2.0			1.3		1.3						2.0		
			CO3	2.0	YES		2.0			1.3		1.3						2.0		3.0
			CO4	2.0	YES		2.0			1.3		1.3						2.0		
	BT6701	Bioinformatics and Computational Biology	CO1	2.0	YES					2.0							2.0	1.3		3.0
			CO2	2.0	YES					2.0							2.0	1.3		
			CO3	2.0	YES															
			CO4	2.0	YES					2.0							2.0	1.3		1.0
	BT6702	Downstream processing	CO1	3.0	YES		3.0			2.0		2.0							2.0	
			CO2	2.0	YES		2.0			1.3		1.3							1.3	
			CO3	2.0	YES		2.0			1.3		1.3							1.3	
			CO4	2.0	YES		2.0			1.3		1.3							1.3	
			CO5	2.0	YES		2.0			2.0									2.0	1.0
		Creativity,	CO1	3.0	YES		3.0												3.0	

Sem	Code	Name	CO			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VII	BT6703	Innovation and New Product Development	CO2	3.0	YES										1.0					
			CO3	2.0	YES		1.3		2.0									3.0		
			CO4	3.0	YES				3.0									2.0		
			CO5	3.0	YES			2.0										3.0		
	BT 6014	Bioindustrial Entreprenurship	CO1	2.0	YES				2.0	2.0		2.0					2.0	3.0		
			CO2	2.0	YES				2.0	2.0		2.0					1.3			
			CO3	2.0	YES					2.0							2.0			
			CO4	2.0	YES				2.0	2.0		2.0					2.0			
	BT 6017	Tissue Engineering	CO1	3.0	YES	2.0		3.0												
			CO2	3.0	YES	1.0		2.0			3.0									
			CO3	3.0	YES	3.0		2.0			3.0		3.0							
			CO4	3.0	YES	1.0		1.0			2.0		3.0							
	BT 6811	Project work	CO1	3.0	YES								2.0		2.0		3.0	3.0	3.0	3.0
			CO2	3.0	YES								3.0		2.0		3.0	3.0	3.0	3.0
			CO3	3.0	YES															3.0
			CO4	3.0	YES														3.0	
			CO5	3.0	YES								3.0		2.0		3.0	3.0	3.0	3.0
		AVERAGE				2.0	1.9	2.0	1.7	1.9	1.6	2.3	1.6	1.7	1.9	2.1	2.0	2.2	2.3	2.5
		CONVERT TO 0.4				1.0	0.9	1.0	0.9	0.9	0.8	1.1	0.8	0.9	1.0	1.1	1.0	1.1	1.1	1.2
						26	25	26	23	25	22	30	21	23	26	29	27	29	30	33

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
PO ATTAINMENT 2014-2018 BATCH

PO /PSO No	Method assessment	Direct assessment (80%)			Indirect Assessment (20%)				
		Internal Assessment (40%)	Semester End Examination (60%)	Direct Assessment (80%)	End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	26	57	67	18	20		19	86
PO 2	Ability to identify, formulate and solve bio-engineering problems	25	47	58	16	20		18	76
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	26	44	56	18	20		19	75
PO 4	Ability to design and conduct experiments as well as to analyze and interpret data to develop modern drug	23	48	57	16	20		18	75
PO 5	Ability to select and apply appropriate techniques, resources and modern biotechnology tools	25	47	58	16	20		18	76
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	22	48	56	14	20		17	73
PO 7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	30	49	63	16	20		18	81
PO 8	Ability to have understanding of professional and ethical responsibility	21	48	55	12	20		16	71
PO 9	Possess ability to function in multi-disciplinary teams	23	47	56	14	20		17	73
PO 10	Ability to communicate effectively	26	49	60	15	20	19	18	78
PO 11	Ability to engage themselves in life-long learning	29	51	64	19	20		20	84
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	27	46	58	17	20		19	77
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with desired qualities.	29	54	66	18	20		19	85
PSO 2	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	30	48	62	17	20	18	19	81
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	33	46	63	16	20		18	81

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
PO ATTAINMENT 2014-2018 BATCH

PO /PSO No	Method assessment	Target (%)	Attained (%)	PO Attained
PO 1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	70	86	Yes
PO 2	Ability to identify, formulate and solve bio-engineering problems	70	76	Yes
PO 3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	70	75	Yes
PO 4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	70	75	Yes
PO 5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	70	76	Yes
PO 6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	70	73	Yes
PO 7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	70	81	Yes
PO 8	Ability to have understanding of professional and ethical responsibility	70	71	Yes
PO 9	Possess ability to function in multi-disciplinary teams	70	73	Yes
PO 10	Ability to communicate effectively	70	78	Yes
PO 11	Ability to engage themselves in life-long learning	70	84	Yes
PO 12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	70	77	Yes
PSO 1	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with desired qualities.	70	85	Yes
PSO 2	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	70	81	Yes
PSO 3	The graduates are expected high caliber to solve societal problems like food, environmental, agriculture , health etc	70	81	Yes

Target - 60% of the students will get above 70%

PO identified to be not attained
Nil

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DEPARTMENT OF BIOTECHNOLOGY (eoc survey attainment) (2013-2017 batch)

COURSE NAME		Cos	EOC	EOC Result	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14
HS6151	Technical English – 1	CO1	3.0	YES							2.0			3.0	3.0	3.0		
		CO2	3.0	YES							2.0			3.0	3.0	3.0		
		CO3	3.0	YES								2.0						
		CO4	3.0	YES														
		CO5	3.0	YES							2.0			3.0	3.0	3.0		
MA6151	Mathematics –1	CO1	3.0	YES	3.0	2.0												
		CO2	3.0	YES	3.0	2.0												
		CO3	3.0	YES	3.0	2.0												
		CO4	3.0	YES	3.0	2.0												
		CO5	3.0	YES	3.0	2.0												
PH6151	Engineering Physics – 1	CO1	3.0	YES	3.0	2.0		2.0	2.0									
		CO2	3.0	YES	3.0	2.0		2.0	2.0									
		CO3	3.0	YES														
		CO4	3.0	YES														
		CO5	3.0	YES	3.0	2.0		2.0	2.0									
CY6151	Engineering Chemistry – I	CO1	3.0	YES	3.0	2.0		2.0										
		CO2	3.0	YES	3.0	2.0		2.0										
		CO3	3.0	YES														
		CO4	3.0	YES														
		CO5	3.0	YES	2.0			2.0										
GE6152	Engineering Graphics	CO1	3.0	YES	3.0	2.0												
		CO2	3.0	YES		3.0								2.0	2.0			
		CO3	3.0	NO		3.0												1.0
GE6151	Computer Programming	CO1	3.0	YES	2.0	2.0	2.0	2.0	2.0							2.0	2.0	
		CO2	3.0	YES	2.0	2.0	2.0	2.0	2.0							2.0	2.0	
		CO3	3.0	YES			2.0	2.0	2.0							2.0	2.0	
HS6251	Technical English – II	CO1	3.0	YES	2.0									2.0	2.0	2.0		
		CO2	3.0	YES	3.0										2.0	2.0		
		CO3	3.0	YES	3.0										3.0	3.0		
MA6251	Mathematics – II	CO1	3.0	YES	3.0	2.0												
		CO2	3.0	YES	3.0	2.0												
		CO3	3.0	YES	3.0													
		CO4	3.0	YES	3.0													
		CO5	3.0	YES	3.0	2.0												
PH6252	Physics of Materials	CO1	3.0	YES	3.0	2.0		2.0	2.0									
		CO2	3.0	YES	3.0	2.0		2.0	2.0									
		CO3	3.0	YES	3.0	2.0		2.0	2.0									
CY6252	Chemistry for Technologists	CO1	3.0	YES	3.0	2.0		2.0										
		CO2	3.0	YES	3.0	2.0		2.0										
		CO3	3.0	YES	2.0	2.0		2.0										
		CO4	3.0	YES	2.0	2.0		2.0										
		CO5	3.0	YES	3.0	2.0		2.0										

Course Code	Course	CO			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
BT6201	Biochemistry	CO1	3.0	YES	2.0	2.0		2.0								
		CO2	3.0	YES		2.0			2.0							
		CO3	3.0	YES		2.0				2.0	3.0					2.0
BT6202	Microbiology	CO1	3.0	YES	2.0	2.0		2.0	3.0							
		CO2	3.0	YES	2.0	2.0	3.0									
		CO3	3.0	YES		2.0								2.0		
MA6351	Transforms and Differential Equation	CO1	3.0	YES	3.0	2.0		2.0								3.0
		CO2	3.0	YES	3.0	2.0		2.0								
		CO3	3.0	YES	3.0	2.0		2.0								
BT6301	Stoichiometry and Fluid Mechanics	CO1	3.0	YES	2.0	2.0			2.0							
		CO2	3.0	YES		3.0			2.0							
		CO3	3.0	YES	2.0	3.0	3.0		2.0	2.0	2.0					
		CO4	3.0	YES					2.0						2.0	
BT6302	Bioorganic Chemistry	CO1	3.0	YES	3.0				2.0							
		CO2	3.0	YES					2.0	2.0						
		CO3	3.0	YES					2.0					2.0		
BT6303	Cell Biology	CO1	3.0	YES	3.0											
		CO2	3.0	YES				2.0		3.0						
		CO3	3.0	YES									2.0			2.0
		CO4	3.0	YES									2.0			
BT6304	Basic Industrial Biotechnology	CO1	3.0	YES												2.0
		CO2	3.0	YES						3.0						
		CO3	3.0	YES			3.0						2.0	2.0		
GE6351	Environmental Science And Engineering	CO1	3.0	YES				2.0	2.0			1.0		2.0		
		CO2	3.0	YES				2.0	2.0							
		CO3	3.0	YES				2.0	2.0							
MA6468	Probability and Statistics	CO1	3.0	YES	3.0	2.0										
		CO2	3.0	YES	3.0	2.0										
		CO3	3.0	YES	3.0	2.0										
BT6401	Analytical Methods and Instrumentation	CO1	3.0	YES	2.0	3.0			2.0							
		CO2	3.0	YES		3.0			2.0							2.0
		CO3	3.0	YES										3.0		
		CO4	3.0	YES	2.0	3.0			2.0							
BT6402	Applied Thermodynamics for Biotechnologists	CO1	3.0	YES	2.0	2.0				2.0						
		CO2	3.0	YES	1.0				2.0							
		CO3	3.0	YES					2.0	3.0						
		CO4	3.0	YES					2.0							
BT6403	Heat Transfer Operations	CO1	3.0	YES	2.0											
		CO2	3.0	YES		2.0										
		CO3	3.0	YES					2.0					2.0		
		CO4	3.0	YES												
BT6404	Enzyme Technology and Biotransformation	CO1	3.0	YES	2.0											
		CO2	3.0	YES		3.0										3.0
		CO3	3.0	YES					3.0	3.0				2.0		
		CO4	3.0	YES									2.0			2.0
BT6405	Bioprocess	CO1	3.0	YES				2.0	3.0					2.0		3.0
		CO2	3.0	YES				2.0						2.0		

Code	Course	CO	Value	Mapped	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	Principles	CO3	3.0	YES			2.0	3.0				2.0						
		CO4	3.0	YES				3.0				2.0				3.0		
BT6501	Protein Structure Function and Proteomics	CO1	3.0	YES		3.0						2.0				3.0		
		CO2	3.0	YES				3.0				2.0						
		CO3	3.0	YES					3.0			2.0						
		CO4	3.0	YES						2.0		2.0						
BT6502	Bioprocess Engineering	CO1	3.0	YES	3.0				2.0	2.0		2.0						
		CO2	3.0	YES		2.0				2.0		2.0		2.0				
		CO3	3.0	YES					2.0			2.0						
BT6503	Mass Transfer Operation	CO1	3.0	YES		3.0						2.0	3.0					
		CO2	3.0	YES								2.0	2.0					
		CO3	3.0	YES								2.0		2.0				
		CO4	3.0	YES								2.0			2.0			
BT6504	Molecular Biology	CO1	3.0	YES	3.0				2.0			2.0						
		CO2	3.0	YES	3.0	3.0			2.0			2.0						
		CO3	3.0	YES		3.0			2.0			2.0						
		CO4	3.0	YES					2.0			2.0				2.0		
BT 6006	Biopharmaceutical Technology	CO1	3.0	YES				2.0				2.0						
		CO2	3.0	YES				2.0				2.0	2.0			2.0		2.0
		CO3	3.0	YES				3.0				2.0		3.0				3.0
BT 6003	Principles of food processing	CO1	3.0	YES	3.0							2.0						
		CO2	3.0	YES				2.0				2.0						
		CO3	3.0	YES					2.0			2.0	2.0					
		CO4	3.0	YES								2.0						2.0
BT6601	Total Quality Management for Biotechnologists	CO1	3.0	YES								2.0	3.0					
		CO2	3.0	YES							3.0	2.0						
		CO3	3.0	YES								2.0	2.0	1.0				
		CO4	3.0	YES								2.0				3.0		
BT6602	Immunology	CO1	3.0	YES	2.0	3.0					2.0	2.0						
		CO2	3.0	YES	2.0	3.0					2.0	2.0						
		CO3	3.0	YES	2.0	3.0					2.0	2.0						
BT6603	Genetic Engineering and Genomics	CO1	3.0	YES	2.0							2.0						
		CO2	3.0	YES	2.0		2.0					2.0						
		CO3	3.0	YES	2.0				3.0			2.0						
		CO4	3.0	YES	2.0							2.0						
BT6604	Chemical Reaction Engineering	CO1	3.0	YES	2.0	2.0	3.0					2.0						
		CO2	3.0	YES	2.0				3.0			2.0	3.0			2.0		
		CO3	3.0	YES	2.0				3.0			2.0	1.0	2.0				
BT 6007	Animal Biotech	CO1	3.0	YES	3.0				2.0	2.0	2.0	2.0						
		CO2	3.0	YES	3.0				2.0	2.0	2.0	2.0						
		CO3	3.0	YES	3.0				2.0	2.0	2.0	2.0						
		CO4	3.0	YES	3.0				2.0	2.0	2.0	2.0						
BT 6010	Plant Biotechnology	CO1	3.0	YES	3.0	3.0			2.0	2.0	2.0	2.0					3.0	
		CO2	3.0	YES	3.0	3.0			2.0	2.0	2.0	2.0					3.0	
		CO3	3.0	YES	3.0	3.0			2.0	2.0	2.0	2.0					3.0	
		CO4	3.0	YES	3.0	3.0			2.0	2.0	2.0	2.0					3.0	
	Bioinformatics	CO1	3.0	YES	3.0	3.0				3.0	2.0	2.0	3.0				2.0	3.0

Course	Course Name	CO			1	2	3	4	5	6	7	8	9	10	11	12	13	14
BT6701	cs and Computational Biology	CO2	3.0	YES	3.0	3.0			3.0	2.0								
		CO3	3.0	YES	3.0	3.0				2.0					2.0	3		
		CO4	3.0	YES	3.0	3.0				2.0					2.0		2.0	3.0
BT6702	Downstream processing	CO1	3.0	YES	3.0	3.0	3.0		3.0	2.0					2.0	3.0		3.0
		CO2	3.0	YES	3.0	3.0	3.0			2.0	2.0				2.0		2.0	3.0
		CO3	3.0	YES	3.0	3.0	3.0			2.0	2.0				2.0		2.0	3.0
		CO4	3.0	YES	3.0	3.0	3.0			2.0	2.0				2.0		3.0	2.0
BT6703	Creativity, Innovation and New Product Development	CO1	3.0	YES	3.0	3.0	3.0			2.0	2.0				2.0		3.0	2.0
		CO2	3.0	YES	3.0	3.0	3.0	3.0		2.0	2.0				2.0		3.0	2.0
		CO3	3.0	YES	3.0	3.0	3.0			2.0	2.0				2.0		3.0	2.0
		CO4	3.0	YES	3.0	3.0	3.0	2.0		2.0	3.0				2.0	1.0	3.0	2.0
		CO5	3.0	YES	3.0		3.0			2.0	3.0				2.0		3.0	2.0
BT 6014	Bioindustrial Entreprenurship	CO1	3.0	YES	3.0		3.0	3.0		2.0					2.0		3.0	2.0
		CO2	3.0	YES	3.0		3.0	3.0		2.0	3.0				2.0		3.0	2.0
		CO3	3.0	YES	3.0		3.0	3.0		2.0	3.0			3.0	2.0		3.0	2.0
		CO4	3.0	YES	3.0		3.0	3.0		2.0				2.0	2.0		3.0	2.0
BT 6017	Tissue Engineering	CO1	3.0	YES	2.0		3.0	3.0		2.0	3.0			3.0	2.0		3.0	2.0
		CO2	3.0	YES	1.0		3.0	3.0		2.0				3.0	2.0		3.0	2.0
		CO3	3.0	YES	3.0		2.0	3.0		3.0				2.0			3.0	2.0
		CO4	3.0	YES	1.0		2.0	3.0		3.0			3.0	2.0			3.0	2.0
BT 6811	Project work	CO1	3.0	YES			1.0	3.0	2.0			3.0	2.0				3.0	2.0
		CO2	3.0	YES			3.0				3.0	2.0					3.0	3.0
		CO3	3.0	YES			3.0				2.0	2.0	2.0		3.0	3.0	3.0	3.0
		CO4	3.0	YES			3.0				3.0	2.0	2.0		3.0	3.0	3.0	3.0
		CO5	3.0	YES			3.0					2.0					3.0	3.0
							3.0					2.0					3.0	
	AVERAGE				2.6	2.4	2.5	2.3	2.1	2.2	2.5	2.0	2.0		3.0	3.0	3.0	3.0
	CONVERT TO 0.2				18	16	17	16	14	15	16	13	15	15	17	15	19	15

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
PO ATTAINMENT 2013-2017 BATCH

PO No	Method assessment	Direct assessment (80%)			Indirect Assessment (20%)			
		Internal Assessment (40%)	Semester End Examination (60%)	Direct Assessment (80%)	End of Course Survey (20%)	Student Exit Survey (20%)	Indirect Assessment (20%)	% PO Attainment
1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	28	58	69	18	20	19	88
2	Ability to identify, formulate and solve bio-engineering problems	26	50	61	16	20	18	79
3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	26	45	57	17	19	19	75
4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	24	49	58	16	19	18	76
5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	25	47	58	14		17	75
6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	23	48	57	15	18	18	74
7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	29	51	64	16	19	18	82
8	Ability to have understanding of professional and ethical responsibility	23	48	57	13	19	16	73
9	Possess ability to function in multi-disciplinary teams	25	47	58	15		18	75
10	Ability to communicate effectively	23	49	58	15	19	18	75
11	Ability to engage themselves in life-long learning	28	50	62	17	20	19	81
12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	25	47	58	15	20	18	75
13	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with desired qualities.	29	52	65	19		20	84
14	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	30	56	69	15		18	86

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF BIOTECHNOLOGY
OVERALL PO ATTAINMENT 2013-2017 BATCH

PO No	PO s	Target (%)	Attained (%)	PO /PSOAttained
1	Ability to apply knowledge of mathematics, science, modern biology, engineering and biotechnology.	65	88	Yes
2	Ability to identify, formulate and solve bio-engineering problems	65	79	Yes
3	Ability to design a system, a component, or a process to meet desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety, manufacturability and sustainability	65	75	Yes
4	Abilityto design and conduct experiments as well as to analyze and interpret data to develop modern drug	65	76	Yes
5	Abilityto select and apply appropriate techniques, resources and modern biotechnology tools	65	75	Yes
6	Ability in apply reasons informed by contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to professional engineering practice	65	74	Yes
7	Ability to understand the impact of professional engineering solutions in societal and environmental contexts	65	82	Yes
8	Ability to have understanding of professional and ethical responsibility	65	73	Yes
9	Possess ability to function in multi-disciplinary teams	65	75	Yes
10	Ability to communicate effectively	65	75	Yes
11	Ability to engage themselves in life-long learning	65	81	Yes
12	Ability to understand engineering and management principles and apply those to one's own work, as a member and leader in a team.	65	75	Yes
13	The graduates are expected to indulge in the field of genetic engineering in order toproduce a recombinant DNA molecule with desired qualities.	65	84	Yes
14	The graduates are expected to possess ability to separate the components obtained at the end of biological process.	65	86	Yes

Target - 60% of the students will get above 65%

PO identified to be not attained
Nil

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PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF CIVIL ENGINEERING
PO ATTAINMENT FOR COURSES (2013-17)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.38					2.35		1.78	1.82	2.18					
		B	2.42					2.32		2.08	2.2	1.96	·				
	Mathematics-I	A	2.21	2.28			1.98							2.28			
		B	2.18	2.12			1.96										
	Engineering Physics-I	A	2.38	2.16		2.24								1.92			
		B	2.31	2.02		2.28								1.86			
	Engineering Chemistry-I	A	2.4	2.2										1.98			
		B	2.36	2		·								1.96			
	Computer Programming	A	2.31	2.62	1.82	2.32	1.98							2.24			
		B	2.2	2.48	2.08	2.52	2.2							2.16			
	Engineering Graphics	A	2.37	2.37								2.16					
		B	2.16	2.16								2.32					
	Computer Practice Laboratory	A	2.56	2.48	2.36									2.36			
		B	2.42	2.36	2.3									2.28			
	Engineering Practices Laboratory	A	2.34	2.38	2.38	2.38								2.16			
		B	2.26	2.18	2.24	2.4								2.08			
	Physics & Chemistry Laboratory I	A	2.71	2.62													
		B	2.54	2.56													
II	Technical English II	A		2.17	1.02						2.64	2.56					
		B		1.83	1.98						2.22	2.38			·		·
	Mathematics II	A	2.21	2.34	2.3										1.92	2.42	
		B	2.1	2.1	2.22										1.94	2.23	
	Engineering Physics II	A	2.08	2.48										2.32			
		B	2.12	2.16										2.14			
	Engineering Chemistry II	A	2.31	2.32	2.18									2.12			
		B	2.42	3.27	2.04									2.42			
	Basic Electrical & Electronics Engineering	A	2.43	2.36			2.24			2.38							
		B	2.38	2.18			2.2			2.2							·
	Engineering Mechanics	A	2.4	2.1	2.18	2.5						2.22	2.18		2.08	2.18	2.08
		B	2.34	2.02	2.02	2.25						2.18	2.22		2.18	2.1	2.11
	Computer Aided Drafting and Modeling Laboratory	A	2.56	2.38						2.58			·				
		B	2.56	2.52						2.48							
	Physics & Chemistry Laboratory II	A	2.56	2.42	2.36					2.36							
		B	2.52	2.36	2.32					2.3							

Year	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14
III	Transforms And Partial Differential Equation	A	2.32	1.98									1.96		2.04	1.96
		B	2.16	1.6									1.92		2	1.72
	Engineering Geology	A	2.3	2.15	2.12	2.16							2.68	2.68	2.68	2.68
		B	2.48	2.04	2.22	2.26							2.59	2.59	2.59	2.59
	Mechanics of Solids	A	2.03	2.03	2.14	2.18	2.2						1.92		2.14	
		B	1.64	2.3	2.02	2.28	2.26						1.98		2.08	
	Mechanics of Fluids	A	2.22	2.22	2.08	2.28							2.14	2.18	2.32	2.32
		B	2.1	2.48	2.01	2.17							2.04	2.04	2.24	2.24
	Surveying 1	A	2.42	2.42	2.42	2.14							2.04		2.24	
		B	2.48	2.48	2.48	2.4							1.98		2.12	
	Environmental Science and Engineering	A	2.42	2.36	2.18					2.36	2.18				2.36	2.36
		B	2.48	2.14	2.25					2.26	2.02				2.22	2.22
	Survey Practical 1	A	2.42	2.36	2.32								2.28	2.18	2.42	2.42
		B	2.38	2.32	2.18								2.14	2.42	2.36	2.36
	Computer Aided Building Drawing	A	2.52	2.48	2.31								2.4		2.36	2.36
		B	2.52	2.48	2.31								2.32		2.36	2.36
IV	Numerical Methods	A	2.41	2.37	2.46								2.18	2.28	2.18	2.36
		B	2.45	2.29	2.36								2.22	2.14	2.14	2.24
	Construction Materials	A	2.49	2.42		2.16									2.12	2.16
		B	2.12	2.15		2.18									1.86	2.02
	Strength of Materials	A	2.28	2.26		2.24									2.41	2.41
		B	2.19	2.02		2.2									2.27	2.27
	Applied Hydraulic Engineering	A	2.12	2.17	2.16	2.26							2.26			2.18
		B	2.08	2.03	2.42	2.08							2.48			2.14
	Surveying II	A	1.8	2.16		1.98									2.32	1.98
		B	2.1	2.15		2.18									2.26	2.18
	Soil Mechanics	A	2.38	2.52	2.18	2.22							2.36			2.52
		B	2.32	2.48	2.42	2.18							2.24			2.48
	Strength of Materials Laboratory	A	2.56	2.42	2.28											2.36
		B	2.46	2.38	2.24											2.24
	Hydraulic Engineering Laboratory	A	2.52	2.48	2.52											2.5
		B	2.48	2.46	2.44											2.44
	Survey Practical II	A	2.28	2.36	2.22											2.42
		B	2.24	2.26	2.18											2.34

Sem	Subject		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
V	Structural Analysis I	A	2.21	2.24		2.18	2.18									2.56	2.44
		B	2.12	2.18		2.25	2.42									2.44	2.22
	Foundation Engineering	A	2.1	2.1		2.02	2.5									2.42	
		B	2.08	2.03		2.04	2.14									2.34	
	Environmental Engineering I	A	2.13	2.1									2.14			2.08	
		B	2.09	2.01									2.18			2.01	
	Highway Engineering	A	2.28	2.57	2.18											2.16	
		B	2.12	2.5	2.2											2.08	
	Design of Reinforced Concrete Elements	A	2.34	2.34	2,42								2.18	2.26		2.08	2.28
		B	2.37	2.37	2.4								2.14	2.34		2.08	2.14
	Construction Techniques, Equipment and Practice	A		2.54	2.42		2.26								2.36		
		B		2.52	2.46		2.34								2.3		.
	Communication and Soft Skills-Laboratory Based	A	2.56	2.56	2.36		2.18		2.18				2.18			2.16	2.36
		B	2.48	2.48	2.28		2.22		2.22				2.06			2.08	2.22
	Soil Mechanics Laboratory	A	2.54	2.48	2.34								2.42		2.28		
		B	2.54	2.48	2.34								2.56		2.14		
	Survey Camp	A		2.44	2.34		2.18								2.44		
		B		2.44	2.32		2.32								2.44		
VI	Design of Reinforced Concrete & Brick Masonry Structures	A	2.47	2.62		2.24								2.18		2.26	2.42
		B	2.38	2.38		2.18								2.28		2.12	2.26
	Structural Analysis II	A	2.34	1.93	2.18		2.28		2.18								2.52
		B	2.23	1.67	2.22		2.18		2.42								2.36
	Design of Steel Structures	A	2.3	2.3	2.28								2.18			2.36	2.48
		B	2.1	2.63	2.22								2.06			2.28	2.34
	Railways, Airports and Harbour Engineering	A	2.31	2.1	2.28								2.01	2.36		2.18	
		B	2.22	2.08	2.42								2.2	2.22		2.06	
	Environmental Engineering II	A	2.16	2.32									2.16	2.18		2.36	2.18
		B	2.13	2.12									2.12	2.08		2.28	2.06
	Professional Ethics	A	2.24	2.42									2.18			2.42	
		B	2.17	2.26									2.22			2.28	
	Environmental Engineering Laboratory	A	2.52	2.46	2.36		2.46						2.46	2.16	2.24	2.36	2.44
		B	2.48	2.32	2.34		2.24						2.24	2.18	2.14	2.28	2.36
	Concrete and Highway Engineering Laboratory	A	2.54				2.46							2.36	2.17	2.14	2.14
		B	2.36				2.48							2.32	2.52	2.17	2.28

Sem	Course	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VII	Structural Dynamics and Earthquake Engineering	A	2.18							2.62	2.42					2.36	
		B	2.12							2.56	2.2					2.22	
	Prestressed Concrete Structures	A	2.03			2.28								2.12		2.28	2.21
		B	2.17			2.18								2.22		2.08	2.07
	Water Resources and Irrigation Engineering	A	2.37	2.37									2.34	2.14		1.72	
		B	2.03	2.27									2.24	2.42		1.68	
	Estimation and Quantity Surveying	A	2.12	2.32	2.37								2.46	2.37		2.42	2.38
		B	2.08	2.1	2.48								2.32	2.27		2.38	2.44
	Traffic Engineering and Management	A	2.48	2.48			2.24		2.46								
		B	2.52	2.37			2.12		2.32								
	Municipal Solid Waste Management	A	2.32	2.48		2.48	2.56						2.46	2.24	2.36		
		B	2.4	2.44									2.24	2.46	2.24		
	Computer Aided Design and Drafting Laboratory	A	2.52	2.46									2.46			2.17	
		B	2.48	2.32									2.48			2.37	
	Design Project	A	2.52	2.46	2.36				2.46				2.44				2.44
		B	2.48	2.32	2.42				2.34				2.48				2.36
VIII	Principles of Management	A	2.56			2.26	2.51							2.32	2.36	2.32	2.24
		B	2.42			2.28	2.58							2.28	2.24	2.48	2.46
	Prefabricated Structures	A	2.12	2.28		2.48								2.46		2.17	2.46
		B	2.04	2.18		2.31								2.38		2.37	2.24
	Repair and Rehabilitation of Structures	A	2.28			2.46						2.42		2.52	2.32		
		B	2.14			2.26						2.52		2.48	2.26		
	Project Work	A	2.56	2.62	2.42				2.46				2.48			2.48	
		B	2.42	2.44	2.34				2.24				2.58			2.32	
	ATTAINMENT LEVEL		2.31	2.30	2.25	2.25	2.27	2.34	2.30	2.26	2.34	2.29	2.25	2.25	2.27	2.25	2.29
	PERCENTAGE		77	77	75	75	76	78	77	75	78	76	75	75	76	75	76
	PERCENTAGE(80%)		62	61	60	60	61	62	61	60	62	61	60	60	60	60	61

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

PO ATTAINMENT 2013-2017 BATCH

PO'S No	Method Assessment	Direct Assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering	62	15	19		17	79
2	An ability to design and conduct experiments, as well as to analyze and interpret data	61	15	20		18	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability	60	14	18	14	15	75
4	An ability to function on multidisciplinary teams	60	15	20		18	78
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice	61	16	19	14	16	77
6	An ability to understand the role of Civil Engineers and ethical responsibility	62	15	19		17	79
7	An ability to deliver effective verbal, written, and graphical communications	61	15	18		17	78
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context	60	15	20		18	78
9	An ability to recognize the need for and an ability to engage in life-long learning	62	15	18		17	79
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem	61	16	18	14	16	77
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice	60	16	19	14	16	76
12	An ability to accept and create innovations in providing solution for sustainable built environment	60	15	18		17	77
PROGRAMME SPECIFIC OUTCOMES							
1	Ability to plan, Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	60	17	19	14	17	77
2	Ability to use conceptual knowledge in soil mechanics, hydrology and water resources and identify the environmental issues to propose suitable solutions	60	15	19	15	16	76
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	61	15	19	16	17	78

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

PO ATTAINMENT 2013-2017 BATCH

PO'S No	Method Assessment	TARGET	ACHIEVED
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	70	79
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	70	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	70	75
4	An ability to function on multidisciplinary teams.	70	78
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	70	77
6	An ability to understand the role of Civil Engineers and ethical responsibility.	70	79
7	An ability to deliver effective verbal, written, and graphical communications.	70	78
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	70	78
9	An ability to recognize the need for and an ability to engage in life-long learning.	70	79
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	70	77
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	70	76
12	An ability to accept and create innovations in providing solution for sustainable built environment.	70	77
	PROGRAMME SPECIFIC OUTCOMES		
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	70	77
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	70	76
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	70	78

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF CIVIL ENGINEERING
PO ATTAINMENT FOR COURSES (2014-18)

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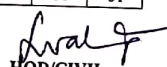
SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.39					2.48		1.8	1.85	2.14					
		B	2.44					2.42		2.1	2.22	2.2					
	Mathematics-I	A	2.24	2.28			2.26							2.34			
		B	2.22	2.24			2							2.32			
	Engineering Physics-I	A	2.38	2.18		2.22								2.22			
		B	2.32	2.22		2.28								2.2			
	Engineering Chemistry-I	A	2.4	2.18										1.98			
		B	2.36	2.28										1.98			
	Computer Programming	A	2.31	2.67	2.24	2.14	2.2							2.24			
		B	2.2	2.52	2.22	2.44	2.22							2.28			
	Engineering Graphics	A	2.37	2.37								2.18					
		B	2.16	2.4								2.26					
	Computer Practice Laboratory	A	2.56	2.54	2.36									2.36			
		B	2.42	2.56	2.32									2.38			
	Engineering Practices Laboratory	A	2.34	2.54	2.38	2.42								2.42			
		B	2.26	2.42	2.18	2.38								2.4			
	Physics & Chemistry Laboratory I	A	2.72	2.64													
		B	2.54	2.56													
II	Technical English II	A		2.18	1.98						2.66	2.57					
		B		1.83	1.98						2.22	2.38					
	Mathematics II	A	2.21	2.34	2.2				·						1.96	2.44	·
		B	2.18	2.1	1.94										1.76	2.32	
	Engineering Physics II	A	2.08	2.48									2.34				
		B	2.12	2.16									2.36				
	Engineering Chemistry II	A	2.31	2.34	2.18								2.14				
		B	2.42	3.27	2.34								2.16				
	Basic Electrical & Electronics Engineering	A	2.43	2.36			2.38			2.38							
		B	2.38	2.24			2.48			2.3							
	Engineering Mechanics	A	2.42	2.18	2.28	1.92						2.28	2.2		2.1	2.38	2.08
		B	2.34	2.18	2.18	1.98						2.18	2.18		2.12	2.24	2.13
	Computer Aided Drafting and Modeling Laboratory	A	2.57	2.38						2.58							
		B	2.56	2.52						2.49							
	Physics & Chemistry Laboratory II	A	2.58	2.44	2.36					2.36							
		B	2.52	2.36	2.32					2.3							

Sem	Subject		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14
III	Transforms And Partial Differential Equation	A	2.32	1.98								1.96			2.24	1.96
		B	2.28	2								1.92			2.18	1.76
	Engineering Geology	A	2.34	2.16	2.42	2.16						2.68	2.68		2.68	2.68
		B	2.48	2.14	2.4	1.98						2.59	2.59		2.59	2.59
	Mechanics of Solids	A	2.32	2.32	2.14	2.18	2.2					1.92			2.24	
		B	1.94	2.36	2.28	2.18	1.98					1.98			2.08	
	Mechanics of Fluids	A	2.22	2.22	2.08	2.28						2.12	2.28	2.35	2.32	
		B	2.1	2.48	2.01	2.32						2.16	2.32	2.24	2.24	
	Surveying I	A	2.42	2.42	2.42	2.16						2.14			2.24	
		B	2.48	2.48	2.48	2.22						1.94			2.22	
	Environmental Science and Engineering	A	2.42	2.36	2.18			2.36	2						2.36	2.36
		B	2.48	2.44	2.22			2.34	2.05						2.22	2.38
	Survey Practical I	A	2.42	2.36	2.32							2.12	2.4		2.42	2.42
		B	2.38	2.32	2.18							2.14	2.42		2.36	2.36
	Computer Aided Building Drawing	A	2.52	2.48	2.31							2.32			2.36	2.38
		B	2.52	2.48	2.31							2.34			2.36	2.36
IV	Numerical Methods	A	2.41	2.37	2.18							2.32	2.34		2.18	2.36
		B	2.45	2.29	2.24							2.14	2.28		2.04	2.24
	Construction Materials	A	2.49	2.42		2.16									2.02	2.16
		B	2.15	2.26		2.18									1.86	2.02
	Strength of Materials	A	2.28	2.26		2.22									2.41	2.41
		B	2.19	2.02		2.2									2.27	2.27
	Applied Hydraulic Engineering	A	2.12	2.17	2.16	2.26						2.26				2.18
		B	2.11	2.03	2.48	2.18						2.18				2.14
	Surveying II	A	1.8	2.16		2.26									2.1	1.98
		B	2.1	2.15		2.18									2.18	2.18
	Soil Mechanics	A	2.38	2.52	2.28	2.14						2.36				2.52
		B	2.34	2.48	2.42	2.4						2.26				2.48
	Strength of Materials Laboratory	A	2.56	2.42	2.28											2.38
		B	2.46	2.38	2.25											2.24
	Hydraulic Engineering Laboratory	A	2.52	2.48	2.52											2.53
		B	2.48	2.46	2.44											2.44
	Survey Practical II	A	2.28	2.36	2.22											2.42
		B	2.24	2.26	2.24											2.34

Sem	Subject																
V	Structural Analysis I	A	2.22	2.24		2.18	2.18							2.56	2.46	
		B	2.12	2.18		2.22	2.24							2.5	2.22	
	Foundation Engineering	A	2.1	2.1		2.28	2.2								2.44	
		B	2.08	2.03		2.24	2.28								2.34	
	Environmental Engineering I	A	2.14	2.1								2.24			2.26	
		B	2.09	2.01								2.18			2.2	
	Highway Engineering	A	2.28	2.58	2.22										2.16	
		B	2.24	2.5	2.26										2.14	
	Design of Reinforced Concrete Elements	A	2.34	2.34	2.42							2.18	2.36		2.08	2.28
		B	2.37	2.37	2.42							2.22	2.34		2.18	2.14
	Construction Techniques, Equipment and Practice	A		2.54	2.42		2.26							2.36		
		B		2.52	2.4		2.34							2.31		
	Communication and Soft Skills- Laboratory Based	A	2.56	2.56	2.36		2.18		2.28			2.18			2.16	2.36
		B	2.48	2.48	2.28		2.16		2.26			2.16			2.18	2.22
	Soil Mechanics Laboratory	A	2.54	2.48	2.34							2.56		2.28		
		B	2.54	2.48	2.38							2.56		2.24		
	Survey Camp	A		2.44	2.34		2.18							2.44		
		B		2.44	2.32		2.46							2.44		
VI	Design of Reinforced Concrete & Brick Masonry Structures	A	2.47	2.62		2.32							2.18		2.26	2.42
		B	2.38	2.39		2.38							2.22		2.22	2.28
	Structural Analysis II	A	2.34	1.93	2.44		2.28		2.22							2.52
		B	2.23	1.67	2.22		2.4		2.48							2.36
	Design of Steel Structures	A	2.34	2.3	2.18							2.18			2.36	2.48
		B	2.18	2.63	2.38							2.16			2.28	2.34
	Railways, Airports and Harbour Engineering	A	2.31	2.1	2.42							2.22	2.36		2.18	
		B	2.22	2.08	2.46							2.24	2.32		2.12	
	Environmental Engineering II	A	2.16	2.32								2.16	2.18		2.36	2.18
		B	2.18	2.12								2.08	2.22		2.28	2.06
	Professional Ethics	A	2.24	2.42								2.42			2.42	
		B	2.18	2.26								2.46			2.28	
	Environmental Engineering Laboratory	A	2.52	2.46	2.36		2.46					2.46	2.26	2.24	2.36	2.44
		B	2.48	2.32	2.28		2.24					2.24	2.28	2.26	2.28	2.36
	Concrete and Highway Engineering Laboratory	A	2.54				2.46						2.36	2.5	2.22	2.14
		B	2.36				2.41						2.32	2.52	2.2	2.28

Sem	Subject																
VII	Structural Dynamics and Earthquake Engineering	A	2.18								2.64	2.34				2.36	
		B	2.12								2.58	2.22				2.32	
	Prestressed Concrete Structures	A	2.03			2.52										2.32	
		B	2.17			2.48								2.32		2.28	2.21
	Water Resources and Irrigation Engineering	A	2.37	2.37										2.38		2.26	2.07
		B	2.03	2.27									2.22	2.14		1.92	
	Estimation and Quantity Surveying	A	2.12	2.32	2.44								2.42	2.34		1.98	
		B	2.28	2.1	2.49								2.46	2.37		2.42	2.38
	Traffic Engineering and Management	A	2.48	2.48			2.38		2.46				2.32	2.27		2.38	2.44
		B	2.52	2.37			2.44		2.34								
	Municipal Solid Waste Management	A	2.52	2.48		2.52	2.56						2.47	2.28	2.52		
		B	2.44	2.44									2.26	2.46	2.42		
	Computer Aided Design and Drafting Laboratory	A	2.52	2.46									2.46			2.28	
		B	2.48	2.32									2.26			2.34	
	Design Project	A	2.52	2.46	2.36				2.46				2.46				2.44
		B	2.48	2.32	2.42				2.42				2.24				2.36
VIII	Principles of Management	A	2.56			2.48	2.62							2.34	2.46	2.38	2.24
		B	2.42			2.48	2.58							2.44	2.38	2.48	2.46
	Prefabricated Structures	A	2.12	2.28		2.5							2.46			2.32	2.46
		B	2.04	2.18		2.52							2.46			2.37	2.25
	Repair and Rehabilitation of Structures	A	2.28			2.46						2.42		2.54	2.54		
		B	2.14			2.56						2.5		2.58	2.58		
	Project Work	A	2.56	2.62	2.58				2.48				2.54			2.48	
		B	2.42	2.44	2.62				2.54				2.52			2.42	
	ATTAINMENT LEVEL		2.33	2.33	2.29	2.28	2.31	2.45	2.35	2.26	2.36	2.31	2.26	2.33	2.30	2.29	2.29
	PERCENTAGE		78	78	76	76	77	82	78	75	79	77	75	78	77	76	76
	PERCENTAGE(80%)		62	62	61	61	62	65	63	60	63	61	60	62	61	61	61

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PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

ESTD. 2001

PO ATTAINMENT 2014-2018 BATCH

PO'S No	Method Assessment	Direct Assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey	Student Exit Survey	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	62	15	20		18	80
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	62	15	19		17	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	61	14	18	14	15	76
4	An ability to function on multidisciplinary teams.	61	15	20		18	79
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	62	16	19	14	16	78
6	An ability to understand the role of Civil Engineers and ethical responsibility.	65	14	18		16	81
7	An ability to deliver effective verbal, written, and graphical communications.	63	15	17		16	79
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	60	15	20		18	78
9	An ability to recognize the need for and an ability to engage in life-long learning.	63	15	18		17	80
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	61	16	18	14	16	77
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	60	16	19	14	16	76
12	An ability to accept and create innovations in providing solution for sustainable built environment.	62	15	17		16	78
PROGRAMME SPECIFIC OUTCOMES							
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	61		16	18	17	78
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	61		14	18	16	77
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	61	12	15	18	15	76

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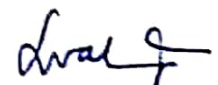
PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

PO ATTAINMENT 2014-2018 BATCH

ESTD. 2001

PO'S No	Method Assessment	TARGET	ACHIEVED
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	70	80
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	70	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	70	76
4	An ability to function on multidisciplinary teams.	70	79
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	70	78
6	An ability to understand the role of Civil Engineers and ethical responsibility.	70	81
7	An ability to deliver effective verbal, written, and graphical communications.	70	79
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	70	78
9	An ability to recognize the need for and an ability to engage in life-long learning.	70	80
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	70	77
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	70	76
12	An ability to accept and create innovations in providing solution for sustainable built environment.	70	78
PROGRAMME SPECIFIC OUTCOMES			
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	70	78
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	70	77
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	70	76

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PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF CIVIL ENGINEERING
PO ATTAINMENT FOR COURSES (2015-19)

ESTD. 2001

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.39					2.52		1.8	1.85	2.14					
		B	2.44					2.5		2.1	2.22	2.2					
	Mathematics-I	A	2.28	2.28			2.26							2.34			
		B	2.24	2.24			2.32							2.32			
	Engineering Physics-I	A	2.4	2.18		2.22								2.22			
		B	2.38	2.22		2.28								2.2			
	Engineering Chemistry-I	A	2.42	2.18										1.98			
		B	2.36	2.28										1.98			
	Computer Programming	A	2.31	2.67	2.24	2.14	2.38							2.24			
		B	2.28	2.52	2.22	2.44	2.42							2.28			
	Engineering Graphics	A	2.37	2.37								2.18					
		B	2.46	2.4								2.26					
	Computer Practice Laboratory	A	2.56	2.54	2.36									2.36			
		B	2.42	2.56	2.32									2.38			
	Engineering Practices Laboratory	A	2.34	2.54	2.38	2.42								2.42			
		B	2.26	2.42	2.18	2.38								2.4			
	Physics & Chemistry Laboratory I	A	2.72	2.64													
		B	2.68	2.56													
II	Technical English II	A		2.18	1.98						2.66	2.57					
		B		1.83	1.98						2.22	2.38					
	Mathematics II	A	2.21	2.34	2.2										1.96	2.44	
		B	2.28	2.1	1.94										1.76	2.32	
	Engineering Physics II	A	2.22	2.48									2.36				
		B	2.24	2.16									2.38				
	Engineering Chemistry II	A	2.31	2.34	2.18								2.18				
		B	2.42	3.27	2.34								2.16				
	Basic Electrical & Electronics Engineering	A	2.43	2.36			2.48			2.38							
		B	2.38	2.24			2.52			2.36							
	Engineering Mechanics	A	2.42	2.18	2.28	2.2							2.28	2.2	2.1	2.38	2.08
		B	2.34	2.18	2.18	2.26							2.24	2.18	2.12	2.24	2.13
	Computer Aided Drafting and Modeling Laboratory	A	2.57	2.38						2.58							
		B	2.56	2.52						2.49							
	Physics & Chemistry Laboratory II	A	2.58	2.44	2.36					2.36							
		B	2.52	2.36	2.38					2.3							

Sem	Subject	Grp	1	2	3	4	5	6	7	8	9	10	11	12
III	Transforms And Partial Differential Equation	A	2.38	1.98						1.96			2.24	1.96
		B	2.32	2						1.92			2.18	1.76
	Engineering Geology	A	2.34	2.16	2.42	2.16				2.68	2.68		2.68	2.68
		B	2.48	2.14	2.44	1.98				2.59	2.59		2.59	2.59
	Mechanics of Solids	A	2.32	2.32	2.14	2.18	2.2			1.92			2.24	
		B	2.2	2.36	2.28	2.18	1.98			1.98			2.08	
	Mechanics of Fluids	A	2.22	2.22	2.08	2.28				2.12	2.28	2.35	2.32	
		B	2.18	2.48	2.01	2.32				2.16	2.32	2.24	2.24	
	Surveying I	A	2.42	2.42	2.42	2.16				2.14			2.24	
		B	2.48	2.48	2.48	2.22				2.22			2.22	
	Environmental Science and Engineering	A	2.42	2.36	2.18			2.46	2				2.36	2.36
		B	2.48	2.44	2.22			2.42	2.05				2.22	2.38
	Survey Practical I	A	2.42	2.36	2.32					2.38	2.4	2.42	2.42	
		B	2.38	2.32	2.18					2.4	2.42	2.36	2.36	
	Computer Aided Building Drawing	A	2.52	2.48	2.31					2.32		2.36	2.38	
		B	2.54	2.48	2.31					2.34		2.36	2.36	
IV	Numerical Methods	A	2.41	2.37	2.18					2.32	2.34	2.18	2.36	
		B	2.44	2.29	2.24					2.36	2.28	2.04	2.24	
	Construction Materials	A	2.49	2.42		2.16						2.02	2.16	
		B	2.15	2.26		2.18						1.86	2.02	
	Strength of Materials	A	2.28	2.26		2.22						2.41	2.41	
		B	2.2	2.02		2.2						2.27	2.27	
	Applied Hydraulic Engineering	A	2.12	2.17	2.36	2.26				2.26			2.18	
		B	2.18	2.03	2.48	2.18				2.24			2.14	
	Surveying II	A	2.22	2.16		2.26						2.1	2.32	
		B	2.18	2.15		2.18						2.18	2.18	
	Soil Mechanics	A	2.38	2.52	2.38	2.14				2.36			2.52	
		B	2.34	2.48	2.42	2.18				2.26			2.48	
	Strength of Materials Laboratory	A	2.56	2.42	2.28								2.38	
		B	2.46	2.38	2.25								2.24	
	Hydraulic Engineering Laboratory	A	2.52	2.48	2.52								2.53	
		B	2.48	2.46	2.44								2.44	
	Survey Practical II	A	2.28	2.36	2.32								2.42	
		B	2.24	2.26	2.34								2.34	

Sem	Course	Sec															
V	Structural Analysis I	A	2.22	2.24		2.18	2.18									2.56	2.46
		B	2.12	2.18		2.22	2.24									2.5	2.22
	Foundation Engineering	A	2.18	2.1		2.28	2.2										2.44
		B	2.16	2.03		2.24	2.28										2.34
	Environmental Engineering I	A	2.14	2.1									2.24				2.26
		B	2.09	2.01									2.18				2.22
	Highway Engineering	A	2.28	2.58	2.22												2.16
		B	2.24	2.5	2.26												2.14
	Design of Reinforced Concrete Elements	A	2.34	2.34	2.42								2.26	2.36		2.22	2.28
		B	2.37	2.37	2.42								2.22	2.34		2.28	2.14
	Construction Techniques, Equipment and Practice	A		2.54	2.42		2.26								2.36		
		B		2.52	2.42		2.34								2.31		
	Communication and Soft Skills- Laboratory Based	A	2.56	2.56	2.36		2.18		2.38				2.18			2.46	2.36
		B	2.48	2.48	2.32		2.16		2.36				2.22			2.48	2.22
	Soil Mechanics Laboratory	A	2.5	2.48	2.34								2.56		2.28		
		B	2.54	2.48	2.38								2.56		2.24		
	Survey Camp	A		2.44	2.34		2.18								2.44		
		B		2.44	2.32		2.46								2.44		
VI	Design of Reinforced Concrete & Brick Masonry Structures	A	2.47	2.62		2.32								2.18		2.26	2.42
		B	2.42	2.39		2.38								2.22		2.22	2.28
	Structural Analysis II	A	2.34	1.93	2.44		2.28		2.42								2.52
		B	2.23	1.67	2.22		2.4		2.48								2.36
	Design of Steel Structures	A	2.34	2.3	2.18								2.18			2.36	2.48
		B	2.18	2.63	2.38								2.16			2.28	2.34
	Railways, Airports and Harbour Engineering	A	2.31	2.1	2.42								2.22	2.36		2.18	
		B	2.22	2.08	2.46								2.24	2.32		2.12	
	Environmental Engineering II	A	2.16	2.32									2.16	2.18		2.36	2.48
		B	2.18	2.12									2.22	2.22		2.28	2.52
	Professional Ethics	A	2.24	2.42									2.42			2.42	
		B	2.18	2.26									2.46			2.28	
	Environmental Engineering Laboratory	A	2.52	2.46	2.36		2.46						2.46	2.26	2.24	2.36	2.44
		B	2.48	2.42	2.28		2.24						2.38	2.28	2.26	2.28	2.36
	Concrete and Highway Engineering Laboratory	A	2.54				2.46							2.36	2.5	2.22	2.32
		B	2.36				2.41							2.32	2.52	2.2	2.28

Sem	Subject	Sec															
VII	Structural Dynamics and Earthquake Engineering	A	2.18								2.64	2.34				2.36	
		B	2.12								2.58	2.22				2.42	
	Prestressed Concrete Structures	A	2.22			2.52									2.32	2.28	2.21
		B	2.24			2.48									2.38	2.26	2.28
	Water Resources and Irrigation Engineering	A	2.37	2.37									2.38	2.14		1.92	
		B	2.03	2.27									2.42	2.34		1.98	
	Estimation and Quantity Surveying	A	2.12	2.32	2.44								2.46	2.37		2.42	2.38
		B	2.28	2.1	2.49								2.32	2.27		2.38	2.44
	Traffic Engineering and Management	A	2.48	2.48			2.38			2.46							
		B	2.52	2.37			2.44			2.34							
	Municipal Solid Waste Management	A	2.52	2.48		2.52	2.56						2.47	2.28	2.52		
		B	2.44	2.44									2.42	2.46	2.42		
	Computer Aided Design and Drafting Laboratory	A	2.52	2.46									2.46			2.48	
		B	2.48	2.32									2.26			2.52	
	Design Project	A	2.52	2.46	2.36				2.52				2.46				2.44
		B	2.48	2.32	2.42				2.58				2.44				2.38
VIII	Principles of Management	A	2.56			2.48	2.62							2.34	2.46	2.38	2.24
		B	2.42			2.48	2.58							2.44	2.38	2.48	2.46
	Prefabricated Structures	A	2.12	2.28		2.5								2.46		2.48	2.46
		B	2.04	2.18		2.52								2.24		2.42	2.52
	Repair and Rehabilitation of Structures	A	2.48			2.46						2.42		2.54	2.54		
		B	2.44			2.56						2.5		2.58	2.58		
	Project Work	A	2.56	2.62	2.58				2.48				2.54			2.48	
		B	2.42	2.44	2.62				2.54				2.52			2.42	
ATTAINMENT LEVEL			2.35	2.33	2.31	2.29	2.34	2.51	2.45	2.27	2.36	2.31	2.30	2.33	2.30	2.32	2.34
PERCENTAGE			78	78	77	76	78	84	82	76	79	77	77	78	77	77	78
PERCENTAGE(80%)			63	62	61	61	62	67	65	60	63	62	61	62	61	62	62

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

ESTD. 2001

PO ATTAINMENT 2015-2019 BATCH

PO'S No	Method Assessment	Direct Assessment (80%)	Indirect Assessment (20%)				% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	63	18	19		19	82
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	62	15	19		17	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	61	15	18	14	16	77
4	An ability to function on multidisciplinary teams.	61	17	20		19	80
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice	62	17	19	15	17	79
6	An ability to understand the role of Civil Engineers and ethical responsibility.	67	14	16		15	82
7	An ability to deliver effective verbal, written, and graphical communications.	65	14	16		15	80
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	60	17	20		19	79
9	An ability to recognize the need for and an ability to engage in life-long learning.	63	15	18		17	80
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	62	16	18	14	16	78
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	61	16	19	14	16	77
12	An ability to accept and create innovations in providing solution for sustainable built environment.	62	15	19		17	79
PROGRAMME SPECIFIC OUTCOMES							
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerial skills for the creation of infrastructures	61	16	19	18	18	79
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	62	16	19	18	18	80
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	62	12	18	18	16	78

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF CIVIL ENGINEERING

ESTD. 2001

PO ATTAINMENT 2015-2019 BATCH

PO'S No	Method Assessment	TARGET	ACHIEVED
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	70	82
2	An ability to design and conduct experiments, as well as to analyze and interpret data,	70	79
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	70	77
4	An ability to function on multidisciplinary teams.	70	80
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	70	79
6	An ability to understand the role of Civil Engineers and ethical responsibility.	70	82
7	An ability to deliver effective verbal, written, and graphical communications.	70	80
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	70	79
9	An ability to recognize the need for and an ability to engage in life-long learning.	70	80
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	70	78
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	70	77
12	An ability to accept and create innovations in providing solution for sustainable built environment.	70	79
PROGRAMME SPECIFIC OUTCOMES			
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	70	79
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	70	80
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	70	78

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF CIVIL ENGINEERING
PO ATTAINMENT FOR COURSES (2016-20)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.41					2.39		1.82	1.88	2.18					
	Mathematics-I	A	2.25	2.28			2.42							2.34			
	Engineering Physics-I	A	2.39	2.18		2.28								1.93			
	Engineering Chemistry-I	A	2.42	2.13										2.2			
	Computer Programming	A	2.34	2.67	1.18	2.24	1.86							2.24			
	Engineering Graphics	A	2.37	2.38								2.18					
	Computer Practice Laboratory	A	2.56	2.5	2.38									2.36			
	Engineering Practices Laboratory	A	2.36	2.4	2.39	2.41								2.28			
	Physics & Chemistry Laboratory I	A	2.72	2.64													
II	Technical English II	A		2.19	1.98						2.68	2.59					
	Mathematics II	A	2.21	2.34	1.94										2.2	2.45	
	Engineering Physics II	A	2.08	2.48									2.36				
	Engineering Chemistry II	A	2.31	2.34	2.18								2.52				
	Basic Electrical & Electronics Engineering	A	2.43	2.36			2.38			2.38							
	Engineering Mechanics	A	2.42	2.13	2.13	2.2						2.28	2.48		2.12	2.2	2.1
	Computer Aided Drafting and Modeling Laboratory	A	2.57	2.38						2.58							
	Physics & Chemistry Laboratory II	A	2.58	2.47	2.38					2.36							

Sem	Subject																		
III	Transforms And Partial Differential Equation	A	2.32	1.98											2.4			2.04	1.96
	Engineering Geology	A	2.3	2.15	2.12	2.2									2.68	2.69		2.68	2.66
	Mechanics of Solids	A	2.03	2.03	2.14	2.18	2.28								1.74			2.14	
	Mechanics of Fluids	A	2.22	2.22	2.18	2.28									2.12	2.18	2.35	2.32	
	Surveying I	A	2.42	2.44	2.42	2.14									2.04			2.25	
	Environmental Science and Engineering	A	2.42	2.36	2.18				2.36	2.18							2.36	2.36	
	Survey Practical I	A	2.42	2.36	2.32										2.12	2.22	2.42	2.42	
	Computer Aided Building Drawing	A	2.52	2.48	2.31										2.24		2.36	2.38	
IV	Numerical Methods	A	2.41	2.37	2.18										2.2	2.28	2.18	2.35	
	Construction Materials	A	2.49	2.42		2.16											2.02	2.16	
	Strength of Materials	A	2.28	2.26		2.28											2.41	2.42	
	Applied Hydraulic Engineering	A	2.12	2.17	2.32	2.26									2.26			2.18	
	Surveying II	A	1.8	2.16		1.98											1.98	1.98	
	Soil Mechanics	A	2.38	2.52	2.24	2.4									2.36			2.52	
	Strength of Materials Laboratory	A	2.56	2.42	2.28													2.38	
	Hydraulic Engineering Laboratory	A	2.52	2.48	2.52													2.53	
	Survey Practical II	A	2.28	2.36	2.22													2.42	

Sem	Subject	Type															
V	Structural Analysis I	A	2.22	2.24		2.18	2.2									2.56	2.46	
	Foundation Engineering	A	2.1	2.1		2.24	2.02										2.45	
	Environmental Engineering 1	A	2.13	2.1										2.14			2.08	
	Highway Engineering	A	2.28	2.58	2.38												2.16	
	Design of Reinforced Concrete Elements	A	2.36	2.34	2.42									2.18	2.26		2.08	2.28
	Construction Techniques, Equipment and Practice	A		2.54	2.4		2.4									2.36		
	Communication and Soft Skills- Laboratory Based	A	2.56	2.56	2.36		2.34		2.18					2.18			2.16	2.36
	Soil Mechanics Laboratory	A	2.54	2.49	2.34									2.57		2.28		
	Survey Camp	A		2.44	2.38		2.42									2.46		
VI	Design of Reinforced Concrete & Brick Masonry Structures	A	2.47	2.62		2.32									2.24		2.26	2.42
	Structural Analysis II	A	2.34	1.93	2.18		2.38		2.18									2.52
	Design of Steel Structures	A	2.3	2.32	2.38									2.18			2.36	2.43
	Railways, Airports and Harbour Engineering	A	2.31	2.1	2.4									2.32	2.36		2.18	
	Environmental Engineering II	A	2.16	2.32										2.16	2.22		2.36	2.18
	Professional Ethics	A	2.24	2.42										2.18			2.42	
	Environmental Engineering Laboratory	A	2.52	2.46	2.46		2.46							2.46	2.16	2.24	2.36	2.44
	Concrete and Highway Engineering Laboratory	A	2.54				2.5								2.36	2.17	2.14	2.14

	Subject		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
VII	Structural Dynamics and Earthquake Engineering	A	2.18								2.64	2.2				2.36	
	Prestressed Concrete Structures	A	2.03			2.52								2.28		2.28	2.21
	Water Resources and Irrigation Engineering	A	2.37	2.37									2.18	2.24		1.72	
	Estimation and Quantity Surveying	A	2.12	2.32	2.52								2.46	2.37		2.42	2.38
	Traffic Engineering and Management	A	2.48	2.48			2.36			2.46							
	Municipal Solid Waste Management	A	2.32	2.48		2.48	2.56						2.47	2.24	2.36		
	Computer Aided Design and Drafting Laboratory	A	2.52	2.46									2.46			2.17	
	Design Project	A	2.52	2.46	2.52				2.46				2.46				2.44
VIII	Principles of Management	A	2.56			2.46	2.51							2.28	2.36	2.32	2.24
	Prefabricated Structures	A	2.12	2.28		2.56								2.46		2.18	2.46
	Repair and Rehabilitation of Structures	A	2.28			2.46						2.42		2.38	2.34		
	Project Work	A	2.56	2.62	2.58				2.46				2.46			2.48	
	ATTAINMENT LEVEL	·	2.35	2.35	2.26	2.30	2.34	2.39	2.30	2.30	2.40	2.31	2.30	2.29	2.29	2.29	2.33
	PERCENTAGE		78	78	75	77	78	80	77	77	80	77	77	76	76	76	78
	PERCENTAGE(80%)		63	63	60	61	62	64	61	61	64	62	61	61	61	61	62

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF MECHANICAL ENGINEERING

ESTD. 2001

PO ATTAINMENT 2016-2020 BATCH

PO'S No	Method Assessment	Direct Assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey	Student Exit Survey	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	63.00	17	20		19	82
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	63.00	15	19		17	80
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	60.00	16	20	14	17	77
4	An ability to function on multidisciplinary teams.	61.00	17	20		19	80
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	62.00	17	20	16	18	80
6	An ability to understand the role of Civil Engineers and ethical responsibility.	64.00	16	20		18	82
7	An ability to deliver effective verbal, written, and graphical communications.	61.00	17	20		19	80
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	61.00	17	20		19	80
9	An ability to recognize the need for and an ability to engage in life-long learning.	64.00	16	18		17	81
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	62.00	16	19	15	17	79
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	61.00	16	19	15	17	78
12	An ability to accept and create innovations in providing solution for sustainable built environment.	61.00	17	20		19	80
PROGRAMME SPECIFIC OUTCOMES							
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerial skills for the creation of infrastructures	61.00	18	20	15	18	79
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	61.00	18	20	18	19	80
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	62.00	15	19	16	17	79

HOD/CIVIL

PO ATTAINMENT 2016-2020 BATCH

PO'S No	Method Assessment	TARGET	ACHIEVED
1	An ability to apply the fundamental knowledge of mathematics, science, and engineering.	70	82
2	An ability to design and conduct experiments, as well as to analyze and interpret data.	70	80
3	An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.	70	77
4	An ability to function on multidisciplinary teams.	70	80
5	An Ability to identify, formulates, and solves Civil Engineering problems in accordance with Indian standard codes of practice.	70	80
6	An ability to understand the role of Civil Engineers and ethical responsibility.	70	82
7	An ability to deliver effective verbal, written, and graphical communications.	70	80
8	An ability to work on the basis of broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.	70	80
9	An ability to recognize the need for and an ability to engage in life-long learning.	70	81
10	An ability to incorporate specific contemporary issues into the identification, formulation, and solution of a specific civil engineering problem.	70	79
11	An ability to use the techniques, skills, and modern civil engineering tools necessary for engineering practice.	70	78
12	An ability to accept and create innovations in providing solution for sustainable built environment.	70	80
PROGRAMME SPECIFIC OUTCOMES			
1	Ability to plan ,Analyze and Estimate all the civil engineering structures with professional ethics and managerical skills for the creation of infrastructures	70	79
2	Ability to use conceptual knowledge in soil mechanics,hydrology and water resources and identify the environmental issues to propose suitable solutions.	70	80
3	Proficiency to use modern surveying tools like total station and GPS, Hands on training on material testing and water quality testing methods	70	79

HOD/CIVIL

PRATHYUSHA ENGINEERING COLLEGE

DPEARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PO ATTAINMENT FOR COURSES (2013- 17)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14
I	MATHEMATICS I	A	2	1.33		1.65	2.5							0.67		
		B	2.1	1.4		1.46	2.4							1.5		
	ENGINEERING PHYSICS I	A	2.38	2.38	1.59											
		B	2.58	2.58	1.72											
	ENGG CHEMISTRY I	A	2.46	2.46	1.64											
		B	2.58	2.58	1.72											
	ENGG GRAPHICS	A	2	2		2								1		
		B	1.78	1.82		1.82								1.76		
	FUNDAMENTALS OF COMPUTING AND PROGRAMMING	A	1.79	2.68	2.68	2.23										
		B	1.76	2.64	2.64	2.2										
	ENGINEERING ENGLISH I	A		1.76	2.1		1.8									
		B		1.82	2.3		1.7									
		A	2.42	2.36	2.28	2.46										

	Subject	Sec													
	COMPUTER PRACTICES LABORATORY	B	2.36	2.37	2.28	2.1									
	ENGINEERING PRACTICES LABORATORY	A	2.14	2.18		2.22									
		B	2.06	2.02		2.11									
	PHYSICS AND CHEMISTRY LABORATORY - I	A	2.6	2.6	2.31										
		B	2.62	2.62	2.33										
II	PHYSICS II	A	2.64	2.64	1.76								2.64		
		B	2.64	2.64	1.76								2.64		
	MATHEMATICS II	A	2.4	2.4	1.6								2.4		
		B	2.14	2.14	1.43								2.14		
	ENGG CHEMISTRY II	A	1.34	1.34				1.34	1.34				1.75		
		B	1.27	1.27				1.27	1.27				1.68		
	PROGRAMMING AND DATASTRUCTURES I	A	2.26	2.34	2.14	2.36	2.16						1.52		
		B	2.12	2.1	2.08	2.04	2.04						1.56		
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.4	2.4	1.6								2.4		
		B	2.17	2.17	1.44								2.17		
	ENGINEERING ENG II	A	2.3	1.51.		1.68	1.72						1.67		
		B	2.2	1.44		1.46	1.4						1.5		

	PHYSICS AND CHEMISTRY LABORATORY - II	A	2.35	2.35	2.57											
		B	2.5	2.5	2.37											
	DIGITAL LABORATORY	A	2.42	2.36	2.28											
		B	2.36	2.37	2.28											
	PROGRAMMING AND DATA STRUCTURES LABORATORY I	A	2.6	2.6	2.31	2.26										
		B	2.62	2.62	2.33	2.14										
III	ANALOG AND DIGITAL COMMUNICATION	A	2.35	2.35	1.57								2.35		
		B	2.5	2.5	1.67								2.5		
	COMPUTER ORGANIZATION AND ARCHITECTURE	A	2.64	2.2	2.35	1.76								2.64	
		B	2.56	2.13	1.99	1.71								2.56	
	PROGRAMMING AND DATASTRUCTURES II	A	1.52	2.13	1.67	1.98	1.52							1.88	
		B	1.43	1.63	1.52	1.77	1.76							1.82	
	DATABASE MANAGEMENT SYSTEMS	A	1.79	2.68	2.68	2.23					2.04				
		B	1.76	2.64	2.64	2.2					1.96				
	ENVIRONMENTAL SCIENCE AND ENGINEERING	A				2.32			1.16	1.8					
		B				2.68			1.34	1.52					

	Subject		1	2	3	4	5	6	7	8	9	10	11	12	13	14
	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	A	2.34	2.34	1.56									2.34		
		B	2.06	2.06	1.37									2.06		
	PROGRAMMING AND DATA STRUCTURE LABORATORY II	A	2.24	2.24	2.29	2.38										
		B	2.36	2.36	2.37	2.36										
	DATABASE MANAGEMENT SYSTEMS LABORATORY	A	2.6	2.6	2.31	2.21										
		B	2.62	2.34	2.33	2.16										
IV	COMPUTER NETWORKS	A	2.6	2.6	2.31	1.73										
		B	2.62	2.62	2.33	1.75										
	DESIGN AND ANALYSIS OF ALGORITHMS	A	1.84	2.58	2.21	2.58									1.84	
		B	1.43	1.68	1.8	1.69									1.68	
	MICROPORCESSOR AND MICROCONTROLLER	A	2.35	2.35	1.57									2.35		
		B	2.5	2.5	1.67									2.5		
	OPERATING SYSTEMS	A	1.35	1.35		2.02	1.35							1.35		
		B	1.68	1.68	1.12									1.68		
	PROBABILITY AND QUEING THEORY	A	2.24	2.24	1.49	1.49										
		B	2.36	2.36	1.57	2.36										

Sem	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	SOFTWARE ENGINEERING	A	1.79	2.68	2.68	2.23							1.89				
		B	1.76	2.64	2.64	2.2							1.86				
	NETWORKS LABORATORY	A	2.41	2.37	2.18	2.31	2.18										
		B	2.45	2.29	2.04	2.33	2.04										
	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	A	2.28	2.26	2.08	2.12											
		B	2.19	2.02	1.98	2.04											
	OPERATING SYSTEMS LABORATORY	A	2.12	2.17	2.16	2.22	2.26										
		B	2.08	2.03	2.04	2.08	2.08										
V	COMPUTER GRAPHICS	A	2.76	2.76	1.84										2.76		
		B	2.52	2.52	1.68										2.52		
	DISCRETE MATHEMATICS	A	2.56	1.99	2.13												
		B	2.48	1.82	1.9												
	THOERY OF COMPUTATION	A	2.01	2.06	2.24		2.01							2.15			
		B	2.05	1.97	2.4		2.45							2.08			
	INTERNET PROGRAMMING	A	2.56	1.99	2.13									2.19	1.68		
		B	2.48	1.82	1.9									2.17	2.13		
		A		1.76	2.1		2.28										

	OBEJCT ORIENTED DESIGN AND ANALYSIS	B		1.82	2.3		2.42								
	CASE TOOLS LABORATORY	A		2.34	2.18	2.1		2.26							
		B		2.37	2.04	2.3		2.34							
	INTERNET PROGRAMMING LABORATORY	A	2.28	2.57	2.12	2.13							2.28	2.16	
		B	2.12	2.5	2	1.9							2.16	2.08	
	COMPUTER GRAPHICS LABORATORY	A	2.21	2.24	2.18	1.84	2							2.56	
		B	2.12	2.18	2.08	1.68								2.44	
VI	ARTIFICIAL INTELLIGENCE	A	2.6	2.6	2.31	1.73			2.38					2.31	2.12
		B	2.62	2.34	2.33	1.75			2.32					2.33	1.96
	COMPLIER DESIGN	A	2.3	1.84	2.02			2.53				2.18		2.76	2.14
		B	2.05	1.64	1.97			2.37				2.09		2.46	2.03
	DISTRIBUTED SYSTEMS	A	1.55		2.32								2.32	2.32	
		B	1.79		2.38								2.68	2.68	
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.28	2.28	1.52								2.28		
		B	2.05	1.97	2.4										
		A	1.68	1.68	1.12										

Sem	Subject	Grp	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17
	MOBILE COMPUTING	B	2.24	2.24	1.49														
	TOTAL QUALITY MANAGEMENT	A	2.36	2.36	1.57												2.36		
		B	2.23	2.23	1.49												2.23		
	MOBILE APPLICATION DEVELOPMENT LABORATORY	A	2.16	2.32	2.16	2.12											2.28		
		B	2.13	2.12	2.08	2													
	COMPILER LABORATORY	A	2.34	2.32	2.18	2.02													
		B	2.23	2.13	2.01	1.97													
	COMMUNICATION AND SOFT SKILLS - BASED LABORATORY	A	2.36	2.36	1.57												2.36		
		B	2.23	2.23	1.49												2.23		
VII	CRYPTOGRAPHY AND NETWORK SECURITY	A		2.01		2.28	1.82												
		B		1.74		2.17	1.64												
	GRID AND CLOUD COMPUTING	A	1.51		1.76	2.36	1.72		2.27									1.51	2.27
		B	1.38		1.69	2.19	1.38		2.18									1.38	2.07
	GRAPH THEORY AND APPLICATIONS	A	1.42	1.53	1.53	2.45	2.1												1.53
		B	2.67	1.7	1.6	2.14	2.02												1.8
	RESOURSE MANAGEMENT TECHNIQUES	A	2.38	2.38															
		B	2.58	2.58															

Sem	Subject	A/B	1	2	3	4	5	6	7	8	9	10	11	12	13	14
VIII	INFORMATION RETRIVAL TECHNIQUES	A		2.41		2.31										
		B		2.3		2.31										
	SERVICE ORIENTED ARCHTIECTURE	A					2.16		2.5						2.5	
		B					2.02		2.27						1.97	
	SECURITY LABORATORY	A		2.18			2.21	2.28								
		B		2.14			2.1	2.17								
	GRID AND CLOUD COMPUTING LABORATORY	A	2.03		2.12	1.76	2.28	1.94		2.28					2.24	2.21
		B	2.17		2	1.69	2.08	1.86		2.21					2.14	2.07
	MULTICORE ARCHITECTURE	A			1.64	2.52		2.46								
		B			1.72	2.43		2.28								
	HUMAN COMPUTER INTERACTION	A	1.93	2.42	1.93									2.03		
		B	2.1	1.74	1.86			2.23	2.2					1.96		
	PROFESSION ETHICS FOR ENGINEERING	A						2.26	2.4	2.6						
		B						2.37	2.8	2.8						
	PROJECT WORK	A	2.47	2.62	2.18	2.31	2.24			2.38					2.27	2.26
		B	2.38	2.38	2.02	2.33	2.08			2.1					2.31	2.12
	ATTAINMENT LEVEL		**2.20**	**2.21**	**1.92**	**2.09**	**2.00**	**2.13**	**2.03**	**2.20**	**2.00**	**1.96**	**2.14**	**2.32**	**2.20**	**2.05**

PERCENTAGE	73	74	64	70	67	71	68	73	67	65	71	77	73	68
PERCENTAGE(80%)	58.65	58.86	51.20	55.61	53.27	56.82	54.22	58.71	53.33	52.27	57.16	61.87	58.71	54.62

V. R. Kethe

HOD

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

PO ATTAINMENT   2013-2017 BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	58.65	16	20		18	**77**
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	58.86	15	20		17	**76**

3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	51.20	16	20	18	18	**69**
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	55.61	14	20		17	**73**
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	53.27	16	20	17	18	**71**
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	56.82	14	20		17	**74**

7	Knowledge of contemporary issues.	54.22	17	20		18	**73**
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	58.71	14	20		17	**76**
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	53.33	17	20		18	**72**
10	An ability to communicate effectively with a range of audiences.	52.27	18	19	17	18	**70**

11	Recognition of the need for and an ability to engage in continuing professional development.	57.16	18	20		19	**76**
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	61.87	14	20		17	**79**
13	An ability to analyze the efficiency and the performance of the software with respect to meet the requirements and specifications of the expected outcome.	58.71	16	20		18	**77**
14	An ability to use simulation tools to get experimental results for the Real-Time system.	54.62	16	20		18	**73**

V. R. Ke^{the}

HOD

PRATHYUSHA ENGINEERING COLLEGE

DPEARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PO ATTAINMENT FOR COURSES (2014- 18)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	MATHEMATICS I	A	2.38	2.66			2.04	2.52							1.68			
		B	2.32	2.8			1.96	2.41							1.44			
	ENGINEERING PHYSICS I	A	2.21	2.28	1.98	1.59												
		B	2.18	2.12	1.84	1.72												
	ENGG CHEMISTRY I	A	2.38	2.16	1.96	1.64												
		B	2.31	2.02	1.78	1.72												
	ENGG GRAPHICS	A	2.4	2.1			1.94								1.98			
		B	2.36	2			1.86								1.78			
	FUNDAMENTALS OF COMPUTING AND PROGRAMMING	A	2.31	2.62	1.18	2.68	2.14											2.24
		B	2.2	2.48	2.08	2.64	2.02											2.16
	ENGINEERING ENGLISH I	A		2.37	2.12	2.1		1.96					2.16					
		B		2.16	2	2.3		1.82					2.08					

	COMPUTER PRACTICES LABORATORY	A	2.56	2.48	2.36	2.58												2.36
		B	2.42	2.36	2.3	2.42												2.28
	ENGINEERING PRACTICES LABORATORY	A	2.34	2.38		2.46												
		B	2.26	2.18		2.28												
	PHYSICS AND CHEMISTRY LABORATORY - I	A	2.71	2.62	2.42													
		B	2.54	2.56	2.36													
II	PHYSICS II	A	2.1	2.17	1.02	1.76								2.56				
		B	2.02	1.83	1.98	1.76								2.38				
	MATHEMATICS II	A	2.21	2.34	1.92	1.6								2.42				
		B	2.1	2.1	1.74	1.43								2.23				
	ENGG CHEMISTRY II	A	2.08	2.48					1.96	1.98					2.32				
		B	2.12	2.16					1.88	1.76					2.04				
	PROGRAMMING AND DATASTRUCTURES I	A	2.31	2.32	2.18	1.67	2.16	1.98							2.12				2.36
		B	2.42	3.27	2.04	1.56	2.04	1.96							2				2.22
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.43	2.36	2.08	1.6									2.38				
		B	2.38	2.18	2	1.44									2.2				

	ENGINEERING ENG II	A	2.4	2.1				1.86					2.18		2.08		
		B	2.34	2.02				1.78					2.1		2.11		
	PHYSICS AND CHEMISTRY LABORATORY - II	A	2.56	2.38	2.58												
		B	2.56	2.52	2.48												
	DIGITAL LABORATORY	A	2.56	2.42	2.36												
		B	2.52	2.36	2.3												2.38
	PROGRAMMING AND DATA STRUCTURES LABORATORY I	A	2.61	2.62	2.48	2.38											2.24
		B	2.58	2.52	2.48	2.36											
III	ANALOG AND DIGITAL COMMUNICATION	A	2.32	1.98	1.96	1.57									2.04		
		B	2.16	1.6	1.72	1.67									2		
	COMPUTER ORGANIZATION AND ARCHITECTURE	A	2.3	2.15	2.12	2.35	2.16									2.68	
		B	2.48	2.04	2.02	1.99	1.98									2.59	
	PROGRAMMING AND DATASTRUCTURES II	A	2.03	2.03	2.14	1.67	2.18	1.72								2.14	2.44
		B	1.64	2.3	2.02	1.52	2.08	1.68								2.08	2.32
		A	2.22	2.22	2.08	2.68	2.28					2.1					2.32

Year	Subject	Sec																	
	DATABASE MANAGEMENT SYSTEMS	B	2.1	2.48	2.01	2.64	2.17					2.04								2.24
	ENVIRONMENTAL SCIENCE AND ENGINEERING	A					2.14			2.04	2.24									
		B					2.02			1.92	2.12									
	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	A	2.42	2.36	2.18	1.56										2.36				
		B	2.48	2.14	2.02	1.37										2.22				
	PROGRAMMING AND DATA STRUCTURE LABORATORY II	A	2.42	2.36	2.32	2.44														2.42
		B	2.38	2.32	2.18	2.38														2.36
	DATABASE MANAGEMENT SYSTEMS LABORATORY	A	2.52	2.48	2.31	2.46														2.38
		B	2.48	2.36	2.23	2.22														2.2
IV	COMPUTER NETWORKS	A	2.41	2.37	2.18	2.31	2.18													2.36
		B	2.45	2.29	2.04	2.33	2.04													2.24
	DESIGN AND ANALYSIS OF ALGORITHMS	A	2.49	2.42	2.16	2.21	2.16											2.02		
		B	2.12	2.15	2.02	1.8	2.02											1.86		
	MICROPORCESSOR AND MICROCONTROLLER	A	2.28	2.26	2.08	1.57										2.41				
		B	2.19	2.02	1.98	1.67										2.27				

Sem	Subject	Sec																				
	OPERATING SYSTEMS	A	2.12	2.17	2.16	2.12	2.26								2.18							
		B	2.08	2.03	2.04	2.1	2.08								2.14							
	PROBABILITY AND QUEING THEORY	A	1.8	2.16	1.98	1.49																
		B	2.1	2.15	1.92	1.57	2.18															
	SOFTWARE ENGINEERING	A	2.38	2.52	2.18	2.68	2.04						2.36									2.52
		B	2.32	2.48	2.02	2.64	2.07						2.24									2.48
	NETWORKS LABORATORY	A	2.56	2.42	2.28	2.46	2.36															
		B	2.46	2.38	2.24	2.3	2.24															
	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	A	2.52	2.48	2.5	2.48																
		B	2.48	2.46	2.44	2.42																
	OPERATING SYSTEMS LABORATORY	A	2.28	2.36	2.22	2.36	2.42															
		B	2.24	2.26	2.18	2.24	2.34															
V	COMPUTER GRAPHICS	A	2.21	2.24	2.18	1.84	2								2.56							
		B	2.12	2.18	2.08	1.68									2.44							
	DISCRETE MATHEMATICS	A	2.1	2.1	2.02	2.13																

		B	2.08	2.03	1.98	1.9															
	THOERY OF COMPUTATION	A	2.13	2.1	2.08	2.24		2.14							2.14						
		B	2.09	2.01	2.01	2.4		1.96							2.1						
	INTERNET PROGRAMMING	A	2.28	2.57	2.12	2.13									2.18	2.16					2.2
		B	2.12	2.5	2	1.9									2.16	2.08					2.08
	OBEJCT ORIENTED DESIGN AND ANALYSIS	A		2.34	2.18	2.1		2.26													2.28
		B		2.37	2.04	2.3		2.34													2.14
	CASE TOOLS LABORATORY	A		2.54	2,42	2.36		2.26													2.36
		B		2.52	2.4	2.34		2.34													2.3
	INTERNET PROGRAMMING LABORATORY	A	2.56	2.56	2.36	2.24									2.18	2.16					2.36
		B	2.48	2.48	2.28	2.2									2.06	2.08					2.22
	COMPUTER GRAPHICS LABORATORY	A	2.54	2.48	2.34	2.32	2									2.56					
		B	2.44	2.44	2.32	2.28										2.44					
VI	ARTIFICIAL INTELLIGENCE	A	2.47	2.62	2.18	2.31	2.24			2.38									2.27	2.26	2.42
		B	2.38	2.38	2.02	2.33	2.08			2.1									2.31	2.12	2.26
	COMPLIER DESIGN	A	2.34	1.93	2.18	2.02			2.28										2.52	2.2	

			PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
		B	2.23	1.67	2.01	1.97			2.1					2.36	2.12		
	DISTRIBUTED SYSTEMS	A	2.3	2.3	2.08	2.32								2.36	2.48		
		B	2.1	2.63	2.01	2.38								2.28	2.34		
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.31	2.1	1.96	1.52							2.36				
		B	2.22	2.08	1.86	2.4							2.22				
	MOBILE COMPUTING	A	2.16	2.32	2.16	1.12											
		B	2.13	2.12	2.08	1.49											
	TOTAL QUALITY MANAGEMENT	A	2.24	2.42	2.18	1.57							2.42				
		B	2.17	2.26	2.06	1.49							2.28				
	MOBILE APPLICATION DEVELOPMENT LABORATORY	A	2.52	2.46	2.36	2.34						2.46					2.44
		B	2.48	2.32	2.24	2.3						2.24					2.36
	COMPILER LABORATORY	A	2.54	2.46	2.36	2.44											
		B	2.36	2.4	2.32	2.38					2.22						
	COMMUNICATION AND SOFT SKILLS - BASED LABORATORY	A	2.46	2.42	2.46						2.08		2.36				2.36
		B	2.4	2.3	2.32								2.24				2.1
VII		A		2.18			2.21	1.84									2.36

	CRYPTOGRAPHY AND NETWORK SECURITY	B		2.12			2.02	1.7											2.22
	GRID AND CLOUD COMPUTING	A	2.03		2.12	1.76	2.28	1.94		2.28							2.24	2.21	
		B	2.17		2	1.69	2.08	1.86		2.21							2.14	2.07	
	GRAPH THEORY AND APPLICATIONS	A	2.37	2.37	2.18	1.53	2.14	1.72										2.1	
		B	2.03	2.27	2.03	1.6	2.04	1.68										2.04	
	RESOURSE MANAGEMENT TECHNIQUES	A	2.12	2.32															
		B	2.08	2.1															
	INFORMATION RETRIVAL TECHNIQUES	A		2.48			2.24												
		B		2.37			2.12												
	SECURITY LABORATORY	A		2.48			2.48	2.56											2.42
		B		2.44			2.38	2.38											2.38
	GRID AND CLOUD COMPUTING LABORATORY	A	2.46		2.44	2.36	2.44	2.52		2.46						2.46	2.48		2.34
		B	2.38		2.36	2.26	2.38	2.32		2.24						2.38	2.34		2.2
VIII	SERVICE ORIENTED ARCHTIECTURE	A						2.51		2.26							2.36		
		B						2.58		2.18							2.24		
	MULTICORE ARCHITECTURE	A			2.12	1.64	2.28		2.48										

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	B			2.04	1.72	2.18		2.31									
HUMAN COMPUTER INTERACTION	A	2.28	2.46	2.12	1.93				2.32					2.24			
	B	2.14	2.26	2	1.86				2.26					2.18			
PROFESSION ETHICS FOR ENGINEERING	A							2.32	2.42	2.36							
	B							2.28	2.38	2.24							
PROJECT WORK	A	2.56	2.62	2.42	2.46	2.44			2.46					2.48	2.36	2.48	2.56
	B	2.42	2.44	2.34	2.38	2.32			2.24					2.36	2.24	2.32	2.34
ATTAINMENT LEVEL		2.31	2.31	2.12		2.15	2.09	2.20	2.20	2.24	2.07	2.18	2.21	2.22	2.30	2.19	2.31
PERCENTAGE		77	77	71		72	70	73	73	75	69	73	74	74	77	73	77
PERCENTAGE(80%)		61.49	61.57	56.66		57.39	55.81	58.70	58.65	59.73	55.20	58.07	58.99	59.30	61.40	58.45	61.73

V. R. Kethe

HOD

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
PO ATTAINMENT   2014-2018 BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	61.49	17	20	13	17	**78**
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	61.57	15	20	13	16	**77**
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	56.66	15	20	13	16	**73**
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	57.39	13	20	14	16	**73**
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	55.81	15	20	12	16	**72**

6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	58.70	13	20	13	15	**74**
7	Knowledge of contemporary issues.	58.65	17	20	10	16	**74**
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	59.73	16	20	11	16	**75**
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	55.20	17	20	11	16	**71**
10	An ability to communicate effectively with a range of audiences.	58.07	18	20	11	16	**75**
11	Recognition of the need for and an ability to engage in continuing professional development.	58.99	18	20	7	15	**74**
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.30	14	20	7	14	**73**
PROGRAMME SPECIFIC OUTCOMES						

1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber-Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	61.40	16	20	13	16	**78**
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	58.45	16	20	13	16	**75**
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	61.73	12	20	13	15	**77**

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PRATHYUSHA ENGINEERING COLLEGE

DPEARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PO ATTAINMENT FOR COURSES (2015- 19)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	MATHEMATICS I	A	2.59	2.76		2.26	2.68							1.68			
		B	2.53	2.9		2.18	2.41							1.44			
	ENGINEERING PHYSICS I	A	2.42	2.38	2.08												
		B	2.39	2.22	1.94												
	ENGG CHEMISTRY I	A	2.59	2.26	2.06												
		B	2.52	2.12	1.88												
	ENGG GRAPHICS	A	2.61	2.2		2.16								1.98			
		B	2.57	2.1		2.08								1.78			
	FUNDAMENTALS OF COMPUTING AND PROGRAMMING	A	2.52	2.72	1.28	2.36											2.24
		B	2.41	2.58	2.18	2.24											2.16
	ENGINEERING ENGLISH I	A		2.47	2.22		1.96					2.16					
		B		2.26	2.1		1.82					2.08					
		A	2.77	2.58	2.46												2.36

Year	Subject	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
	COMPUTER PRACTICES LABORATORY	B	2.63	2.46	2.4												2.28
	ENGINEERING PRACTICES LABORATORY	A	2.55	2.48													
		B	2.47	2.28													
	PHYSICS AND CHEMISTRY LABORATORY - I	A	2.92	2.72	2.52												
		B	2.75	2.66	2.46												
II	PHYSICS II	A	2.31	2.27	1.12								2.56				
		B	2.23	1.93	2.08								2.38				
	MATHEMATICS II	A	2.42	2.44	2.02								2.42				
		B	2.31	2.2	1.84								2.23				
	ENGG CHEMISTRY II	A	2.29	2.58				1.96	1.98				2.32				
		B	2.33	2.26				1.88	1.76				2.04				
	PROGRAMMING AND DATASTRUCTURES I	A	2.52	2.42	2.28	2.38	1.98						2.12				2.36
		B	2.63	3.37	2.14	2.26	1.96						2				2.22
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.64	2.46	2.18								2.38				
		B	2.59	2.28	2.1								2.2				
	ENGINEERING ENG II	A	2.61	2.2			1.86				2.18		2.08				
		B	2.55	2.12			1.78				2.1		2.11				

Year	Subject	Sec														
	PHYSICS AND CHEMISTRY LABORATORY - II	A	2.77	2.48	2.68											
		B	2.77	2.62	2.58											
	DIGITAL LABORATORY	A	2.77	2.52	2.46											
		B	2.73	2.46	2.4									2.38		
	PROGRAMMING AND DATA STRUCTURES LABORATORY I	A	2.82	2.72	2.58									2.24		
		B	2.79	2.62	2.58											
III	ANALOG AND DIGITAL COMMUNICATION	A	2.53	2.08	2.06							2.04				
		B	2.37	1.7	1.82							2				
	COMPUTER ORGANIZATION AND ARCHITECTURE	A	2.51	2.25	2.22	2.38							2.68			
		B	2.69	2.14	2.12	2.2							2.59			
	PROGRAMMING AND DATASTRUCTURES II	A	2.24	2.13	2.24	2.4	1.72						2.14		2.44	
		B	1.85	2.4	2.12	2.3	1.68						2.08		2.32	
	DATABASE MANAGEMENT SYSTEMS	A	2.43	2.32	2.18	2.5				2.1					2.32	
		B	2.31	2.58	2.11	2.39				2.04					2.24	
	ENVIRONMENTAL SCIENCE AND ENGINEERING	A				2.36		2.04	2.24							
		B				2.24		1.92	2.12							

	Subject	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17
	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	A	2.63	2.46	2.28								2.36						
		B	2.69	2.24	2.12								2.22						
	PROGRAMMING AND DATA STRUCTURE LABORATORY II	A	2.63	2.46	2.42														2.42
		B	2.59	2.42	2.28														2.36
	DATABASE MANAGEMENT SYSTEMS LABORATORY	A	2.73	2.58	2.41														2.38
		B	2.69	2.46	2.33														2.2
IV	COMPUTER NETWORKS	A	2.62	2.47	2.28	2.4													2.36
		B	2.66	2.39	2.14	2.26													2.24
	DESIGN AND ANALYSIS OF ALGORITHMS	A	2.7	2.52	2.26	2.38										2.02			
		B	2.33	2.25	2.12	2.24										1.86			
	MICROPORCESSOR AND MICROCONTROLLER	A	2.49	2.36	2.18								2.41						
		B	2.4	2.12	2.08								2.27						
	OPERATING SYSTEMS	A	2.33	2.27	2.26	2.48							2.18						
		B	2.29	2.13	2.14	2.3							2.14						
	PROBABILITY AND QUEING THEORY	A	2.01	2.26	2.08														
		B	2.31	2.25	2.02	2.4													

	Subject		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
	SOFTWARE ENGINEERING	A	2.59	2.62	2.28	2.26						2.36						2.52
		B	2.53	2.58	2.12	2.29						2.24						2.48
	NETWORKS LABORATORY	A	2.77	2.52	2.38	2.58												
		B	2.67	2.48	2.34	2.46												
	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	A	2.73	2.58	2.6													
		B	2.69	2.56	2.54													
	OPERATING SYSTEMS LABORATORY	A	2.49	2.46	2.32	2.64												
		B	2.45	2.36	2.28	2.56												
V	COMPUTER GRAPHICS	A	2.42	2.34	2.28	2.22										2.56		
		B	2.33	2.28	2.18											2.44		
	DISCRETE MATHEMATICS	A	2.31	2.2	2.12													
		B	2.29	2.13	2.08													
	THOERY OF COMPUTATION	A	2.34	2.2	2.18		2.14						2.14					
		B	2.3	2.11	2.11		1.96						2.1					
	INTERNET PROGRAMMING	A	2.49	2.67	2.22									2.18	2.16			2.2
		B	2.33	2.6	2.1									2.16	2.08			2.08
		A		2.44	2.28		2.26											2.28

Sem	Subject	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17	C18	C19
	OBEJCT ORIENTED DESIGN AND ANALYSIS	B		2.47	2.14		2.34															2.14
	CASE TOOLS LABORATORY	A		2.64	2.52		2.26															2.36
	CASE TOOLS LABORATORY	B		2.62	2.5		2.34															2.3
	INTERNET PROGRAMMING LABORATORY	A	2.77	2.66	2.46											2.18	2.16					2.36
	INTERNET PROGRAMMING LABORATORY	B	2.69	2.58	2.38											2.06	2.08					2.22
	COMPUTER GRAPHICS LABORATORY	A	2.75	2.58	2.44	2.22											2.56					
	COMPUTER GRAPHICS LABORATORY	B	2.65	2.54	2.42												2.44					
VI	ARTIFICIAL INTELLIGENCE	A	2.68	2.72	2.28	2.46			2.38										2.27	2.26	2.42
	ARTIFICIAL INTELLIGENCE	B	2.59	2.48	2.12	2.3			2.1										2.31	2.12	2.26
	COMPLIER DESIGN	A	2.55	2.03	2.28			2.28											2.52	2.2	
	COMPLIER DESIGN	B	2.44	1.77	2.11			2.1											2.36	2.12	
	DISTRIBUTED SYSTEMS	A	2.51	2.4	2.18														2.36	2.48	
	DISTRIBUTED SYSTEMS	B	2.31	2.73	2.11														2.28	2.34	
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.52	2.2	2.06														2.36		
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	B	2.43	2.18	1.96														2.22		
		A	2.37	2.42	2.26																

		Sec															
	MOBILE COMPUTING	B	2.34	2.22	2.18												
	TOTAL QUALITY MANAGEMENT	A	2.45	2.52	2.28								2.42				
		B	2.38	2.36	2.16								2.28				
	MOBILE APPLICATION DEVELOPMENT LABORATORY	A	2.73	2.56	2.46							2.46					2.44
		B	2.69	2.42	2.34							2.24					2.36
	COMPILER LABORATORY	A	2.75	2.56	2.46												
		B	2.57	2.5	2.42						2.22						
	COMMUNICATION AND SOFT SKILLS - BASED LABORATORY	A	2.67	2.52	2.56						2.08	2.36					2.36
		B	2.61	2.4	2.42							2.24					2.1
VII	CRYPTOGRAPHY AND NETWORK SECURITY	A		2.28		2.43	1.84										2.36
		B		2.22		2.24	1.7										2.22
	GRID AND CLOUD COMPUTING	A	2.24		2.22	2.5	1.94		2.28						2.24	2.21	
		B	2.38		2.1	2.3	1.86		2.21						2.14	2.07	
	GRAPH THEORY AND APPLICATIONS	A	2.58	2.47	2.28	2.36	1.72									2.1	
		B	2.24	2.37	2.13	2.26	1.68									2.04	
	RESOURSE MANAGEMENT TECHNIQUES	A	2.33	2.42													
		B	2.29	2.2													

			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	INFORMATION RETRIVAL TECHNIQUES	A		2.58		2.46											
		B		2.47		2.34											
	SECURITY LABORATORY	A		2.58		2.7	2.56										2.42
		B		2.54		2.6	2.38										2.38
	GRID AND CLOUD COMPUTING LABORATORY	A	2.67		2.54	2.66	2.52		2.46					2.46	2.48		2.34
		B	2.59		2.46	2.6	2.32		2.24					2.38	2.34		2.2
VIII	SERVICE ORIENTED ARCHTIECTURE	A					2.51		2.26						2.36		
		B					2.58		2.18						2.24		
	MULTICORE ARCHITECTURE	A			2.22	2.5		2.48									
		B			2.14	2.4		2.31									
	HUMAN COMPUTER INTERACTION	A	2.49	2.56	2.22				2.32					2.24			
		B	2.35	2.36	2.1				2.26					2.18			
	PROFESSION ETHICS FOR ENGINEERING	A						2.32	2.42	2.36							
		B						2.28	2.38	2.24							
	PROJECT WORK	A	2.77	2.72	2.52	2.66			2.46					2.48	2.36	2.48	2.56
		B	2.63	2.54	2.44	2.54			2.24					2.36	2.24	2.32	2.34
ATTAINMENT LEVEL			2.52	2.41	2.23	2.38	2.10	2.20	2.22	2.24	2.07	2.18	2.21	2.22	2.30	2.19	2.31

PERCENTAGE	84	80	74	79	70	73	74	75	69	73	74	74	77	73	77
PERCENTAGE(80%)	67.18	64.34	59.53	63.50	55.96	58.70	59.10	59.73	55.20	58.07	58.99	59.30	61.40	58.45	61.73

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PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
PO ATTAINMENT   2015-2019 BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	67.18	16	20		18	**85**
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	64.34	15	20		17	**82**
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	59.53	16	20	18	18	**77**

4	An ability to design and conduct experiments, as well as to analyze and interpret data.	63.50	14	20		17	**81**
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	55.96	16	20	17	18	**74**
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	58.70	14	20		17	**76**
7	Knowledge of contemporary issues.	59.10	17	20		18	**77**
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	59.73	16	20		18	**78**

9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	55.20	17	20			18	**74**
10	An ability to communicate effectively with a range of audiences.	58.07	18	19	17		18	**76**
11	Recognition of the need for and an ability to engage in continuing professional development.	58.99	18	20	17		18	**77**
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.30	14	20			17	**76**

PROGRAMME SPECIFIC OUTCOMES

1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber-Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	61.40	16	20	19	18	**80**
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	58.45	16	20	18	18	**77**
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	61.73	12	19	18	16	**78**

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PRATHYUSHA ENGINEERING COLLEGE

DPEARTMENT OF COMPUTER SCIENCE AND ENGINEERING

PO ATTAINMENT FOR COURSES (2016- 20)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	MATHEMATICS I	A	2.69	2.859		2.33	2.752							1.68			
		B	2.57	2.999		2.25	2.41							1.44			
	ENGINEERING PHYSICS I	A	2.49	2.479	2.156												
		B	2.45	2.319	2.016												
	ENGG CHEMISTRY I	A	2.69	2.359	2.136												
		B	2.6	2.219	1.956												
	ENGG GRAPHICS	A	2.63	2.299		2.23								1.98			
		B	2.62	2.199		2.15								1.78			
	FUNDAMENTALS OF COMPUTING AND PROGRAMMING	A	2.68	2.819	1.356	2.43											2.24
		B	2.47	2.679	2.256	2.31											2.16
	ENGINEERING ENGLISH I	A		2.569	2.296		1.96					2.16					
		B		2.359	2.176		1.82					2.08					

Year	Subject	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15
	COMPUTER PRACTICES LABORATORY	A	2.89	2.679	2.536												2.36
		B	2.75	2.559	2.476												2.28
	ENGINEERING PRACTICES LABORATORY	A	2.67	2.579													
		B	2.59	2.379													
	PHYSICS AND CHEMISTRY LABORATORY - I	A	3.04	2.819	2.596												
		B	2.87	2.759	2.536												
II	PHYSICS II	A	2.43	2.369	1.196									2.56			
		B	2.35	2.029	2.156									2.38			
	MATHEMATICS II	A	2.54	2.539	2.096									2.42			
		B	2.43	2.299	1.916									2.23			
	ENGG CHEMISTRY II	A	2.41	2.679				1.96	1.98					2.32			
		B	2.45	2.359				1.88	1.76					2.04			
	PROGRAMMING AND DATASTRUCTURES I	A	2.64	2.519	2.356	2.45	1.98							2.12			2.36
		B	2.75	3.469	2.216	2.33	1.96							2			2.22
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.76	2.559	2.256									2.38			
		B	2.71	2.379	2.176									2.2			

	Subject		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	ENGINEERING ENG II	A	2.73	2.299			1.86								2.18		2.08			
		B	2.67	2.219			1.78								2.1		2.11			
	PHYSICS AND CHEMISTRY LABORATORY - II	A	2.89	2.579	2.756															
		B	2.89	2.719	2.656															
	DIGITAL LABORATORY	A	2.89	2.619	2.536															
		B	2.85	2.559	2.476															2.38
	PROGRAMMING AND DATA STRUCTURES LABORATORY I	A	2.94	2.819	2.656															2.24
		B	2.91	2.719	2.656															
III	ANALOG AND DIGITAL COMMUNICATION	A	2.65	2.179	2.136												2.04			
		B	2.49	1.799	1.896												2			
	COMPUTER ORGANIZATION AND ARCHITECTURE	A	2.63	2.349	2.296	2.45											2.68			
		B	2.81	2.239	2.196	2.27											2.59			
	PROGRAMMING AND DATASTRUCTURES II	A	2.36	2.229	2.316	2.47	1.72										2.14			2.44
		B	1.97	2.499	2.196	2.37	1.68										2.08			2.32

	DATABASE MANAGEMENT SYSTEMS	A	2.55	2.419	2.256	2.57				2.1								2.32
		B	2.43	2.679	2.186	2.46				2.04								2.24
	ENVIRONMENTAL SCIENCE AND ENGINEERING	A				2.43		2.04	2.24									
		B				2.31		1.92	2.12									
	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	A	2.63	2.559	2.356								2.36					
		B	2.69	2.339	2.196								2.22					
	PROGRAMMING AND DATA STRUCTURE LABORATORY II	A	2.63	2.559	2.496													2.42
		B	2.59	2.519	2.356													2.36
	DATABASE MANAGEMENT SYSTEMS LABORATORY	A	2.73	2.679	2.486													2.38
		B	2.69	2.559	2.406													2.2
IV	COMPUTER NETWORKS	A	2.62	2.569	2.356	2.47												2.36
		B	2.66	2.489	2.216	2.33												2.24
	DESIGN AND ANALYSIS OF ALGORITHMS	A	2.7	2.619	2.336	2.45									2.02			
		B	2.33	2.349	2.196	2.31									1.86			
	MICROPORCESSOR AND	A	2.49	2.459	2.256								2.41					

	Subject	Sec																			
	MICROCONTROLLER	B	2.4	2.219	2.156										2.27						
	OPERATING SYSTEMS	A	2.33	2.369	2.336	2.55									2.18						
		B	2.29	2.229	2.216	2.37									2.14						
	PROBABILITY AND QUEING THEORY	A	2.12	2.359	2.156																
		B	2.42	2.349	2.096	2.47															
	SOFTWARE ENGINEERING	A	2.7	2.719	2.356	2.33						2.36									2.52
		B	2.64	2.679	2.196	2.36						2.24									2.48
	NETWORKS LABORATORY	A	2.88	2.619	2.456	2.65															
		B	2.78	2.579	2.416	2.53															
	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	A	2.84	2.679	2.676																
		B	2.8	2.659	2.616																
	OPERATING SYSTEMS LABORATORY	A	2.6	2.559	2.396	2.71															
		B	2.56	2.459	2.356	2.63															
V	COMPUTER GRAPHICS	A	2.53	2.439	2.356	2.29									2.56						
		B	2.44	2.379	2.256										2.44						
	DISCRETE MATHEMATICS	A	2.42	2.299	2.196																

Sem	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
		B	2.4	2.229	2.156													
	THOERY OF COMPUTATION	A	2.45	2.299	2.256		2.14						2.14						
		B	2.41	2.209	2.186		1.96						2.1						
	INTERNET PROGRAMMING	A	2.6	2.769	2.296								2.18	2.16					2.2
		B	2.44	2.699	2.176								2.16	2.08					2.08
	OBEJCT ORIENTED DESIGN AND ANALYSIS	A		2.539	2.356		2.26												2.28
		B		2.569	2.216		2.34												2.14
	CASE TOOLS LABORATORY	A		2.739	2.52		2.26												2.36
		B		2.719	2.576		2.34												2.3
	INTERNET PROGRAMMING LABORATORY	A	2.77	2.759	2.536								2.18	2.16					2.36
		B	2.69	2.679	2.456								2.06	2.08					2.22
	COMPUTER GRAPHICS LABORATORY	A	2.75	2.679	2.516	2.29								2.56					
		B	2.65	2.639	2.496									2.44					
VI	ARTIFICIAL INTELLIGENCE	A	2.68	2.819	2.356	2.53			2.38								2.27	2.26	2.42
		B	2.59	2.579	2.196	2.37			2.1								2.31	2.12	2.26
	COMPLIER DESIGN	A	2.55	2.129	2.356			2.28									2.52	2.2	

		B	2.44	1.869	2.186			2.1								2.36	2.12	
	DISTRIBUTED SYSTEMS	A	2.51	2.499	2.256											2.36	2.48	
		B	2.31	2.829	2.186											2.28	2.34	
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.52	2.299	2.136									2.36				
		B	2.43	2.279	2.036									2.22				
	MOBILE COMPUTING	A	2.37	2.519	2.336													
		B	2.34	2.319	2.256													
	TOTAL QUALITY MANAGEMENT	A	2.45	2.619	2.356									2.42				
		B	2.38	2.459	2.236									2.28				
	MOBILE APPLICATION DEVELOPMENT LABORATORY	A	2.73	2.659	2.536								2.46					2.44
		B	2.69	2.519	2.416								2.24					2.36
	COMPILER LABORATORY	A	2.75	2.659	2.536													
		B	2.57	2.599	2.496								2.22					
	COMMUNICATION AND SOFT SKILLS - BASED LABORATORY	A	2.67	2.619	2.636								2.08	2.36					2.36
		B	2.61	2.499	2.496									2.24					2.1
VII		A		2.379		2.5	1.84												2.36

Sem	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	CRYPTOGRAPHY AND NETWORK SECURITY	B		2.319		2.31	1.7												2.22
	GRID AND CLOUD COMPUTING	A	2.24		2.296	2.57	1.94		2.28						2.24	2.21		
		B	2.38		2.176	2.37	1.86		2.21						2.14	2.07		
	GRAPH THEORY AND APPLICATIONS	A	2.58	2.569	2.356	2.43	1.72									2.1		
		B	2.24	2.469	2.206	2.33	1.68									2.04		
	RESOURSE MANAGEMENT TECHNIQUES	A	2.33	2.519														
		B	2.29	2.299														
	INFORMATION RETRIVAL TECHNIQUES	A		2.679		2.53												
		B		2.569		2.41												
	SECURITY LABORATORY	A		2.679		2.77	2.56											2.42
		B		2.639		2.67	2.38											2.38
	GRID AND CLOUD COMPUTING LABORATORY	A	2.67		2.616	2.73	2.52		2.46					2.46	2.48			2.34
		B	2.59		2.536	2.67	2.32		2.24					2.38	2.34			2.2
VIII	SERVICE ORIENTED ARCHTIECTURE	A				2.51			2.26						2.36			
		B				2.58			2.18						2.24			

MULTICORE ARCHITECTURE	A			2.296	2.57		2.48									
	B			2.216	2.47		2.31									
HUMAN COMPUTER INTERACTION	A	2.49	2.659	2.296				2.32					2.24			
	B	2.35	2.459	2.176				2.26					2.18			
PROFESSION ETHICS FOR ENGINEERING	A						2.32	2.42	2.36							
	B						2.28	2.38	2.24							
PROJECT WORK	A	2.77	2.819	2.596	2.73			2.46					2.48	2.36	2.48	2.56
	B	2.63	2.639	2.516	2.61			2.24					2.36	2.24	2.32	2.34
ATTAINMENT LEVEL		2.58	2.51	2.31	2.45	2.10	2.20	2.22	2.24	2.07	2.18	2.21	2.22	2.30	2.19	2.31
PERCENTAGE		86	84	77	82	74	73	74	75	69	73	74	74	77	73	77
PERCENTAGE(80%)		68.80	66.98	61.54	65.37	58.34	60.08	60.18	61.73	58.13	59.10	59.24	60.11	62.22	59.78	62.62

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PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
PO ATTAINMENT   (2016- 20) BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	68.80	18	20		19	**88**
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	66.98	15	20		18	**85**
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	61.54	16	20	18	18	**79**

4	An ability to design and conduct experiments, as well as to analyze and interpret data.	65.37	14	20		17	**82**
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	58.34	16	20	18	18	**76**
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	60.08	14	20		17	**77**
7	Knowledge of contemporary issues.	60.18	17	20		18	**79**

8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	61.73	16	20		18	**80**
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	58.13	17	20		18	**77**
10	An ability to communicate effectively with a range of audiences.	59.10	19	19	17	18	**77**
11	Recognition of the need for and an ability to engage in continuing professional development.	59.24	19	20	17	19	**78**

| 12 | An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects. | 60.11 | 13 | 20 | | 17 | **77** |

PROGRAMME SPECIFIC OUTCOMES

| 1 | To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber-Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity | 62.22 | 17 | 20 | 19 | 19 | **81** |
| 2 | To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies | 59.78 | 16 | 20 | 18 | 18 | **78** |

| 3 | To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies. | 62.62 | 12 | 19 | 18 | 16 | **79** |

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PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2013-17: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	CO-D	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	I	C2013.1.1	HS6151	Technical English – I	2.17	2.31	2.40	2.15	0.00	0.00	0.00	0.00	0.00	0.76	0.75	0.75	1.51	2.26	1.51	0.00	0.75	0.75
2	I	C2013.1.2	MA6151	Mathematics – I	2.07	2.31	2.30	2.16	2.21	2.24	2.23	2.21	0.00	0.00	0.00	0.00	0.00	0.00	1.48	1.48	2.22	2.22
3	I	C2013.1.3	PH6151	Engineering Physics – I	2.21	2.29	2.22	2.20	0.74	0.74	0.74	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.74	0.74	0.74
4	I	C2013.1.4	CY6151	Engineering Chemistry – I	1.92	2.07	1.88	1.80	1.28	1.28	1.25	1.25	1.89	0.00	0.00	0.00	0.00	0.00	1.89	1.89	0.63	0.63
5	I	C2013.1.5	GE6151	Computer Programming	2.35	2.24	2.29	2.30	0.00	0.00	0.76	0.76	0.76	0.00	0.00	0.00	0.76	0.00	0.76	0.76	0.76	0.76
6	I	C2013.1.6	GE6152	Engineering Graphics	2.01	2.31	2.05	2.10	1.41	1.43	1.40	1.41	2.12	0.00	0.00	0.00	0.00	0.00	2.11	2.12	0.71	0.70
7	I	L2013.1.1	GE6161	Computer Practices Laboratory	2.52	2.32	2.52	2.52	2.47	2.46	2.50	1.66	1.65	0.00	0.00	0.00	0.00	0.00	0.83	0.83	2.48	2.48
8	I	L2013.1.2	GE6162	Engineering Practices Laboratory	2.52	2.64	2.50	2.52	1.70	1.70	1.69	1.69	0.00	0.00	0.00	0.00	0.00	0.00	1.69	1.69	0.85	0.85
9	I	L2013.1.3	GE6163	Physics and Chemistry Laboratory - I	2.52	2.49	2.52	2.52	0.00	0.00	0.00	0.00	0.84	0.84	0.84	0.84	1.68	2.52	1.68	1.68	0.84	0.84
10	II	C2013.2.1	HS6251	Technical English – II	2.22	2.44	2.39	2.52	2.39	2.44	2.44	2.45	0.00	0.00	0.00	0.00	0.00	0.00	1.62	1.62	2.44	2.44
11	II	C2013.2.2	MA6251	Mathematics – II	2.24	2.36	2.24	2.29	2.28	2.29	2.27	2.28	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.52	2.28	2.28
12	II	C2013.2.3	PH6251	Engineering Physics – II	2.26	2.33	2.26	2.22	0.76	0.76	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.75	0.75	0.75
13	II	C2013.2.4	CY6251	Engineering Chemistry – II	2.04	2.08	1.89	2.13	2.04	2.03	2.02	2.05	1.36	1.36	0.00	0.00	0.00	0.00	2.04	2.04	2.04	2.04
14	II	C2013.2.5	EC6201	Electronic Devices	2.51	2.26	2.24	2.44	0.79	0.77	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.78
15	II	C2013.2.6	EE6201	Circuit Theory	2.35	2.36	2.27	2.42	0.78	0.00	0.78	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.79
16	II	L2013.2.1	GE6262	Physics and Chemistry Laboratory - II	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	2.52
17	II	L2013.2.2	EC6211	Circuits and Devices Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.00	0.00	0.00	0.00	0.84	0.84	2.52	2.52
18	III	C2013.3.1	MA6351	Transforms and Partial Differential Equations	2.38	2.39	2.22	2.45	2.36	2.36	2.35	1.59	1.57	0.00	0.00	0.00	0.00	0.00	1.58	1.58	2.36	2.36
19	III	C2013.3.2	EE6352	Electrical Engineering and Instrumentation	2.16	2.17	1.69	1.89	1.98	1.93	1.87	1.92	1.28	1.27	0.00	0.00	0.00	0.00	1.27	1.27	1.91	1.91
20	III	C2013.3.3	EC6301	Object Oriented Programming and Data Structures	2.32	2.37	1.83	2.29	2.20	2.17	2.12	2.20	2.17	2.17	0.00	0.00	0.00	0.00	1.45	1.45	2.17	2.17
21	III	C2013.3.4	EC6302	Digital Electronics	2.33	2.36	2.36	2.52	2.39	2.41	2.42	2.44	2.42	2.42	0.00	0.00	0.00	0.00	1.62	1.62	2.42	2.42
22	III	C2013.3.5	EC6303	Signals and Systems	2.19	2.33	1.64	1.86	2.00	1.96	1.86	1.92	1.29	1.28	0.00	0.00	0.00	0.00	1.28	1.28	1.92	1.92
23	III	C2013.3.6	EC6304	Electronic Circuits- I	2.15	2.29	1.61	1.73	1.94	1.89	1.79	1.84	1.87	1.85	0.00	0.00	0.00	0.00	1.23	1.23	1.85	1.85
24	III	L2013.3.1	EC6311	Analog and Digital Circuits Laboratory	2.52	2.49	2.50	2.52	2.51	2.51	2.51	2.51	2.51	0.00	0.00	0.00	0.00	0.00	0.84	0.84	2.51	2.51
25	III	L2013.3.2	EC6312	OOPS and Data Structures Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	1.68	1.68	1.68	0.00	0.00	0.00	0.00	0.84	0.84	2.52	2.52
26	IV	C2013.4.1	MA6451	Probability and Random Processes	2.20	2.25	2.24	2.46	2.29	2.31	2.33	2.35	1.54	1.55	0.00	0.00	0.00	0.00	1.55	1.55	2.33	2.33

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2013-17: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	CO-D	A	B	C	D	E	F	G	H	I	J	K	L	M	N
27	IV	C2013.4.2	EC6401	Electronic Circuits II	2.41	2.34	2.36	2.42	2.39	2.38	2.39	2.39	2.39	1.59	0.00	0.00	0.00	0.00	1.59	1.59	2.39	2.39
28	IV	C2013.4.3	EC6402	Communication Theory	2.41	2.39	2.14	2.44	2.35	2.33	2.31	1.57	1.56	1.56	0.00	0.00	0.00	0.00	1.56	1.56	2.34	2.34
29	IV	C2013.4.4	EC6403	Electromagnetic Fields	2.43	2.32	2.29	2.44	2.37	2.36	2.37	2.38	2.37	2.37	0.00	0.00	0.00	0.00	2.37	2.37	2.37	2.37
30	IV	C2013.4.5	EC6404	Linear Integrated Circuits	2.21	2.24	1.97	2.11	2.13	2.11	2.08	2.11	1.40	1.40	0.00	0.00	0.00	0.00	1.40	1.40	2.10	2.10
31	IV	C2013.4.6	EC6405	Control System Engineering	2.27	2.31	2.36	2.40	2.34	2.35	2.36	2.36	1.57	1.57	0.00	0.00	0.00	0.00	1.57	1.57	2.36	2.36
32	IV	L2013.1.1	EC6411	Circuit and Simulation Integrated Laboratory	2.52	2.49	2.52	2.50	2.51	2.51	2.51	2.51	1.67	1.67	0.00	0.00	0.00	0.00	1.67	1.67	2.51	2.51
33	IV	L2013.1.2	EC6412	Linear Integrated Circuit Laboratory	2.48	2.49	2.52	2.50	2.50	2.51	2.51	2.51	1.67	1.67	0.00	0.00	0.00	0.00	1.67	1.67	2.51	2.51
34	IV	L2013.1.3	EE6461	Electrical Engineering and Control System	2.47	2.49	2.52	2.50	2.50	2.51	2.51	2.50	2.50	2.51	0.00	0.00	0.00	0.00	2.51	2.51	2.51	2.51
35	V	C2013.5.1	EC6501	Digital Communication	2.34	2.42	2.41	2.46	2.41	2.42	2.43	0.81	0.81	0.81	0.00	0.00	0.00	0.00	1.62	1.62	2.43	2.43
36	V	C2013.5.2	EC6502	Principles of Digital Signal Processing	2.31	2.35	2.36	2.42	2.36	2.38	2.38	2.38	2.38	2.38	0.00	0.00	0.00	0.00	2.38	2.38	2.38	2.38
37	V	C2013.5.3	EC6503	Transmission Lines and Wave Guides	2.15	2.31	1.96	2.13	0.00	0.00	0.00	0.00	0.00	0.71	0.70	0.71	0.00	0.00	1.41	1.41	0.71	0.71
38	V	C2013.5.4	GE6351	Environmental Science and Engineering	2.48	2.46	2.52	2.50	2.49	2.49	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50
39	V	C2013.5.5	EC6504	Microprocessor and Microcontroller	2.41	2.39	2.22	2.48	2.38	2.37	2.36	2.40	2.38	2.38	0.00	0.00	0.00	0.00	2.38	2.38	2.38	2.38
40	V	L2013.5.1	EC6511	Digital Signal Processing Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.00	0.00	0.00	2.52	2.52	2.52	2.52
41	V	L2013.5.2	EC6512	Communication System Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.00	0.00	0.00	0.00	0.00	1.68	1.68	2.52	2.52
42	V	L2013.5.3	EC6513	Microprocessor and Microcontroller Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.00	0.00	0.00	2.52	2.52	2.52	2.52
43	VI	C2013.6.1	MG6851	Principles of Management	2.48	2.45	2.49	2.44	2.47	2.46	2.46	2.46	2.46	2.46	0.00	0.00	0.00	0.00	2.46	2.46	2.46	2.46
44	VI	C2013.6.2	CS6303	Computer Architecture	2.42	2.36	2.39	2.51	0.00	0.00	0.00	0.00	0.00	2.43	2.44	2.44	2.43	2.44	2.44	2.44	0.81	0.81
45	VI	C2013.6.3	CS6551	Computer Networks	2.43	2.38	2.29	2.37	2.37	2.35	2.34	2.36	2.36	2.35	0.00	0.00	0.00	0.00	2.35	2.35	2.35	2.35
46	VI	C2013.6.4	EC6601	VLSI Design	2.33	2.23	2.34	2.39	2.32	2.32	2.34	2.35	2.33	2.34	0.00	0.00	0.00	0.00	2.34	2.34	2.34	2.34
47	VI	C2013.6.5	EC6602	Antenna and Wave propagation	2.38	2.35	2.24	2.47	2.36	2.35	2.36	2.38	2.36	2.36	0.00	0.00	0.00	0.00	2.37	2.37	2.37	2.37
48	VI	C2013.6.6	EC 6001	Medical Electronics	2.27	2.31	2.17	2.18	2.23	2.22	2.20	2.21	2.22	2.21	0.00	0.00	0.00	0.00	2.21	2.21	2.21	2.21
49	VI	L2013.6.1	EC6611	Computer Networks Laboratory	2.52	2.49	2.52	2.52	0.00	0.00	0.00	0.00	0.00	2.52	0.00	2.52	2.52	2.52	2.52	2.52	0.84	0.84

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2013-17: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	CO-D	A	B	C	D	E	F	G	H	I	J	K	L	M	N
50	VI	L2013.6.2	EC6612	VLSI Design Laboratory	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.84	0.00	0.00	0.00	0.00	1.68	1.68	2.52	2.52
51	VI	L2013.6.3	GE6674	Communication and Soft Skills - Laboratory Based	2.52	2.49	2.52	2.52	2.52	2.52	2.52	2.52	0.00	0.84	0.00	0.00	0.00	0.00	1.68	1.68	2.52	2.52
52	VII	C2013.7.1	EC6701	RF and Microwave Engineering	2.24	2.23	2.04	2.19	2.17	2.16	2.14	2.17	2.16	2.16	0.00	0.00	0.00	0.00	2.16	2.16	2.16	2.16
53	VII	C2013.7.2	EC6702	Optical Communication and Networks	2.21	2.07	2.32	1.85	2.11	2.09	2.09	2.03	2.08	2.07	0.00	0.00	0.00	0.00	2.07	2.07	2.07	2.07
54	VII	C2013.7.3	EC6703	Embedded and Real Time Systems	2.49	2.43	2.48	2.51	2.48	2.47	2.48	2.48	2.48	2.48	0.00	0.00	0.00	0.00	2.48	2.48	2.48	2.48
55	VII	C2013.7.4	EC 6011	Electromagnetic Interference and Compatibility	2.39	2.28	2.16	2.35	2.30	2.27	2.27	2.30	2.28	2.28	0.00	0.00	0.00	0.00	2.29	2.29	2.28	2.29
56	VII	C2013.7.5	EC 6015	Radar and Navigational Aids	2.39	2.36	2.43	2.49	2.42	2.42	2.44	2.44	2.43	2.43	0.00	0.00	0.00	0.00	2.43	2.43	2.43	2.43
57	VII	C2013.7.6	EC 6004	Satellite Communication	2.38	2.42	2.48	2.52	2.45	2.47	2.48	2.48	2.47	2.47	0.00	0.00	0.00	0.00	2.47	2.47	2.47	2.47
58	VII	L2013.7.1	EC6711	Embedded Laboratory	2.52	2.49	2.52	2.52	0.00	0.00	0.00	0.00	0.00	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.84	0.84
59	VII	L2013.7.2	EC6712	Optical and Microwave Laboratory	2.53	2.49	2.52	2.52	2.52	2.52	2.52	0.84	0.84	0.84	0.00	0.00	0.00	0.00	1.68	1.68	2.52	2.52
60	VIII	C2013.8.1	EC6801	Wireless Communication	2.45	2.33	2.36	2.44	2.39	2.38	2.39	0.80	0.80	0.80	0.00	0.00	0.00	0.00	1.60	1.60	2.39	2.39
61	VIII	C2013.8.2	EC6802	Wireless Networks	2.36	2.40	2.46	2.32	2.39	2.39	2.39	2.37	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38
62	VIII	C2013.8.3	GE 6757	Total Quality Management	2.35	2.40	2.41	1.92	0.00	0.00	0.00	0.00	0.00	2.21	2.20	2.20	2.21	2.21	2.21	2.21	0.74	0.74
63	VIII	C2013.8.4	GE6075	Professional Ethics in Engineering	2.35	2.42	2.42	2.45	0.00	0.00	0.00	0.00	0.00	2.43	2.43	2.43	2.43	2.43	2.43	2.43	0.81	0.81
64	VIII	L2013.8.1	EC6811	Project Work	2.48	2.46	2.52	2.77	2.56	2.58	2.61	2.63	2.59	2.60	2.61	2.61	2.60	2.61	2.61	2.61	2.61	2.61
				Direct Attainment of PO					2.20	2.22	2.19	2.03	1.97	1.90	1.87	1.94	2.10	2.43	1.84	1.85	1.96	1.96
				Direct Attainment of PO (%)					73.28	74.06	73.03	67.65	65.57	63.37	62.50	64.63	70.15	81.02	61.48	61.67	65.48	65.48

PRATHYUSHA ENGINEERING COLLEGE

DEPARTMENT OF ECE- BATCH: 2013-17: PO ATTAINMENT

		PROGRAM OUTCOMES												
		A	B	C	D	E	F	G	H	I	J	K	L	M	N
2013-17	Rubrics						85.00	95.00	75.00			85.00	85.00		
	Exit Survey(50%)	68.00	68.00	68.00	68.00	78.00	78.00	60.00	60.00	85.00	85.00	85.00	75.00	75.00	75.00
	Average Indirect Attainment	68.00	68.00	68.00	68.00	78.00	81.50	77.50	67.50	85.00	85.00	85.00	80.00	75.00	75.00
	DIRECT ATTAINMENT	73.28	74.06	73.03	67.65	65.57	63.37	62.50	64.63	70.15	81.02	61.48	61.67	65.48	65.48
	OVERALL PO ATTAINMEN	72.23	72.85	72.02	67.72	68.05	67.00	65.50	65.21	73.12	81.82	66.18	65.33	67.39	67.39

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PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2014-18: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	CO-D	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	I	C2013.1.1	HS6151	Technical English – I	2.06	2.23	2.26	1.68	0.00	0.00	0.00	0.00	0.00	0.67	0.67	0.66	1.34	2.00	1.33	0.00	1.33	1.33	1.33
2	I	C2013.1.2	MA6151	Mathematics – I	1.86	2.59	2.22	2.10	2.19	2.28	2.20	2.19	0.00	0.00	0.00	0.00	0.00	0.00	1.47	1.47	2.21	2.21	2.21
3	I	C2013.1.3	PH6151	Engineering Physics – I	2.05	2.55	2.16	2.17	0.75	0.76	0.74	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.74	1.49	1.49	1.49
4	I	C2013.1.4	CY6151	Engineering Chemistry – I	2.04	2.47	1.92	1.95	1.40	1.41	1.35	1.36	2.07	0.00	0.00	0.00	0.00	0.00	2.05	2.05	1.37	1.37	1.37
5	I	C2013.1.5	GE6151	Computer Programming	2.42	2.78	2.37	2.33	0.00	0.00	0.81	0.81	0.82	0.00	0.00	0.00	0.81	0.00	0.81	0.81	1.63	1.63	1.63
6	I	C2013.1.6	GE6152	Engineering Graphics	2.38	2.87	2.35	2.32	1.65	1.67	1.61	1.62	2.46	0.00	0.00	0.00	0.00	0.00	2.45	2.45	1.63	1.63	1.63
7	I	L2013.1.1	GE6161	Computer Practices Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	1.68	1.71	0.00	0.00	0.00	0.00	0.00	0.85	0.85	2.55	2.55	2.55
8	I	L2013.1.2	GE6162	Engineering Practices Laboratory	2.50	3.00	2.50	2.37	1.73	1.74	1.68	1.68	0.00	0.00	0.00	0.00	0.00	0.00	1.70	1.70	1.70	1.70	1.70
9	I	L2013.1.3	GE6163	Physics and Chemistry Laboratory - I	2.50	3.00	2.50	2.37	0.00	0.00	0.00	0.00	0.85	0.85	0.85	0.85	1.70	2.55	1.70	1.70	1.70	1.70	1.70
10	II	C2013.2.1	HS6251	Technical English – II	1.94	2.86	2.44	2.37	2.40	2.52	2.43	2.43	0.00	0.00	0.00	0.00	0.00	0.00	1.63	1.63	2.45	2.45	2.45
11	II	C2013.2.2	MA6251	Mathematics – II	2.19	2.66	2.33	2.15	2.33	2.37	2.29	2.28	0.00	0.00	0.00	0.00	0.00	0.00	1.54	1.54	2.31	2.31	2.31
12	II	C2013.2.3	PH6251	Engineering Physics – II	2.17	2.74	2.11	2.17	0.77	0.78	0.74	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.75	0.76	1.51	1.51	1.51
13	II	C2013.2.4	CY6251	Engineering Chemistry – II	2.08	2.44	1.89	2.16	2.14	2.16	2.09	2.14	1.42	1.42	0.00	0.00	0.00	0.00	2.13	2.13	2.13	2.13	2.13
14	II	C2013.2.5	EC6201	Electronic Devices	2.17	2.58	2.35	2.22	0.78	0.79	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.55	1.55	1.55
15	II	C2013.2.6	EE6201	Circuit Theory	2.22	2.64	2.22	2.12	0.77	0.00	0.75	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.51	1.51	1.51
16	II	L2013.2.1	GE6262	Physics and Chemistry Laboratory - II	2.50	3.00	2.50	2.38	2.59	2.62	2.52	2.53	2.57	0.00	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55
17	II	L2013.2.2	EC6211	Circuits and Devices Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	2.56	0.00	0.00	0.00	0.00	0.00	0.85	0.85	2.55	2.55	2.55
18	III	C2013.3.1	MA6351	Transforms and Partial Differential Equations	2.26	2.80	2.32	2.11	2.37	2.40	2.30	1.53	1.56	0.00	0.00	0.00	0.00	0.00	1.55	1.55	2.33	2.33	2.33
19	III	C2013.3.2	EE6352	Electrical Engineering and Instrumentation	1.96	1.98	1.76	1.90	1.90	1.89	1.86	1.89	1.26	1.25	0.00	0.00	0.00	0.00	1.25	1.25	1.88	1.88	1.88
20	III	C2013.3.3	EC6301	Object Oriented Programming and Data Structures	2.05	2.48	1.86	2.06	2.11	2.13	2.04	2.08	2.09	2.09	0.00	0.00	0.00	0.00	1.39	1.39	2.08	2.08	2.08
21	III	C2013.3.4	EC6302	Digital Electronics	2.02	2.64	2.46	2.24	2.34	2.42	2.37	2.34	2.37	2.37	0.00	0.00	0.00	0.00	1.58	1.58	2.36	2.36	2.36
22	III	C2013.3.5	EC6303	Signals and Systems	2.29	2.63	1.72	1.93	2.14	2.11	1.98	2.04	1.38	1.37	0.00	0.00	0.00	0.00	1.36	1.36	2.05	2.04	2.05
23	III	C2013.3.6	EC6304	Electronic Circuits- I	1.74	2.40	1.56	1.69	1.85	1.87	1.74	1.79	1.81	1.80	0.00	0.00	0.00	0.00	1.20	1.20	1.80	1.80	1.80
24	III	L2013.3.1	EC6311	Analog and Digital Circuits Laboratory	2.50	3.00	2.50	2.38	2.59	2.62	2.52	2.53	2.57	0.00	0.00	0.00	0.00	0.00	0.85	0.85	2.55	2.55	2.55
25	III	L2013.3.2	EC6312	OOPS and Data Structures Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	1.68	1.71	1.70	0.00	0.00	0.00	0.00	0.85	0.85	2.55	2.55	2.55
26	IV	C2013.4.1	MA6451	Probability and Random Processes	2.12	2.67	2.33	2.09	2.30	2.35	2.27	2.25	1.53	1.53	0.00	0.00	0.00	0.00	1.52	1.52	2.28	2.28	2.28
27	IV	C2013.4.2	EC6401	Electronic Circuits II	2.31	2.57	2.41	2.17	2.37	2.38	2.33	2.31	2.35	1.56	0.00	0.00	0.00	0.00	1.56	1.56	2.34	2.34	2.34
28	IV	C2013.4.3	EC6402	Communication Theory	2.43	2.77	2.30	2.20	2.42	2.42	2.34	1.56	1.59	1.58	0.00	0.00	0.00	0.00	1.58	1.58	2.37	2.37	2.37
29	IV	C2013.4.4	EC6403	Electromagnetic Fields	2.20	2.52	2.30	2.09	2.28	2.30	2.24	2.23	2.26	2.26	0.00	0.00	0.00	0.00	2.25	2.25	2.25	2.25	2.25
30	IV	C2013.4.5	EC6404	Linear Integrated Circuits	2.00	2.22	1.88	1.79	1.97	1.96	1.90	1.91	1.29	1.28	0.00	0.00	0.00	0.00	1.28	1.28	1.92	1.92	1.92
31	IV	C2013.4.6	EC6405	Control System Engineering	2.21	2.70	2.45	2.21	2.39	2.44	2.37	2.35	1.59	1.59	0.00	0.00	0.00	0.00	1.59	1.59	2.38	2.38	2.38
32	IV	L2013.1.1	EC6411	Circuit and Simulation Integrated Laboratory	2.50	3.00	2.50	2.38	2.59	2.62	2.52	2.53	1.71	1.71	0.00	0.00	0.00	0.00	1.70	1.70	2.55	2.55	2.55
33	IV	L2013.1.2	EC6412	Linear Integrated Circuit Laboratory	2.29	3.00	2.50	2.37	2.54	2.60	2.50	2.50	1.69	1.69	0.00	0.00	0.00	0.00	1.68	1.68	2.53	2.53	2.53
34	IV	L2013.1.3	EE6461	Electrical Engineering and Control	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	2.56	2.55	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55
35	V	C2013.5.1	EC6501	Digital Communication	2.42	2.97	2.50	2.37	2.56	2.60	2.51	0.84	0.85	0.85	0.00	0.00	0.00	0.00	1.69	1.69	2.53	2.53	2.53
36	V	C2013.5.2	EC6502	Principles of Digital Signal Processing	2.42	2.84	2.50	2.34	2.53	2.55	2.48	2.47	2.51	2.50	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2014-18: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	CO-D	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
37	V	C2013.5.3	EC6503	Transmission Lines and Wave Guides	2.05	2.75	2.01	2.08	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.73	0.00	0.00	1.46	1.46	1.46	1.46	1.46
38	V	C2013.5.4	GE6351	Environmental Science and Engineering	2.45	2.87	2.50	2.35	2.54	2.56	2.49	2.48	2.52	2.51	0.00	0.00	0.00	0.00	2.50	2.51	2.51	2.51	2.51
39	V	C2013.5.5	EC6504	Microprocessor and Microcontroller	2.45	2.93	2.36	2.37	2.53	2.55	2.45	2.47	2.50	2.49	0.00	0.00	0.00	0.00	2.48	2.49	2.49	2.49	2.49
40	V	L2013.5.1	EC6511	Digital Signal Processing Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	2.56	2.55	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55
41	V	L2013.5.2	EC6512	Communication System Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	0.00	0.00	0.00	0.00	0.00	0.00	1.70	1.70	2.55	2.55	2.55
42	V	L2013.5.3	EC6513	Microprocessor and Microcontroller Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	2.56	2.55	0.00	0.00	0.00	0.00	2.55	2.55	2.55	2.55	2.55
43	VI	C2013.6.1	MG6851	Principles of Management	2.45	2.96	2.48	2.35	2.56	2.58	2.49	2.50	2.53	2.53	0.00	0.00	0.00	0.00	2.52	2.52	2.52	2.52	2.52
44	VI	C2013.6.2	CS6303	Computer Architecture	2.48	2.88	2.46	2.37	0.00	0.00	0.00	0.00	0.00	2.52	2.51	2.51	2.51	2.51	2.51	2.51	1.68	1.67	1.67
45	VI	C2013.6.3	CS6551	Computer Networks	2.45	2.97	2.29	2.35	2.51	2.53	2.42	2.45	2.48	2.47	0.00	0.00	0.00	0.00	2.46	2.47	2.47	2.46	2.46
46	VI	C2013.6.4	EC6601	VLSI Design	2.32	2.74	2.45	2.35	2.46	2.50	2.44	2.44	2.46	2.46	0.00	0.00	0.00	0.00	2.45	2.45	2.45	2.45	2.45
47	VI	C2013.6.5	EC6602	Antenna and Wave propagation	2.47	2.96	2.36	2.37	2.54	2.56	2.46	2.48	2.51	2.50	0.00	0.00	0.00	0.00	2.49	2.50	2.50	2.49	2.49
48	VI	C2013.6.6	EC6001	Medical Electronics	2.32	2.94	2.27	2.21	2.44	2.47	2.35	2.37	2.40	2.40	0.00	0.00	0.00	0.00	2.39	2.39	2.39	2.39	2.39
49	VI	L2013.6.1	EC6611	Computer Networks Laboratory	2.50	3.00	2.50	2.37	0.00	0.00	0.00	0.00	0.00	2.56	0.00	2.55	2.55	2.55	2.55	2.55	1.70	1.70	1.70
50	VI	L2013.6.2	EC6612	VLSI Design Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	0.00	0.85	0.00	0.00	0.00	0.00	1.70	1.70	2.55	2.55	2.55
51	VI	L2013.6.3	GE6674	Communication and Soft Skills - Laboratory Based	2.50	3.00	2.50	2.37	2.59	2.61	2.52	2.52	0.00	0.85	0.00	0.00	0.00	0.00	1.70	1.70	2.55	2.55	2.55
52	VII	C2013.7.1	EC6701	RF and Microwave Engineering	2.14	2.53	2.15	2.15	2.24	2.27	2.20	2.22	2.23	2.23	0.00	0.00	0.00	0.00	2.23	2.23	2.23	2.23	2.23
53	VII	C2013.7.2	EC6702	Optical Communication and Networks	2.31	2.34	2.43	1.91	2.25	2.23	2.21	2.15	2.21	2.20	0.00	0.00	0.00	0.00	2.19	2.19	2.20	2.19	2.19
54	VII	C2013.7.3	EC6703	Embedded and Real Time Systems	2.38	2.70	2.45	2.27	2.45	2.47	2.41	2.40	2.43	2.43	0.00	0.00	0.00	0.00	2.42	2.42	2.42	2.42	2.42
55	VII	C2013.7.4	EC6011	Electromagnetic Interference and Compatibility	2.13	2.35	2.14	2.05	2.17	2.18	2.13	2.13	2.15	2.15	0.00	0.00	0.00	0.00	2.14	2.14	2.14	2.14	2.14
56	VII	C2013.7.5	EC6015	Radar and Navigational Aids	2.40	2.91	2.50	2.35	2.54	2.58	2.49	2.49	2.52	2.52	0.00	0.00	0.00	0.00	2.51	2.51	2.51	2.51	2.51
57	VII	C2013.7.6	EC6004	Satellite Communication	2.28	2.57	2.50	2.13	2.37	2.39	2.35	2.31	2.35	2.35	0.00	0.00	0.00	0.00	2.34	2.34	2.34	2.34	2.34
58	VII	L2013.7.1	EC6711	Embedded Laboratory	2.50	3.00	2.50	2.38	0.00	0.00	0.00	0.00	0.00	2.56	2.54	2.55	2.55	2.55	2.55	2.55	1.70	1.70	1.70
59	VII	L2013.7.2	EC6712	Optical and Microwave Laboratory	2.50	3.00	2.50	2.37	2.59	2.61	2.52	0.84	0.85	0.85	0.00	0.00	0.00	0.00	1.70	1.70	2.55	2.55	2.55
60	VIII	C2013.8.1	EC6801	Wireless Communication	2.38	2.69	2.40	2.29	2.44	2.45	2.39	0.80	0.81	0.80	0.00	0.00	0.00	0.00	1.61	1.61	2.41	2.41	2.41
61	VIII	C2013.8.2	EC6802	Wireless Networks	2.38	2.96	2.45	2.26	2.51	2.54	2.44	2.44	2.48	2.48	2.46	2.46	2.47	2.47	2.47	2.47	2.47	2.47	2.47
62	VIII	C2013.8.3	GE6757	Total Quality Management	2.33	2.73	2.40	2.37	0.00	0.00	0.00	0.00	0.00	2.45	2.44	2.45	2.45	2.45	2.45	2.45	1.63	1.63	1.63
63	VIII	C2013.8.4	GE6075	Professional Ethics in Engineering	2.29	2.87	2.40	2.32	0.00	0.00	0.00	0.00	0.00	2.46	2.44	2.45	2.45	2.45	2.45	2.45	1.63	1.63	1.63
64	VIII	L2013.8.1	EC6811	Project Work	3.00	2.93	3.00	2.40	2.83	2.79	2.76	2.69	2.77	2.75	2.74	2.74	2.75	2.75	2.74	2.75	2.75	2.75	2.75
				Direct Attainment of PO					2.256	2.306	2.2024	2.034	2.01	1.93	1.931	1.995	2.159	2.47469	1.87513	1.88502	2.1849	2.1844	2.1843
				Direct Attainment of PO (%)					75.18	76.87	73.414	67.81	67	64.4	64.37	66.49	71.98	82.4896	62.5045	62.8339	72.83	72.813	72.809

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PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2014-18: PO ATTAINMENT

Parameters	PROGRAM OUTCOMES														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Rubrics						85.00	85.00				85.00	85.00			
Exit Survey(50%)	73.00	73.00	73.00	73.00	85.00	85.00	65.00	65.00	85.00	85.00	85.00	80.00	80.00	80.00	80.00
Average Indirect Attainment	73.00	73.00	73.00	73.00	85.00	85.00	75.00	65.00	85.00	85.00	85.00	82.50	80.00	80.00	80.00
DIRECT ATTAINMENT	75.18	76.87	73.41	67.81	67.01	64.43	64.37	66.49	71.98	82.49	62.50	62.83	72.83	72.81	72.81
OVERALL PO ATTAINMENT	74.75	76.10	73.33	68.85	70.60	68.54	66.49	66.19	74.58	82.99	67.00	66.77	74.26	74.25	74.25

HOD

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2015-19: PO ATTAINMENT

S.No.	SEM	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	PO1	PO2	FO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	I	C2013.1.1	HS6151	Technical English – I	2.36	2.19	2.23	0.00	0.00	0.00	0.00	0.00	0.75	0.75	0.75	1.49	2.24	1.49	0.00	1.49	1.49	1.49
2	I	C2013.1.2	MA6151	Mathematics – I	2.10	2.19	2.18	2.16	2.18	2.17	2.17	0.00	0.00	0.00	0.00	0.00	0.00	1.45	1.45	2.17	2.17	2.17
3	I	C2013.1.3	PH6151	Engineering Physics – I	1.93	1.99	1.94	0.65	0.65	0.65	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.65	0.65	1.30	1.30	1.30
4	I	C2013.1.4	CY6151	Engineering Chemistry – I	2.08	1.93	1.89	1.31	1.29	1.29	1.29	1.93	0.00	0.00	0.00	0.00	0.00	1.94	1.94	1.29	1.29	1.29
5	I	C2013.1.5	GE6151	Computer Programming	2.29	2.32	2.34	0.00	0.00	0.78	0.78	0.78	0.00	0.00	0.00	0.78	0.00	0.78	0.78	1.55	1.55	1.55
6	I	C2013.1.6	GE6152	Engineering Graphics	2.31	2.28	2.37	1.55	1.55	1.56	1.55	2.33	0.00	0.00	0.00	0.00	0.00	2.33	2.33	1.55	1.55	1.55
7	I	L2013.1.1	GE6161	Computer Practices Laboratory	2.50	2.50	2.50	2.50	2.50	2.50	1.66	1.66	0.00	0.00	0.00	0.00	0.00	0.83	0.83	2.50	2.50	2.50
8	I	L2013.1.2	GE6162	Engineering Practices Laboratory	2.50	2.50	2.50	1.66	1.66	1.66	1.66	0.00	0.00	0.00	0.00	0.00	0.00	1.66	1.66	1.66	1.66	1.66
9	I	L2013.1.3	GE6163	Physics and Chemistry Laboratory - I	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.83	0.83	0.83	0.83	1.66	2.50	1.66	1.66	1.66	1.66	1.66
10	II	C2013.2.1	HS6251	Technical English – II	1.94	2.39	2.44	2.26	2.36	2.35	2.32	0.00	0.00	0.00	0.00	0.00	0.00	1.56	1.56	2.34	2.34	2.34
11	II	C2013.2.2	MA6251	Mathematics – II	2.15	2.13	2.18	2.15	2.15	2.16	2.16	0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	2.16	2.16	2.16
12	II	C2013.2.3	PH6251	Engineering Physics – II	2.06	2.13	2.06	0.69	0.70	0.69	0.69	0.00	0.00	0.00	0.00	0.00	0.00	0.69	0.69	1.39	1.39	1.39
13	II	C2013.2.4	CY6251	Engineering Chemistry – II	2.02	1.83	1.87	1.90	1.87	1.88	1.88	1.25	1.25	0.00	0.00	0.00	0.00	1.88	1.88	1.88	1.88	1.88
14	II	C2013.2.5	EC6201	Electronic Devices	2.14	2.12	2.11	0.71	0.71	0.00	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	1.41	1.41
15	II	C2013.2.6	EC6201	Circuit Theory	2.22	2.12	2.17	0.72	0.00	0.72	0.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	1.44	1.44
16	II	L2013.2.1	GE6262	Physics and Chemistry Laboratory - II	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50
17	II	L2013.2.2	EC6211	Circuits and Devices Laboratory	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.00	0.83	0.83	2.50	2.50	2.50
18	III	C2013.3.1	MA6351	Transforms and Partial Differential Equations	2.29	2.43	2.29	2.34	2.35	2.33	1.56	1.56	0.00	0.00	0.00	0.00	0.00	1.56	1.56	2.34	2.34	2.34
19	III	C2013.3.2	EE6352	Electrical Engineering and Instrumentation	2.02	1.88	1.78	1.89	1.85	1.84	1.86	1.23	1.23	0.00	0.00	0.00	0.00	1.24	1.24	1.85	1.85	1.85
20	III	C2013.3.3	EC6301	Object Oriented Programming and Data Structures	2.26	2.30	1.94	2.17	2.14	2.08	2.13	2.12	2.11	0.00	0.00	0.00	0.00	1.41	1.41	2.11	2.11	2.11
21	III	C2013.3.4	EC6302	Digital Electronics	2.14	2.36	2.42	2.31	2.36	2.36	2.34	2.36	2.35	0.00	0.00	0.00	0.00	1.57	1.57	2.35	2.35	2.35
22	III	C2013.3.5	EC6303	Signals and Systems	2.41	2.41	1.74	2.19	2.11	2.01	2.10	1.38	1.38	0.00	0.00	0.00	0.00	1.38	1.38	2.07	2.07	2.07
23	III	C2013.3.6	EC6304	Electronic Circuits- I	2.02	2.31	1.63	1.99	1.98	1.86	1.94	1.93	1.91	0.00	0.00	0.00	0.00	1.28	1.28	1.92	1.92	1.92
24	III	L2013.3.1	EC6311	Analog and Digital Circuits Laboratory	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.00	0.83	0.83	2.50	2.50	2.50
25	III	L2013.3.2	EC6312	OOPS and Data Structures Laboratory	2.50	2.50	2.50	2.50	2.50	2.50	1.66	1.66	1.66	0.00	0.00	0.00	0.00	0.83	0.83	2.50	2.50	2.50
26	IV	C2013.4.1	MA6451	Probability and Random Processes	2.27	2.28	2.31	2.29	2.29	2.30	2.29	1.53	1.53	0.00	0.00	0.00	0.00	1.53	1.53	2.30	2.30	2.30
27	IV	C2013.4.2	EC6401	Electronic Circuits II	2.45	2.37	2.47	2.43	2.42	2.44	2.43	2.43	1.62	0.00	0.00	0.00	0.00	1.62	1.62	2.43	2.43	2.43
28	IV	C2013.4.3	EC6402	Communication Theory	2.45	2.43	2.27	2.38	2.36	2.34	1.57	1.57	1.57	0.00	0.00	0.00	0.00	1.57	1.57	2.35	2.35	2.35
29	IV	C2013.4.4	EC6403	Electromagnetic Fields	2.41	2.37	2.42	2.40	2.39	2.40	2.40	2.40	2.40	0.00	0.00	0.00	0.00	2.40	2.40	2.40	2.40	2.40
30	IV	C2013.4.5	EC6404	Linear Integrated Circuits	2.30	2.36	2.16	2.27	2.26	2.23	2.26	1.50	1.50	0.00	0.00	0.00	0.00	1.50	1.50	2.25	2.25	2.25
31	IV	C2013.4.6	EC6405	Control System Engineering	2.41	2.36	2.47	2.41	2.41	2.43	2.42	1.61	1.62	0.00	0.00	0.00	0.00	1.61	1.61	2.42	2.42	2.42
32	IV	L2013.1.1	EC6411	Circuit and Simulation Integrated Laboratory	2.50	2.50	2.50	2.50	2.50	2.50	2.50	1.66	1.66	0.00	0.00	0.00	0.00	1.66	1.66	2.50	2.50	2.50
33	IV	L2013.1.2	EC6412	Linear Integrated Circuit Laboratory	2.2901	2.50	2.50	2.43	2.47	2.47	2.46	1.64	1.64	0.00	0.00	0.00	0.00	1.64	1.64	2.46	2.46	2.46
34	IV	L2013.1.3	EE6461	Electrical Engineering and Control System	2.496	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50
35	V	C2013.5.1	EC6501	Digital Communication	2.3824	2.40	2.44	2.41	2.42	2.42	0.81	0.81	0.81	0.00	0.00	0.00	0.00	1.61	1.61	2.42	2.42	2.42
36	V	C2013.5.2	EC6502	Principles of Digital Signal Processing	2.3197	2.43	2.47	2.41	2.43	2.44	2.43	2.43	2.43	0.00	0.00	0.00	0.00	2.43	2.43	2.43	2.43	2.43
37	V	C2013.5.3	EC6503	Transmission Lines and Wave Guides	1.9568	2.28	1.97	0.00	0.00	0.00	0.00	0.00	0.69	0.69	0.69	0.00	0.00	1.38	1.38	1.38	1.38	1.38
38	V	C2013.5.4	GE6351	Environmental Science and Engineering	2.3824	2.33	2.32	2.34	2.33	2.33	2.33	2.33	2.33	0.00	0.00	0.00	0.00	2.33	2.33	2.33	2.33	2.33
39	V	C2013.5.5	EC6504	Microprocessor and Microcontroller	2.4305	2.38	2.33	2.35	2.32	2.33	2.33	2.33	2.33	0.00	0.00	0.00	0.00	2.33	2.33	2.33	2.33	2.33
40	V	L2013.5.1	EC6511	Digital Signal Processing Laboratory	2.496	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50
41	V	C2013.5.2	EC6512	Communication System Laboratory	2.496	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	0.00	1.66	1.66	2.50	2.50	2.50
42	V	L2013.5.3	EC6513	Microprocessor and Microcontroller Laboratory	2.496	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50
43	VI	C2013.6.1	MG6851	Principles of Management	2.4094	2.43	2.45	2.43	2.44	2.44	2.44	2.44	2.44	0.00	0.00	0.00	0.00	2.44	2.44	2.44	2.44	2.44
44	VI	C2013.6.2	CS6303	Computer Architecture	2.4108	2.41	2.41	0.00	0.00	0.00	0.00	0.00	2.41	2.41	2.41	2.41	2.41	2.41	2.41	1.61	1.61	1.61
45	VI	C2013.6.3	CS6551	Computer Networks	2.4094	2.43	2.15	2.33	2.31	2.26	2.30	2.29	2.28	0.00	0.00	0.00	0.00	2.29	2.29	2.29	2.29	2.29
46	VI	C2013.6.4	EC6601	VLSI Design	2.2562	2.23	2.39	2.29	2.31	2.33	2.31	2.32	2.32	0.00	0.00	0.00	0.00	2.32	2.32	2.32	2.32	2.32
47	VI	C2013.6.5	EC6602	Antenna and Wave propagation	2.3815	2.45	2.38	2.40	2.41	2.40	2.40	2.41	2.40	0.00	0.00	0.00	0.00	2.40	2.40	2.40	2.40	2.40

48	VI	C2013.6.6	EC 6001	Medical Electronics	2.2947	2.47	2.25	2.34	2.35	2.31	2.33	2.33	2.32	0.00	0.00	0.00	0.00	2.33	2.33	2.33	2.33	2.33
49	VI	L2013.6.1	EC6611	Computer Networks Laboratory	2.496	2.50	2.50	0.00	0.00	0.00	0.00	0.00	2.50	0.00	2.50	2.50	2.50	2.50	2.50	1.66	1.66	1.66
50	VI	L2013.6.2	EC6612	VLSI Design Laboratory	2.496	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.83	0.00	0.00	0.00	0.00	1.66	1.66	2.50	2.50	2.50
51	VI	L2013.6.3	GE6674	Communication and Soft Skills - Laboratory Based	2.496	2.50	2.50	2.50	2.50	2.50	2.50	0.00	0.83	0.00	0.00	0.00	0.00	1.66	1.66	2.50	2.50	2.50
52	VII	C2013.7.1	EC6701	RF and Microwave Engineering	2.0102	2.23	2.07	2.10	2.14	2.10	2.11	2.12	2.11	0.00	0.00	0.00	0.00	2.11	2.11	2.11	2.11	2.11
53	VII	C2013.7.2	EC6702	Optical Communication and Networks	2.321	1.98	2.29	2.20	2.15	2.21	2.19	2.19	2.20	0.00	0.00	0.00	0.00	2.19	2.19	2.19	2.19	2.19
54	VII	C2013.7.3	EC6703	Embedded and Real Time Systems	2.4773	2.39	2.36	2.41	2.39	2.39	2.39	2.39	2.39	0.00	0.00	0.00	0.00	2.39	2.39	2.39	2.39	2.39
55	VII	C2013.7.4	EC 6011	Electromagnetic Interference and Compatibility	2.32	2.21	2.30	2.28	2.26	2.28	2.27	2.27	2.27	0.00	0.00	0.00	0.00	2.27	2.27	2.27	2.27	2.27
56	VII	C2013.7.5	EC 6015	Radar and Navigational Aids	2.4661	2.39	2.47	2.44	2.43	2.45	2.44	2.44	2.44	0.00	0.00	0.00	0.00	2.44	2.44	2.44	2.44	2.44
57	VII	C2013.7.6	EC 6004	Satellite Communication	2.3288	2.19	2.50	2.34	2.34	2.39	2.36	2.36	2.37	0.00	0.00	0.00	0.00	2.37	2.37	2.37	2.37	2.37
58	VII	L2013.7.1	EC6711	Embedded Laboratory	2.496	2.50	2.50	0.00	0.00	0.00	0.00	0.00	2.50	2.50	2.50	2.50	2.50	2.50	2.50	1.66	1.66	1.66
59	VII	L2013.7.2	EC6712	Optical and Microwave Laboratory	2.496	2.50	2.50	2.50	2.50	2.50	0.83	0.83	0.83	0.00	0.00	0.00	0.00	1.66	1.66	2.50	2.50	2.50
60	VIII	C2013.8.1	EC6801	Wireless Communication	2.3759	2.24	2.32	2.31	2.29	2.31	0.77	0.77	0.77	0.00	0.00	0.00	0.00	1.53	1.53	2.30	2.30	2.30
61	VIII	C2013.8.2	EC6802	Wireless Networks	2.3787	2.45	2.42	2.42	2.43	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42	2.42
62	VIII	C2013.8.3	GE 6757	Total Quality Management	2.3347	2.32	2.40	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1.57	1.57	1.57
63	VIII	C2013.8.4	GE6075	Professional Ethics in Engineering	2.2719	2.35	2.40	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36	2.36	2.36	2.36	2.36	1.57	1.57	1.57
64	VIII	L2013.8.1	EC6811	Project Work	3	2.93	3.00	2.98	2.97	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
				Direct Attainment of PO				2.1904	2.21634	2.1864	2.0194	1.9738	1.9029	1.9215	1.97909	2.14548	2.4729	1.8414	1.84712	2.14446	2.14445	2.14445
				Direct Attainment of PO (%)				73.01	73.88	72.88	67.31	65.79	63.43	64.05	65.97	71.52	82.43	61.38	61.57	71.48	71.48	71.48

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF ECE- BATCH: 2015-19: PO ATTAINMENT

Parameters	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Average(Indirect Attainment through Surveys) (50%)				95.00	95.00	95.00	95.00	95.00			95.00	95.00			
Exit Survey(50%)	95.00	85.00	85.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	92.50	87.50	85.00	85.00	85.00
Average Indirect Attainment	95.00	85.00	85.00	90.00	90.00	90.00	90.00	90.00	87.00	85.00	92.50	87.50	85.00	85.00	85.00
DIRECT ATTAINMENT	73.01	73.88	72.88	67.31	65.79	63.43	64.05	65.97	71.52	82.43	61.38	61.57	71.48	71.48	71.48
OVERALL PO ATTAINMENT	77.41	76.10	75.30	71.85	70.63	68.74	69.24	70.78	74.61	82.94	67.60	66.76	74.19	74.19	74.19

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S.No.	Year	Ref.No.	Course Code	Course Name	CO-A	CO-B	CO-C	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	I	C2013.1.1	HS6151	Technical English – I	2.18	2.93	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.73	1.45	2.18	1.45	0.00	0.73	0.73
2	I	C2013.1.2	MA6151	Mathematics – I	2.38	2.92	0.00	2.25	2.25	2.25	2.25	0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.50	0.75	0.75
3	I	C2013.1.3	PH6151	Engineering Physics – I	2.26	2.88	0.00	0.73	0.73	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73	0.73	0.73
4	I	C2013.1.4	CY6151	Engineering Chemistry – I	2.35	2.83	0.00	1.47	1.47	1.47	1.47	2.20	0.00	0.00	0.00	0.00	0.00	2.20	2.20	0.73	0.73
5	I	C2013.1.5	GE6151	Computer Programming	2.36	2.83	0.00	0.00	0.00	0.73	0.73	0.73	0.00	0.00	0.00	0.73	0.00	0.73	0.73	0.00	0.00
6	I	C2013.1.6	GE6152	Engineering Graphics	2.40	2.92	0.00	1.51	1.51	1.51	1.51	2.26	0.00	0.00	0.00	0.00	0.00	2.26	2.26	0.75	0.75
7	I	L2013.1.1	GE6161	Computer Practices Laboratory	2.40	3.00	0.00	2.30	2.30	2.30	1.53	1.53	0.00	0.00	0.00	0.00	0.00	0.77	0.77	0.77	0.77
8	I	L2013.1.2	GE6162	Engineering Practices Laboratory	2.30	3.00	0.00	1.50	1.50	1.50	1.50	0.00	0.00	0.00	0.00	0.00	0.00	1.50	1.50	0.75	0.75
9	I	L2013.1.3	GE6163	Physics and Chemistry Laboratory - I	2.38	3.00	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.76	0.76	1.52	2.28	1.52	1.52	0.76	0.76
10	II	C2013.2.1	HS6251	Technical English – II	2.37	2.95	0.00	2.26	2.26	2.26	2.26	0.00	0.00	0.00	0.00	0.00	0.00	1.51	1.51	0.75	0.75
11	II	C2013.2.2	MA6251	Mathematics – II	2.35	2.80	0.00	2.19	2.19	2.19	2.19	0.00	0.00	0.00	0.00	0.00	0.00	1.46	1.46	0.73	0.73
12	II	C2013.2.3	PH6251	Engineering Physics – II	2.38	2.60	0.00	0.71	0.71	0.71	0.71	0.00	0.00	0.00	0.00	0.00	0.00	0.71	0.71	0.71	0.71
13	II	C2013.2.4	CY6251	Engineering Chemistry – II	2.28	2.52	0.00	2.04	2.04	2.04	2.04	1.36	1.36	0.00	0.00	0.00	0.00	2.04	2.04	0.68	0.68
14	II	C2013.2.5	EC6201	Electronic Devices	2.38	2.84	0.00	0.74	0.74	0.00	0.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.74
15	II	C2013.2.6	EE6201	Circuit Theory	2.32	2.84	0.00	0.73	0.00	0.73	0.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.73
16	II	L2013.2.1	GE6262	Physics and Chemistry Laboratory - II	2.40	2.93	0.00	2.27	2.27	2.27	2.27	2.27	0.00	0.00	0.00	0.00	0.00	2.27	2.27	0.76	0.76
17	II	L2013.2.2	EC6211	Circuits and Devices Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	2.28	0.00	0.00	0.00	0.00	0.00	0.76	0.76	0.76	0.76
18	III	C2013.3.1	MA6351	Transforms and Partial Differential Equations	2.28	2.88	0.00	2.20	2.20	2.20	1.46	1.46	0.00	0.00	0.00	0.00	0.00	1.46	1.46	0.73	0.73
19	III	C2013.3.2	EE6352	Electrical Engineering and Instrumentation	2.25	2.73	0.00	2.12	2.12	2.12	2.12	1.41	1.41	0.00	0.00	0.00	0.00	1.41	1.41	0.71	0.71
20	III	C2013.3.3	EC6301	Object Oriented Programming and Data Structures	2.21	2.82	0.00	2.14	2.14	2.14	2.14	2.14	2.14	0.00	0.00	0.00	0.00	1.43	1.43	0.71	0.71
21	III	C2013.3.4	EC6302	Digital Electronics	2.40	2.92	0.00	2.26	2.26	2.26	2.26	2.26	2.26	0.00	0.00	0.00	0.00	1.51	1.51	0.75	0.75
22	III	C2013.3.5	EC6303	Signals and Systems	2.30	2.95	0.00	2.23	2.23	2.23	2.23	1.49	1.49	0.00	0.00	0.00	0.00	1.49	1.49	1.49	1.49
23	III	C2013.3.6	EC6304	Electronic Circuits- I	2.12	2.87	0.00	2.12	2.12	2.12	2.12	2.12	2.12	0.00	0.00	0.00	0.00	1.42	1.42	1.42	1.42
24	III	L2013.3.1	EC6311	Analog and Digital Circuits Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	2.28	0.00	0.00	0.00	0.00	0.00,	0.76	0.76	0.76	0.76
25	III	L2013.3.2	EC6312	OOPS and Data Structures Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	1.52	1.52	1.52	0.00	0.00	0.00	0.00	0.76	0.76	0.76	0.76
26	IV	C2013.4.1	MA6451	Probability and Random Processes	2.35	2.75	0.00	2.17	2.17	2.17	2.17	1.45	1.45	0.00	0.00	0.00	0.00	1.45	1.45	0.72	0.72
27	IV	C2013.4.2	EC6401	Electronic Circuits II	2.36	2.80	0.00	2.19	2.19	2.19	2.19	2.19	1.46	0.00	0.00	0.00	0.00	1.46	1.46	0.73	0.73
28	IV	C2013.4.3	EC6402	Communication Theory	2.30	2.93	0.00	2.22	2.22	2.22	1.48	1.48	1.48	0.00	0.00	0.00	0.00	1.48	1.48	0.74	0.74
29	IV	C2013.4.4	EC6403	Electromagnetic Fields	2.25	2.85	0.00	2.17	2.17	2.17	2.17	2.17	2.17	0.00	0.00	0.00	0.00	2.17	2.17	0.72	0.72
30	IV	C2013.4.5	EC6404	Linear Integrated Circuits	2.31	2.83	0.00	2.18	2.18	2.18	2.18	1.46	1.46	0.00	0.00	0.00	0.00	1.46	1.46	1.46	1.46
31	IV	C2013.4.6	EC6405	Control System Engineering	2.32	2.87	0.00	2.21	2.21	2.21	2.21	1.47	1.47	0.00	0.00	0.00	0.00	1.47	1.47	1.47	1.47
32	IV	L2013.1.1	EC6411	Circuit and Simulation Integrated Laboratory	2.37	2.97	0.00	2.27	2.27	2.27	2.27	1.51	1.51	0.00	0.00	0.00	0.00	1.51	1.51	0.76	0.76
33	IV	L2013.1.2	EC6412	Linear Integrated Circuit Laboratory	2.37	2.97	0.00	2.27	2.27	2.27	2.27	1.51	1.51	0.00	0.00	0.00	0.00	1.51	1.51	0.76	0.76
34	IV	L2013.1.3	EE6461	Electrical Engineering and Control System Laboratory	2.37	2.97	0.00	2.27	2.27	2.27	2.27	2.27	2.27	0.00	0.00	0.00	0.00	2.27	2.27	0.76	0.76
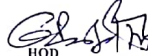
No	Sem	Code	Subject Code	Course	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
35	V	C2013.5.1	EC6501	Digital Communication	2.31	2.86	0.00	2.20	2.20	2.20	0.73	0.73	0.73	0.00	0.00	0.00	0.00	1.46	1.46	0.73	0.73
36	V	C2013.5.2	EC6502	Principles of Digital Signal Processing	2.37	2.91	0.00	2.24	2.24	2.24	2.24	2.24	2.24	0.00	0.00	0.00	0.00	2.24	2.24	0.75	0.75
37	V	C2013.5.3	EC6503	Transmission Lines and Wave Guides	2.12	2.80	0.00	0.00	0.00	0.00	0.00	0.70	0.70	0.70	0.00	0.00	0.00	1.40	1.40	0.70	0.70
38	V	C2013.5.4	GE6351	Environmental Science and Engineering	2.37	2.92	0.00	2.25	2.25	2.25	2.25	2.25	2.25	0.00	0.00	0.00	0.00	2.25	2.25	0.75	0.75
39	V	C2013.5.5	EC6504	Microprocessor and Microcontroller	2.34	2.83	0.00	2.20	2.20	2.20	2.20	2.20	2.20	0.00	0.00	0.00	0.00	2.20	2.20	0.73	0.73
40	V	L2013.5.1	EC6511	Digital Signal Processing Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	2.28	2.28	0.00	0.00	0.00	0.00	2.28	2.28	1.52	1.52
41	V	L2013.5.2	EC6512	Communication System Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	0.00	0.00	0.00	0.00	0.00	0.00	1.52	1.52	0.76	0.76
42	V	L2013.5.3	EC6513	Microprocessor and Microcontroller Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	2.28	2.28	0.00	0.00	0.00	0.00	2.28	2.28	0.76	0.76
43	VI	C2013.6.1	MG6851	Principles of Management	2.32	2.92	0.00	2.23	2.23	2.23	2.23	2.23	2.23	0.00	0.00	0.00	0.00	2.23	2.23	0.74	0.74
44	VI	C2013.6.2	CS6303	Computer Architecture	2.33	2.79	0.00	0.00	0.00	0.00	0.00	0.00	2.18	2.18	2.18	2.18	2.18	2.18	2.18	0.73	0.73
45	VI	C2013.6.3	CS6551	Computer Networks	2.27	2.72	0.00	2.12	2.12	2.12	2.12	2.12	2.12	0.00	0.00	0.00	0.00	2.12	2.12	0.71	0.71
46	VI	C2013.6.4	EC6601	VLSI Design	2.25	2.83	0.00	2.16	2.16	2.16	2.16	2.16	2.16	0.00	0.00	0.00	0.00	2.16	2.16	0.72	0.72
47	VI	C2013.6.5	EC6602	Antenna and Wave propagation	2.31	2.95	0.00	2.24	2.24	2.24	2.24	2.24	2.24	0.00	0.00	0.00	0.00	2.24	2.24	1.49	1.49
48	VI	C2013.6.6	EC6001	Medical Electronics	2.16	2.95	0.00	2.17	2.17	2.17	2.17	2.17	2.17	0.00	0.00	0.00	0.00	2.17	2.17	1.45	1.45
49	VI	L2013.6.1	EC6611	Computer Networks Laboratory	2.39	2.97	0.00	0.00	0.00	0.00	0.00	0.00	2.28	0.00	2.28	2.28	2.28	2.28	2.28	0.76	0.76
50	VI	L2013.6.2	EC6612	VLSI Design Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	2.28	0.00	0.76	0.00	0.00	0.00	0.00	1.52	1.52	0.76	0.76
51	VI	L2013.6.3	GE6674	Communication and Soft Skills - Laboratory Based	2.40	2.97	0.00	2.28	2.28	2.28	2.28	0.00	0.76	0.00	0.00	0.00	0.00	1.52	1.52	0.76	0.76
52	VII	C2013.7.1	EC6701	RF and Microwave Engineering	2.22	2.67	0.00	2.08	2.08	2.08	2.08	2.08	2.08	0.00	0.00	0.00	0.00	2.08	2.08	0.69	0.69
53	VII	C2013.7.2	EC6702	Optical Communication and Networks	2.25	2.29	0.00	1.93	1.93	1.93	1.93	1.93	1.93	0.00	0.00	0.00	0.00	1.93	1.93	0.64	0.64
54	VII	C2013.7.3	EC6703	Embedded and Real Time Systems	2.37	2.69	0.00	2.15	2.15	2.15	2.15	2.15	2.15	0.00	0.00	0.00	0.00	2.15	2.15	0.72	0.72
55	VII	C2013.7.4	EC6011	Electromagnetic Interference and Compatibility	2.27	2.67	0.00	2.10	2.10	2.10	2.10	2.10	2.10	0.00	0.00	0.00	0.00	2.10	2.10	0.70	0.70
56	VII	C2013.7.5	EC6015	Radar and Navigational Aids	2.33	2.49	0.00	2.05	2.05	2.05	2.05	2.05	2.05	0.00	0.00	0.00	0.00	2.05	2.05	0.68	0.68
57	VII	C2013.7.6	EC6004	Satellite Communication	2.36	2.50	0.00	2.06	2.06	2.06	2.06	2.06	2.06	0.00	0.00	0.00	0.00	2.06	2.06	0.76	0.76
58	VII	L2013.7.1	EC6711	Embedded Laboratory	2.40	2.97	0.00	0.00	0.00	0.00	0.00	0.00	2.28	2.28	2.28	2.28	2.28	2.28	2.28	0.76	0.76
59	VII	L2013.7.2	EC6712	Optical and Microwave Laboratory	2.40	2.97	0.00	2.28	2.28	2.28	0.76	0.76	0.76	0.00	0.00	0.00	0.00	1.52	1.52	0.73	0.73
60	VIII	C2013.8.1	EC6801	Wireless Communication	2.35	2.77	0.00	2.18	2.18	2.18	0.73	0.73	0.73	0.00	0.00	0.00	0.00	1.45	1.45	0.73	0.73
61	VIII	C2013.8.2	EC6802	Wireless Networks	2.24	2.95	0.00	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20
62	VIII	C2013.8.3	GE6757	Total Quality Management	2.33	2.87	0.00	0.00	0.00	0.00	0.00	0.00	2.21	2.21	2.21	2.21	2.21	2.21	2.21	0.74	0.74
63	VIII	C2013.8.4	GE6075	Professional Ethics in Engineering	2.28	2.90	0.00	0.00	0.00	0.00	0.00	0.00	2.20	2.20	2.20	2.20	2.20	2.20	2.20	0.73	0.73
64	VIII	L2013.8.1	EC6811	Project Work	1.55	2.93	0.00	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
				Direct Attainment of PO				112.69	111.96	112.69	105.99	84.46	82.80	15.16	17.44	18.96	19.72	106.61	105.16	54.03	54.03
				Direct Attainment of PO (%)				0.86	0.86	0.86	0.86	0.86	0.85	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.86
								86.09	86.09	86.09	86.00	85.66	85.45	84.95	85.50	85.81	85.91	85.91	85.92	85.90	85.90

INDIRECT ATTAINMENT

Parameters	PROGRAM OUTCOMES-2016-20														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Industry Expert Interaction	80.00	80.00	80.00	75.00	89.00				88.00	91.00	86.00		80.00	80.00	80.00
Internship	75.00	74.00	84.00				74.00				92.00	88.00	81.00	84.00	75.00
Projects								91.00	91.00	91.00					
Miniprojects	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00
Industrial Visits						90.00	90.00	85.00				90.00			90.00
Workshops	75.00	75.00	75.00		96.00										
Extracurricular activities								75.00	75.00			90.00			
Preplacement Training										83.00	83.00	83.00			
Technical Club Technical Training and Certifications	73.20	77.00	78.00	76.40	82.00	89.00					94.00	96.00	83.00	88.00	77.00
Professional Society	75.00	75.00	75.00	85.00	90.00	85.00	80.00				95.00	85.00	85.00	90.00	85.00
Cocurricular activities								85.00	80.00		95.00	90.00			
Consultancy	85.00	85.00	85.00	85.00							95.00	75.00	75.00	85.00	75.00
EDC											95.00	95.00			
NPTEL	90.00	90.00	90.00	90.00	95.00		75.00					95.00	95.00	95.00	
Average(Indirect Attainment through Surveys) (50%)	80.40	80.75	82.13	83.57	90.33	88.50	81.80	85.20	84.80	88.75	91.67	88.82	84.14	87.43	81.71
Exit Survey(50%)	81.00	82.00	74.00	71.00	87.00	84.00	68.00	64.00	89.00	92.00	93.00	84.00	90.00	83.00	81.00
Average Indirect Attainment	80.70	81.38	78.06	77.28	88.67	86.25	74.90	74.60	86.90	90.38	92.33	86.41	87.07	85.21	81.36
DIRECT ATTAINMENT	86.09	86.09	86.09	86.00	85.66	85.45	84.95	85.50	85.81	85.91	85.91	85.92	85.90	85.90	85.90
OVERALL PO ATTAINMENT	85.01	85.15	84.48	84.25	86.26	85.61	82.94	83.32	86.03	86.80	87.19	86.01	86.14	85.76	84.99

HOD

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
PO ATTAINMENT 2013-2017 BATCH

ESTD. 2001

PO No	Method assessment	Direct Assessment		INDIRECT				
		Direct Assessment (100%)	Direct Assessment (80%)	EOC(20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	67	54	15	18		17	70
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	64	51	15	19		19	70
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	66	53	16	18		17	70
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	66	53	16	17		16	70
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	71	57	17	16		17	73
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	73	58	16	18		17	76
7	Knowledge of contemporary issues.	62	49	16	17	18	17	66
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	76	61	17	18		18	79
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	73	59	17	18		17	76
10	An ability to communicate effectively with a range of audiences.	72	57	16	16		16	73
11	Recognition of the need for and an ability to engage in continuing professional development.	64	51	13	18	18	16	68
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	69	55	15	18		17	72
13	An ability to understand the mathematical and physical foundations of electrical engineering and how they are applied in complex electrical and electronic system through simulation, experimentation and interpretation of data.	61	49	16	18		17	66
14	An ability to design electrical /electronic system (or) device for any given process with realistic constraints.	60	48	15	18		16	65

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
OVERALL PO ATTAINMENT   2013-2017 BATCH

ESTD. 2001

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13	PO14
PO Target	65	65	65	65	65	65	65	65	65	65	65	65	65	65
PO Achieved	72	70	70	70	73	76	66	79	76	74	68	72	66	65

OVERALL PO ATTAINMENT FOR BATCH 2013-2017

■ PO Target   ■ PO Achieved

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
PO ATTAINMENT 2014-2018 BATCH

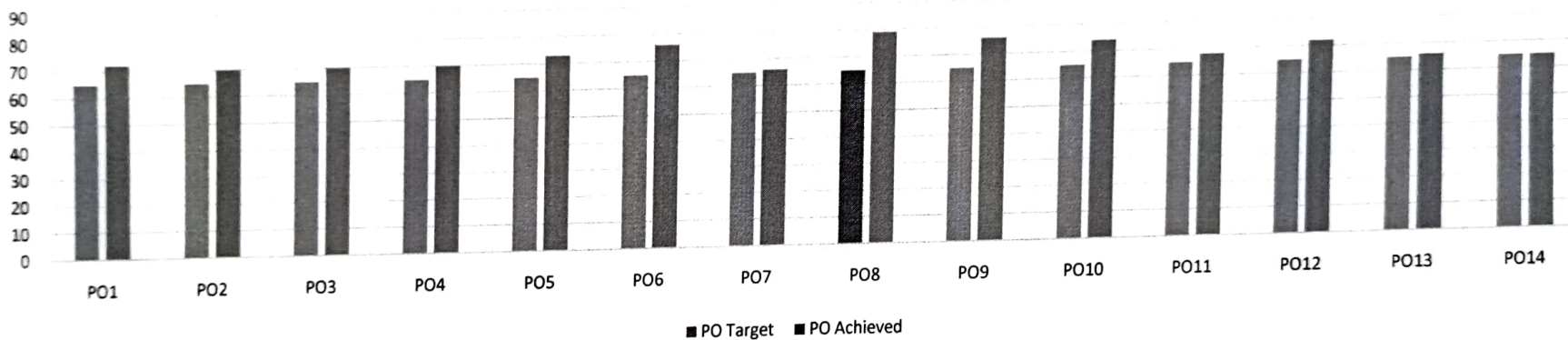| PO No.	Method assessment	Direct (80%)		Indirect(20%)				% PO Attainment
		Direct Assessment (100%)	Direct Assessment (80%)	EOC(20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	69	55	17	18		18	73
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	66	53	17	18		18	71
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	70	56	18	18		18	74
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	68	55	16	19		17	72
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	72	58	17	18		18	76
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	68	55	18	18		18	73
7	Knowledge of contemporary issues.	61	49	17	18	19	18	67
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	76	61	17	18		18	79
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	66	53	18	18		18	71
10	An ability to communicate effectively with a range of audiences.	70	56	18	18	19	18	74
11	Recognition of the need for and an ability to engage in continuing professional development.	64	51	17	18		18	69
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	68	54	18	19		19	73
13	An ability to understand the mathematical and physical foundations of electrical engineering and how they are applied in complex electrical and electronic system through simulation, experimentation and interpretation of data.	78	62	17	17		17	79
14	An ability to design electrical /electronic system (or) device for any given process with realistic constraints.	72	57	16	17		17	74
15	Ability to design, analyse and solve complex engineering problems in Renewable Energy	78	63	17	17		17	80

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
OVERALL PO ATTAINMENT 2014-2018 BATCH

ESTD. 2001

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
PO Target	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
PO Achieved	73	71	74	74	76	73	67	79	71	75	69	73	79	74	80

OVERALL PO ATTAINMENT FOR BATCH 2014-2018

■ PO Target ■ PO Achieved

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
PO ATTAINMENT 2015-2019 BATCH

ESTD. 2001

PO No	Method assessment	DIRECT		INDIRECT				% PO Attainment
		Direct Assessment (100%)	Direct Assessment (80%)	EOC(20%)	EXIT SURVEY(20 %)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	71	57	16	18		17	74
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	68	54	15	18		16	71
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	72	57	16	18		17	74
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	67	54	14	18		16	70
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	73	58	15	18		17	75
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	77	62	16	18		17	79
7	Knowledge of contemporary issues.	74	59	16	17	19	17	76
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	80	64	17	16	17	17	81
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	77	61	16	18		17	79
10	An ability to communicate effectively with a range of audiences.	73	58	16	18	19	18	76
11	Recognition of the need for and an ability to engage in continuing professional development.	68	55	16	16	19	17	72
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	73	59	15	18		17	75
13	Ability to apply concepts of Electrical and Electronics Engineering in the analysis, design, and development of Complex electrical and electronic systems using modern tools such as LabVIEW.	79	63	17	19		18	81
14	Ability to design, develop and implement electrical and electronics and allied interdisciplinary projects to meet the demands of industry with realistic constraints.	79	63	18	19		19	82
15	Ability to design, analyse and solve complex engineering problems in Renewable Energy	80	64	17	19		18	82

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
OVERALL PO ATTAINMENT   2015-2019 BATCH

ESTD. 2001

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
PO Target	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
PO Achieve	74	71	74	70	75	79	76	81	79	76	72	75	81	82	82

OVERALL PO ATTAINMENT FOR BATCH 2015-2019

■ PO Target ■ PO Achieved

HOD /EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
PO ATTAINMENT 2016-2020 BATCH

PO No	Method assessment	DIRECT		INDIRECT				% PO Attainment
		Direct Assessment (100%)	Direct Assessment (80%)	EOC(20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	70	56	16	18		18	75
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	68	54	15	18		18	72
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	70	56	16	18		18	74
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	68	55	14	18		18	72
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	75	60	15	18		18	78
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	75	60	16	18		18	78
7	Knowledge of contemporary issues.	72	57	16	17	19	18	76
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	79	63	17	17		17	81
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	74	59	17	18		18	77
10	An ability to communicate effectively with a range of audiences.	75	60	16	17	19	18	78
11	Recognition of the need for and an ability to engage in continuing professional development.	73	59	18	19		19	77
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	71	57	17	18	18	18	75
13	Ability to apply concepts of Electrical and Electronics Engineering in the analysis, design, and development of Complex electrical and electronic systems using modern tools such as LabVIEW.	79	63	17	17		17	81
14	Ability to design, develop and implement electrical and electronics and allied interdisciplinary projects to meet the demands of industry with realistic constraints.	79	63	16	18		18	81
15	Ability to design, analyse and solve complex engineering problems in Renewable Energy	81	65	18	17		18	83

K (signature)
HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF EEE
OVERALL PO ATTAINMENT   2016-2020 BATCH

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
PO Target	70	70	70	70	70	70	70	70	70	70	70	70	70	70	70
PO Achieved	75	72	74	72	78	78	76	81	77	78	77	75	81	81	83

OVERALL PO ATTAINMENT FOR BATCH 2016-2020
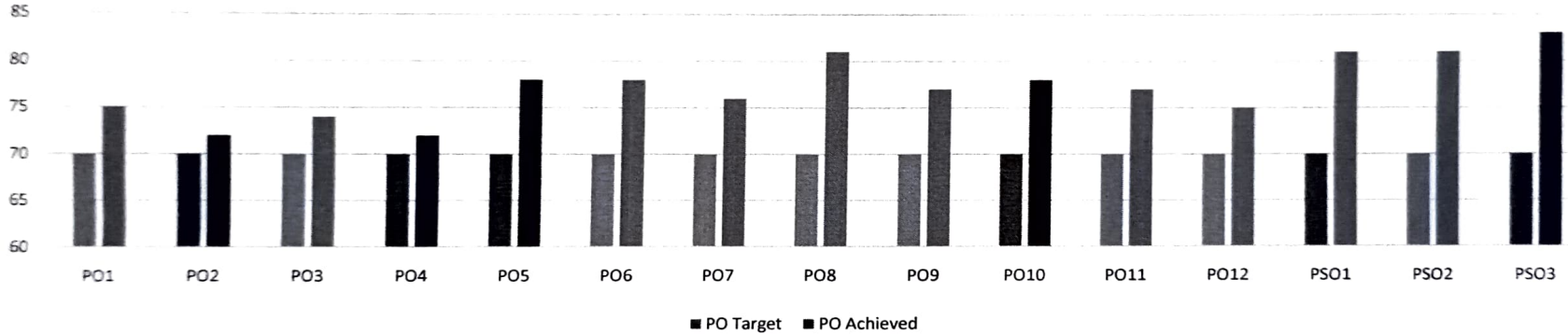
■ PO Target   ■ PO Achieved

HOD/EEE

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF IT
SUMMARY GRAPH FOR PROGRAMME OUTCOMES (BATCH : 2015-19)

ESTD. 2001

POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13
TARGET	70	70	70	70	70	70	70	70	70	70	70	70	70
ACHIEVED	77	76	69	74	71	70	72	76	73	70	77	79	73
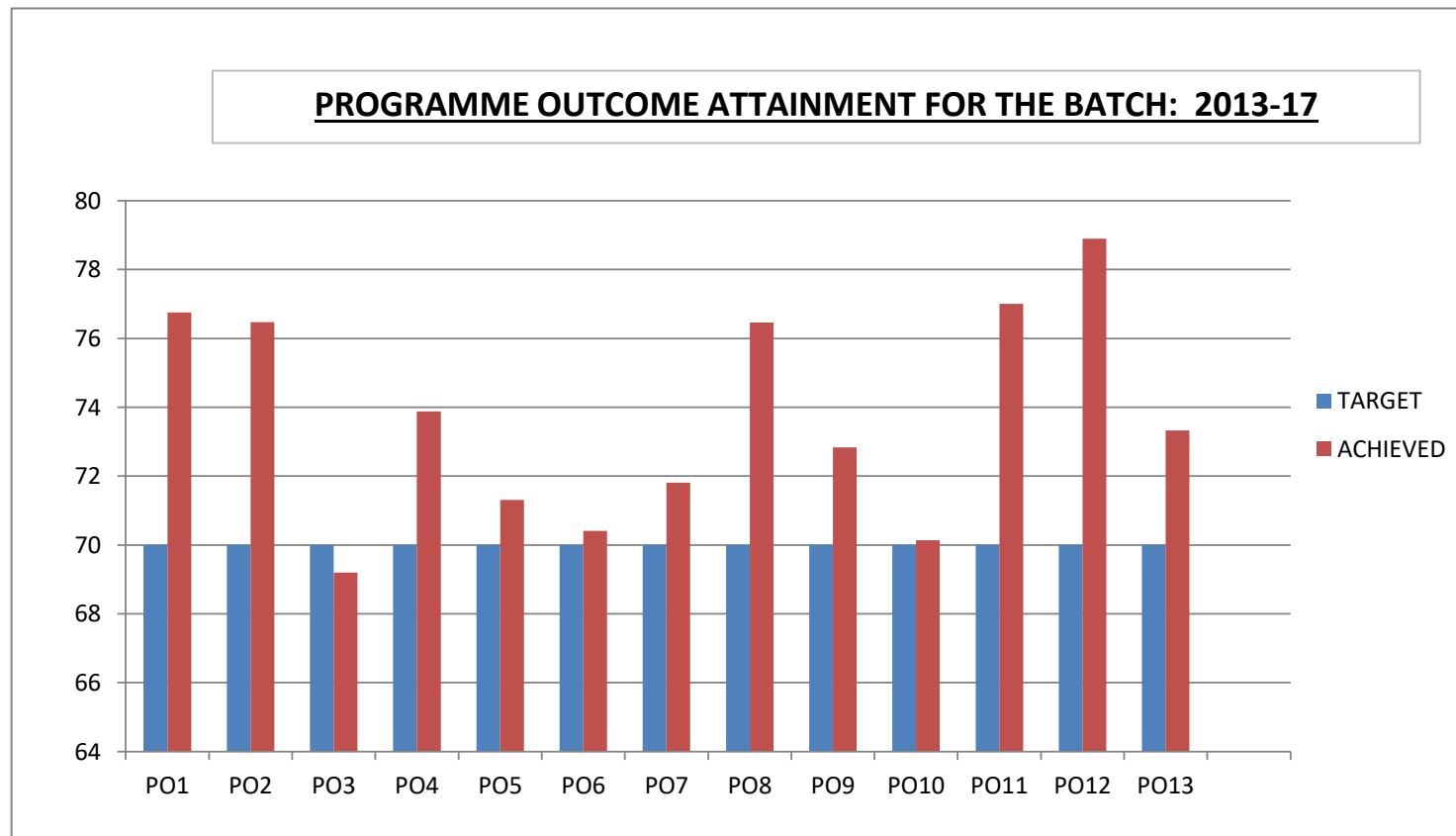
PROGRAMME OUTCOME ATTAINMENT FOR THE BATCH: 2013-17

HOD / IT

SUMMARY OF PROGRAMME OUTCOMES (BATCH : 2015- 2019)

POs No	PROGRAMME OUTCOMES	TARGET	ACHIEVED
1	An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and queuing theory, science, and engineering;	70	77
2	An ability to design and conduct experiments, as well as to analyze and interpret data;	70	76
3	An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;	70	69
4	An ability to function on multi-disciplinary teams;	70	74
5	An ability to identify, formulate, and solve engineering problems;	70	71
6	An understanding of professional, ethical, legal, security and social issues and responsibilities;	70	70
7	An ability to communicate effectively with a range of audiences;	70	72
8	An ability to analyze the local and global impact of computing on individuals, organizations, and society;	70	76
9	A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;	70	73
10	A knowledge of contemporary issues;	70	70
11	An ability to use the techniques, skills, and modern engineering tools necessary for practice as a it professional;	70	77
12	Graduates are able to participate and succeed in competitive examination like GRE, GATE, TOEFL, GMAT, SCJP, RHC, OCP etc.	70	79
13	The use of current application software; the design and use of operating systems; and the analysis, design, testing, and documentation of computer programs for the use in information engineering technologies.	70	73

PRATHYUSHA ENGINEERING COLLEGE

DPEARTMENT OF IT

PO ATTAINMENT FOR COURSES (2015- 2019)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13
I	MATHEMATICS I	A	2.36	1.33		1.66	2.5							0.67	
	ENGINEERING PHYSICS I	A	2.18	2.38	1.59										
	ENGG CHEMISTRY I	A	2.6	2.46	1.64										
	ENGG GRAPHICS	A	1.66	2		1.7								1	
	COMPUTER PROGRAMING	A	1.79	2.68	1.66	2.58									
	TECHNICAL ENGLISH-I	A		1.76	2.1		1.8								
	COMPUTER PRACTICES LABORATORY	A	2.42	2.36	2.28	2.46									
	ENGINEERING PRACTICES LABORATORY	A	1.78	2.18		2.22									
	PHYSICS AND CHEMISTRY LABORATORY - I	A	2.6	2.6	1.7										
	ENGG PHYSICS II	A	2.64	1.66	2.58									1.7	
	MATHEMATICS II	A	2.4	2.4	1.6									2.58	
	ENGG CHEMISTRY II	A	2.37	1.34				1.34	1.34					1.7	

Sem	Subject															
II	PROGRAMMING AND DATASTRUCTURES I	A	2.02	2.34	2.14	2.36	2.16								2.58	
	DIGITAL PRINCIPLES AND SYSTEM DESIGN	A	2.62	2.4	1.6										2.4	
	TECHNICAL ENGLISH-II	A	2.3	1.51.		1.68	1.72								1.67	
	PHYSICS AND CHEMISTRY LABORATORY - II	A	2.35	2.35	2.57											
	DIGITAL LABORATORY	A	2.42	2.36	2.28											
	PROGRAMMING AND DATA STRUCTURES LABORATORY I	A	1.66	2.18	2.31	2.26										
III	TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATIONS	A	2.35	2.6	1.57										2.35	
	COMPUTER ARCHITECTURE	A	2.64	1.66	2.35	1.76										1.7
	PROGRAMMING AND DATASTRUCTURES II	A	2.37	2.13	1.67	1.98	1.52									2.58
	DATABASE MANAGEMENT SYSTEMS	A	2.02	2.68	2.68	2.23						2.04				
	ENVIRONMENTAL SCIENCE AND ENGINEERING	A	2.62			2.32			1.16	1.8						
	ANALOG AND DIGITAL COMMUNICATION	A	1.66	2.34	1.56										2.34	
	PROGRAMMING AND DATA STRUCTURE LABORATORY II	A	2.24	2.24	2.29	2.38										
	DATABASE MANAGEMENT SYSTEMS LABORATORY	A	2.6	2.6	2.31	2.21										

Sem	Course															
IV	COMPUTER NETWORKS	A	2.6	2.6	2.31	1.73										
	DESIGN AND ANALYSIS OF ALGORITHMS	A	1.84	1.66	2.21	2.58										1.84
	MICROPORCESSOR AND MICROCONTROLLER	A	2.35	2.37	1.57									1.7		
	OPERATING SYSTEMS	A	1.35	2.02		2.02	1.35								2.58		
	PROBABILITY AND QUEING THEORY	A	2.24	2.62	1.49	1.49										
	SOFTWARE ENGINEERING	A	1.79	2.68	2.68	2.23							1.89				
	NETWORKS LABORATORY	A	2.41	2.37	2.18	2.31	2.18									
	MICROPROCESSOR AND MICROCONTROLLER LABORATORY	A	2.28	2.26	2.08	2.12										
	OPERATING SYSTEMS LABORATORY	A	2.37	2.17	2.16	2.22	2.26									
V	COMPUTER NETWORKS	A	2.02	2.76	1.84									2.76		
	GRAPHICS AND MULTIMEDIA	A	2.62	1.99	2.13											
	OBJECT ORIENTED ANALYSIS AND DESIGN	A	2.01	2.06	2.24		2.01							2.15		
	DIGITAL SIGNAL PROCESSING	A	2.36	1.99	2.13									2.19	1.68	
	WEB PROGRAMMING	A	2.18	1.76	2.1		2.28									

Sem	Subject															
	WIRELESS COMMUNICATION	A	2.6	1.56	2.18	2.1		2.26								
	NETWORKS LABORATORY	A	1.66	2.57	2.12	2.13									2.28	2.16
	CASE TOOLS LABORATORY	A	2.28	2.57	2.12	2.13										
	WEB PROGRAMMING LABORATORY	A	2.21	2.24	2.18	1.84	2									2.15
VI	DISTRIBUTED SYSTEMS	A	2.6	2.6	2.31	1.73			2.38							2.19
	MOBILE COMPUTING	A	2.3	2.37	2.02			2.53						2.18		2.76
	ARTIFICIAL INTELLIGENCE	A	1.55	2.02	2.32										2.32	2.32
	COMPILER DESIGN	A	2.28	2.62	1.52										2.28	
	SOFTWARE ARCHITECTURES	A	1.68	1.68	1.12											
	TOTAL QUALITY MANAGEMENT	A	2.36	2.36	1.57										2.36	
	MOBILE APPLICATION DEVELOPMENT LABORATORY	A	2.16	2.32	2.16	2.12									2.28	
	COMPILER LABORATORY	A	2.36	1.56	2.18	2.02										
	COMMUNICATION AND SOFT SKILLS - BASED LABORATORY	A	2.18	2.36	1.57										2.36	
	INFORMATION MANAGEMENT	A	2.6	2.01		2.28	1.82									

	Course	A													
VII	GRID AND CLOUD COMPUTING	A	1.66		1.76	2.36	1.72		2.27						1.51
	CRYPTOGRAPHY AND NETWORK SECURITY	A	1.42	1.53	1.53	2.45	2.1								
	DATA WARE HOUSING AND DATA MINING	A	2.38	2.38											
	GRID AND CLOUD COMPUTING	A	1.7	2.41	1.7	2.31									
	C# AND .NET PROGRAMMING	A	2.58	1.7	2.58		2.16		2.5						1.82
	SECURITY LABORATORY	A	1.7	2.58			2.21	1.82							1.72
	GRID AND CLOUD COMPUTING LABORATORY	A	2.58	1.7	2.12	1.76	2.28	1.72		2.28					2.1
	PROFESSIONAL ETHICS	A	1.7	2.58	1.64	2.52		2.1							
VIII	SERVICE ORIENTED ARCHITECTURE	A	1.7	1.7	1.93								2.03		
	SOFTWARE PROJECT MANAGEMENT	A	2.58	2.58				2.26	2.4	2.6					
	CYBER FORENICS	A	2.47	2.62	2.18	2.31	2.24			2.38					2.27
	ATTAINMENT LEVEL		2.19	2.21	1.92	2.13	2.02	2.00	2.01	2.23	2.04	1.96	2.17	2.32	2.09
	PERCENTAGE		73	74	64	71	67	67	67	74	68	65	72	77	70
	PERCENTAGE(80%)		58.49	58.91	51.20	56.71	53.79	53.45	53.56	59.38	54.40	52.27	57.96	61.87	55.63

HOD / IT

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF IT
SUMMARY GRAPH FOR PROGRAMME OUTCOMES (BATCH : 2014-18)

POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13
TARGET	70	70	70	70	70	70	70	70	70	70	70	70	70
ACHIEVED	77	77	69	73	71	74	72	76	72	70	76	79	76
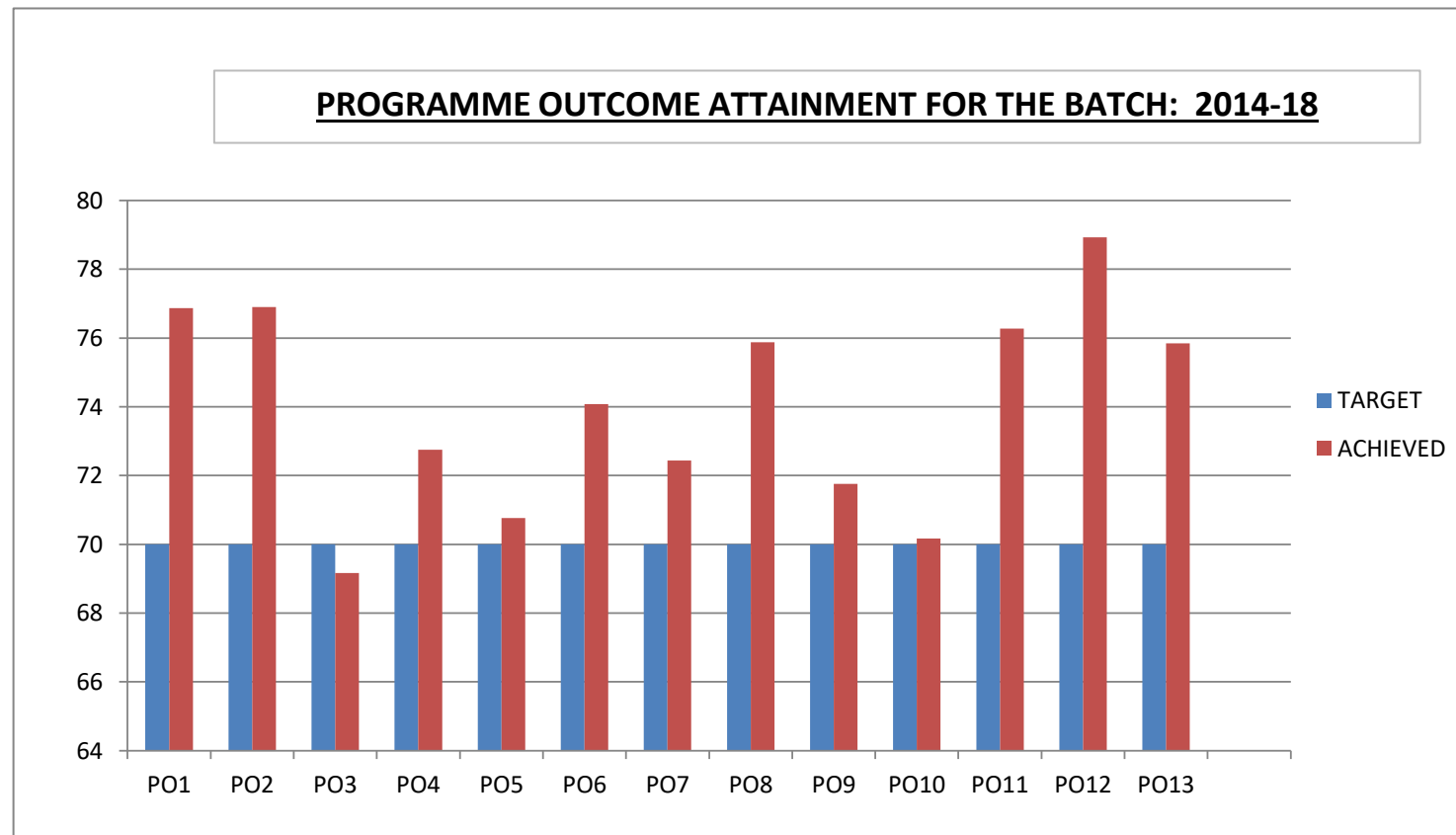
PROGRAMME OUTCOME ATTAINMENT FOR THE BATCH: 2014-18

HOD / IT

SUMMARY OF PROGRAMME OUTCOMES (BATCH : 2014-18)

POs No	PROGRAMME OUTCOMES	TARGET	ACHIEVED
1	An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and queuing theory, science, and engineering;	70	77
2	An ability to design and conduct experiments, as well as to analyze and interpret data;	70	77
3	An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;	70	69
4	An ability to function on multi-disciplinary teams;	70	73
5	An ability to identify, formulate, and solve engineering problems;	70	71
6	An understanding of professional, ethical, legal, security and social issues and responsibilities;	70	74
7	An ability to communicate effectively with a range of audiences;	70	72
8	An ability to analyze the local and global impact of computing on individuals, organizations, and society;	70	76
9	A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;	70	72
10	A knowledge of contemporary issues;	70	70
11	An ability to use the techniques, skills, and modern engineering tools necessary for practice as a it professional;	70	76
12	Graduates are able to participate and succeed in competitive examination like GRE, GATE, TOEFL, GMAT, SCJP, RHC, OCP etc.	70	79
13	The use of current application software; the design and use of operating systems; and the analysis, design, testing, and documentation of computer programs for the use in information engineering technologies.	70	76

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)					% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)		
1	An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and queuing theory, science, and engineering;	58.62	16	20		18		**77**
2	An ability to design and conduct experiments, as well as to analyze and interpret data;	59.37	15	20		18		**77**
3	An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;	51.20	16	20	18	18		**69**
4	An ability to function on multi-disciplinary teams;	55.60	14	20		17		**73**
5	An ability to identify, formulate, and solve engineering problems;	53.27	15	20	17	17		**71**

6	An understanding of professional, ethical, legal, security and social issues and responsibilities;	57.17	14	20		17	**74**
7	An ability to communicate effectively with a range of audiences;	54.22	16	20		18	**72**
8	An ability to analyze the local and global impact of computing on individuals, organizations, and society;	58.71	14	20		17	**76**
9	A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;	53.33	17	20		18	**72**
10	A knowledge of contemporary issues;	52.27	18	19	17	18	**70**
11	An ability to use the techniques, skills, and modern engineering tools necessary for practice as a it professional;	57.16	18	20		19	**76**
12	Graduates are able to participate and succeed in competitive examination like GRE, GATE, TOEFL, GMAT, SCJP, RHC, OCP etc.	61.87	14	20		17	**79**
13	The use of current application software; the design and use of operating systems; and the analysis, design, testing, and documentation of computer programs for the use in information engineering technologies.	58.18	15	20		18	**76**

POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PO13
TARGET	70	70	70	70	70	70	70	70	70	70	70	70	70
ACHIEVED	75	75	69	73	71	74	72	76	72	70	76	79	76
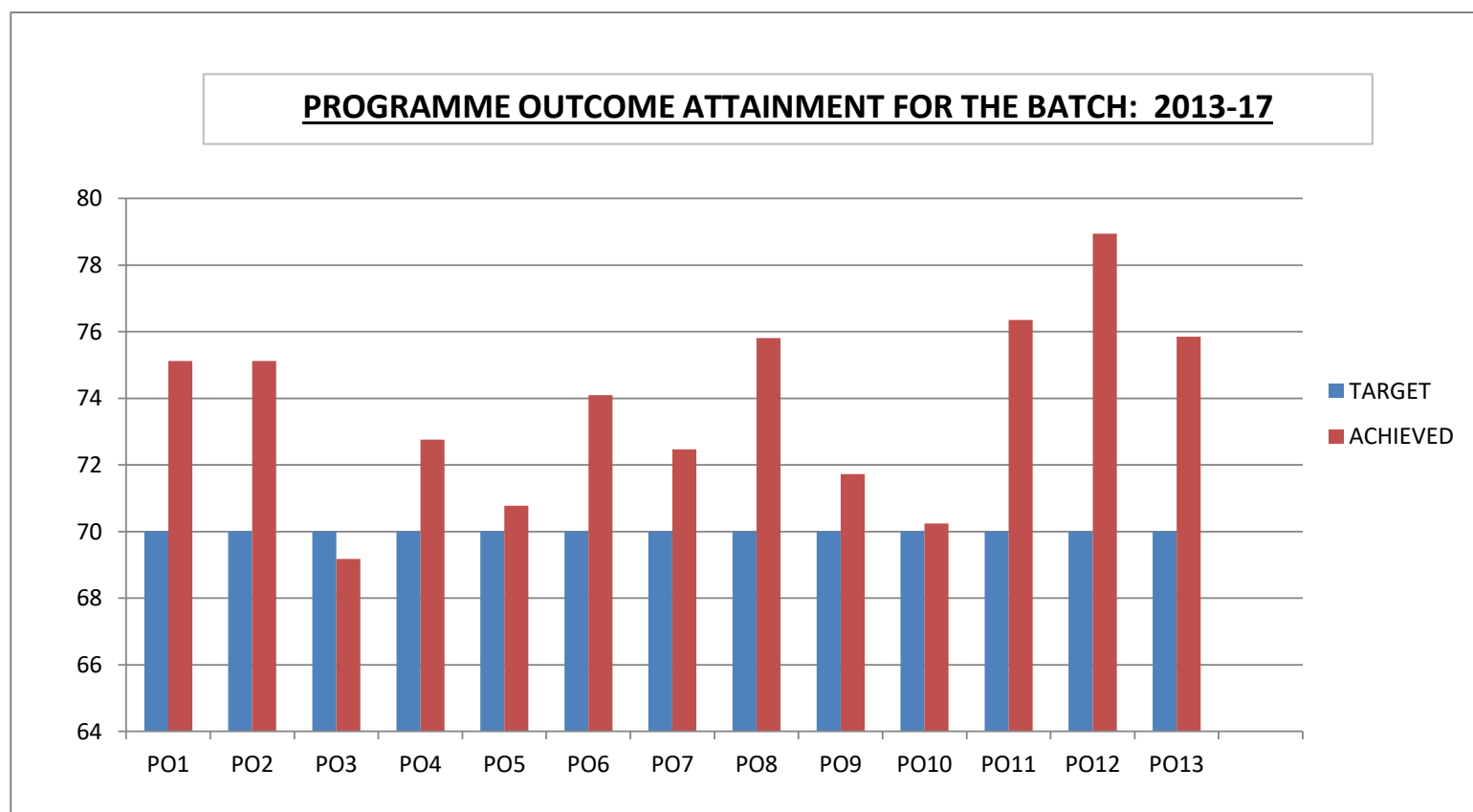
PROGRAMME OUTCOME ATTAINMENT FOR THE BATCH: 2013-17

HOD/IT

SUMMARY OF PROGRAMME OUTCOMES (BATCH : 2013-17)

POs No	PROGRAMME OUTCOMES	TARGET	ACHIEVED
1	An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and queuing theory, science, and engineering;	70	75
2	An ability to design and conduct experiments, as well as to analyze and interpret data;	70	75
3	An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;	70	69
4	An ability to function on multi-disciplinary teams;	70	73
5	An ability to identify, formulate, and solve engineering problems;	70	71
6	An understanding of professional, ethical, legal, security and social issues and responsibilities;	70	74
7	An ability to communicate effectively with a range of audiences;	70	72
8	An ability to analyze the local and global impact of computing on individuals, organizations, and society;	70	76
9	A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;	70	72
10	A knowledge of contemporary issues;	70	70
11	An ability to use the techniques, skills, and modern engineering tools necessary for practice as a it professional;	70	76
12	Graduates are able to participate and succeed in competitive examination like GRE, GATE, TOEFL, GMAT, SCJP, RHC, OCP etc.	70	79
13	The use of current application software; the design and use of operating systems; and the analysis, design, testing, and documentation of computer programs for the use in information engineering technologies.	70	76

ESTD. 2001

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics including discrete mathematics as well as probability and queuing theory, science, and engineering;	56.86	17	20		18	75
2	An ability to design and conduct experiments, as well as to analyze and interpret data;	57.57	15	20		18	75
3	An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints such as memory, runtime efficiency, as well as appropriate constraints related to economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability considerations;	51.20	16	20	18	18	69
4	An ability to function on multi-disciplinary teams;	55.60	14	20		17	73
5	An ability to identify, formulate, and solve engineering problems;	53.27	16	20	17	18	71

6	An understanding of professional, ethical, legal, security and social issues and responsibilities;	57.17	14	20		17	74
7	An ability to communicate effectively with a range of audiences;	54.22	17	20		18	72
8	An ability to analyze the local and global impact of computing on individuals, organizations, and society;	58.71	14	20		17	76
9	A recognition of the need for, and an ability to engage in life-long learning and continuing professional development;	53.33	17	20		18	72
10	A knowledge of contemporary issues;	52.27	18	19	17	18	70
11	An ability to use the techniques, skills, and modern engineering tools necessary for practice as a it professional;	57.16	18	20		19	76
12	Graduates are able to participate and succeed in competitive examination like GRE, GATE, TOEFL, GMAT, SCJP, RHC, OCP etc.	61.87	14	20		17	79
13	The use of current application software; the design and use of operating systems; and the analysis, design, testing, and documentation of computer programs for the use in information engineering technologies.	58.18	15	20		18	76

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT FOR COURSES (2016- 20)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.08		-			2.18		1.78	2.04	2.16		✓			
		B	2.42					2.32		2.1	1.94	1.96					
	Mathematics-I	A	2.21	2.28			1.98					2.03					
		B	2.18	2.12			1.84					1.96					
	Engineering Physics-I	A	2.38	2.16										1.92			
		B	2.31	2.02										1.86			
	Engineering Chemistry-I	A	2.4	2.1										1.98			
		B	2.36	2										1.78			
	Computer Programming	A	2.31	2.62	1.18	2.14											2.24
		B	2.2	2.48	2.08	2.32											2.16
	Engineering Graphics	A	2.48	2.37	2.12		1.96					2.16					
		B	2.48	2.16	2		1.82					2.08					
	Computer Practice Laboratory	A	2.56	2.48	2.36												2.36
		B	2.42	2.36	2.3												2.28
	Engineering Practices Laboratory	A	2.34	2.38													
		B	2.26	2.18													
	Physics & Chemistry Laboratory	A	2.71	2.62	2.42												
		B	2.54	2.56	2.36												
II	Technical English II	A	2.1	2.17	1.02									2.56			
		B	2.02	1.83	1.98									2.38			
	Mathematics II	A	2.48	2.34	1.92									2.42			
		B	2.48	2.1	1.74									2.23			
	Engineering Physics II	A	2.08	2.48				1.96	1.98					2.32			
		B	2.12	2.16				1.98	2.32					2.04			
	Engineering Chemistry II	A	2.31	2.32	2.18	2.16	1.98							2.12			2.36
		B	2.42	3.27	2.04	2.24	1.96							2			2.22
	Basic Electrical & Electronics Engineering	A	2.43	2.36	2.08									2.38			
		B	2.38	2.18	2									2.2			
	Engineering Mechanics	A	2.4	2.1			1.86					2.18		2.08			
		B	2.34	2.02			1.78					2.1		2.11			
	Computer Aided Drafting and Modeling Laboratory	A	2.56	2.38	2.58												
		B	2.56	2.52	2.48												
	Physics & Chemistry Laboratory II	A	2.56	2.42	2.36												
		B	2.52	2.36	2.3												2.38
III	Transforms And Partial Differential Equation	A	2.32	1.98	1.96									2.04			
		B	2.16	1.6	1.72									2			
	Strength of Materials	A	2.3	2.15	2.12	2.16					2.31				2.68		
		B	2.48	2.04	2.02	1.98					2.28				2.59		
	Engineering Thermodynamics	A	2.03	2.03	2.14	2.18	1.72								2.14		2.44
		B	2.48	2.3	2.02	2.18	1.68								2.08		2.32
	Fluid Mechanics and Machinery	A	2.22	2.22	2.08	2.28					2.32						2.32
		B	2.1	2.48	2.01	1.98					2.04						2.24
	Manufacturing Technology I	A				2.14		2.04	2.04	2.24							
		B				2.02		2.17	1.92	2.12							

Sem	Course	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
	Electrical Drives and Control	A	2.42	2.36	2.18					2.36				
		B	2.48	2.14	2.02					2.22				
	Manufacturing Technology Lab I	A	2.42	2.36	2.32								2.01	2.42
		B	2.38	2.32	2.18								2.04	2.36
	Fluid Mechanics and Machinery Laboratory	A	2.52	2.48	2.31									2.38
		B												
	Electrical Engineering Laboratory	A	2.48											
		B	2.48	2.36	2.23									2.2
IV	Statistics and Numerical Methods	A	2.41	2.37	2.18	2.18								2.36
		B	2.45	2.29	2.04	2.04								2.24
	Kinematics of Machinery	A	2.49	2.42	2.16	1.98							2.02	
		B	2.48	2.15	2.02	2.02							1.86	
	Manufacturing Technology – II	A	2.28	2.26	2.08		2.32				2.41			
		B	2.19	2.02	1.98		2.37				2.27			
	Engineering Materials and Metallurgy	A	2.12	2.17	2.16	2.26					2.18			
		B	2.08	2.03	2.04	2.38					2.14			
	Environmental Science & Engineering	A	2.48	2.16	1.98									
		B	2.1	2.15	1.92	2.18								
	Thermal Engineering	A		2.52	2.18	1.98	2.38	2.12	2.36					2.52
		B		2.48	2.02	2.47	2.32	2.32	2.24					2.48
	Manufacturing Technology Lab – II	A	2.56	2.42	2.28	2.36								
		B	2.46	2.38	2.24	2.24								
	Thermal Engineering Laboratory-I	A	2.52	2.48	2.5									
		B	2.48	2.46	2.44									
	Strength of Materials Laboratory	A	2.28	2.36	2.22	2.42								
		B	2.24	2.26	2.18	1.98								
V	Computer Aided Design	A	2.21	2.24	2.18	2.42					2.56	2.34		
		B	2.12	2.18	2.08						2.44	2.44		
	Heat & Mass Transfer	A		2.1	2.02		2.48							
		B		2.03	1.98		2.48							
	Design of Machine Elements	A	2.13	2.1	2.08		2.14			2.14				
		B	2.09	2.01	2.01		1.96			2.1				
	Metrology and Measurement	A	2.28	2.57	2.12						2.18	2.16		2.2
		B	2.48	2.5	2						2.16	2.08		2.08
	Dynamics of Machines	A	2.28	2.34	2.18		2.26							2.28
		B	2.28	2.37	2.04		2.34							2.14
	Professional Ethics in Engineering	A		2.54	2.42		2.26							2.36
		B		2.52	2.4		2.34							2.3
	Dynamics Laboratory	A	2.56	2.56	2.36						2.18	2.16		2.36
		B	2.48	2.48	2.28						2.06	2.08		2.22
	Thermal Engineering Laboratory II	A	2.54	2.48	2.34	2.29					2.56			
		B												
	Metrology & Measurements Laboratory	A												
		B	2.44	2.44	2.32						2.44			

Sem	Course		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VI	Design of Transmission Systems	A		2.62	2.18	2.26	2.47		2.38								
		B		2.38	2.02	2.08	2.38		2.1					2.27	2.26	2.42	
	Principles of Management	A	2.34	1.93	2.18									2.31	2.12	2.26	
		B	2.23	1.67	2.01			2.28						2.52	2.2		
	Automobile Engineering	A		2.3	2.08			2.1						2.36	2.12		
		B		2.63	2.01								2.36	2.48			
	Finite Element Analysis	A	2.31	2.1	1.96								2.28	2.34			
		B	2.22	2.08	1.86								2.36				
	Gas Dynamics and Jet Propulsion	A	2.16	2.32	2.16								2.22				
		B	2.13	2.12	2.08												
	Unconventional Machining Processes	A	2.24	2.42	2.18												
		B	2.48	2.26	2.06								2.42				
	CAD / CAM Laboratory	A	2.52	2.46	2.36								2.28				
		B	2.48	2.32	2.24							2.46				2.44	
	Design & Fabrication Project	A	2.54	2.46	2.36							2.24				2.36	
		B	2.36	2.4	2.32												
	Communication Skills - Laboratory based	A	2.46	2.42	2.46						2.22						
		B	2.4	2.3	2.32						2.08	2.36				2.36	
VII	Power Plant Engineering	A		2.18		2.21	1.84									2.1	
		B		2.12		2.42	1.7									2.36	
	Mechatronics	A	2.03		2.12	1.94	1.94	2.28								2.22	
		B	2.17		2.00	2.08	1.86	2.21						2.24	2.21		
	Computer Integrated Manufacturing Systems	A	2.37	2.37	2.18	2.14	1.72							2.14	2.07		
		B	2.03	2.27	2.03	2.34	1.68								2.1		
	Total Quality Management	A	2.12	2.32											2.04		
		B	2.48	2.1													
	Process Planning & Cost Estimation	A		2.48		2.24		2.43									
		B		2.37		2.12		2.29									
	Maintenance Engineering	A		2.48		2.48	2.56										2.42
		B		2.44		2.38	2.38										2.38
	Mechatronics Lab	A	2.32					2.34							2.28	2.32	
		B	2.32					2.2							2.28	2.32	
	Comprehension	A	2.05					2.43									
		B	2.02					2.43		2.28							
	Simulation & Analysis Laboratory	A	2.46		2.44	2.44	2.52	2.46		2.29				2.46	2.48		2.34
		B	2.38		2.36	2.52	2.32	2.24						2.38	2.34		2.2
VIII	Engineering Economics	A					2.51	2.26							2.36		
		B					2.58	2.18							2.24		
	Production Planning & Control	A			2.12	2.28		2.48									
		B			2.04	2.38		2.31									
	Advanced I.C. Engines	A		2.46	2.12			2.32						2.24			
		B		2.26	2.00			2.26						2.18			
	PROJECT WORK	A	2.56	2.62	2.42	2.44		2.46						2.48	2.36	2.48	2.56
		B	2.42	2.44	2.34	2.32		2.24						2.36	2.24	2.32	2.34
	ATTAINMENT LEVEL		2.34	2.30	2.13	2.22	2.12	2.24	2.25	2.06	2.19	2.13	2.21	2.24	2.29	2.21	2.32
	PERCENTAGE		78	77	71	74	71	75	75	69	73	71	74	75	76	74	77
	PERCENTAGE(80%)		62.42	61.35	56.86	59.25	56.47	59.62	60.01	54.93	58.51	56.73	58.99	59.70	60.96	59.02	61.78

HOD/MECH _(signature)_

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT FOR COURSES (2015- 19)

ESTD. 2001

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-1	A	2.28			1.96				2.08	2.36	2.16					2.34	
		B	2.42			2.1				1.96	1.84	1.96		1.86				
	Mathematics-1	A	2.56	2.28			1.98					2.03						
		B	2.18	2.36			1.84					1.96						
	Engineering Physics-1	A	2.38	2.16											1.92		1.98	
		B	2.56	2.02											1.86			
	Engineering Chemistry-1	A	2.4	2.36											1.98			
		B	2.36	2											1.78			
	Computer Programming	A	2.31	2.62	2.36	2.14					2.36							2.24
		B	2.2	2.48	2.08	2.36					2.36							2.46
	Engineering Graphics	A		2.37	2.36		2.36							2.16				
		B		2.16	2		1.82							2.08				
	Computer Practice Laboratory	A	2.56	2.48	2.36													2.36
		B	2.56	2.36	2.3													2.28
	Engineering Practices Laboratory	A	2.34	2.38														
		B	2.26	2.18							2.36							
	Physics & Chemistry Laboratory	A	2.71	2.62	2.42						2.08							
		B	2.54	2.56	2.36													
II	Technical English II	A	2.56	2.36	1.02										2.56			
		B	2.02	1.83	1.98										2.38			
	Mathematics II	A	2.21	2.34	1.92										2.42		2.36	
		B	2.1	2.1	2.36										2.23			
	Engineering Physics II	A	2.08	2.48				1.96	2.36						2.32			
		B	2.56	2.16				2.36	1.76						2.04			
	Engineering Chemistry II	A	2.56	2.32	2.36	2.16	1.98								2.12			2.36
		B	2.42	3.27	2.04	2.04	1.96								2			2.42
	Basic Electrical & Electronics Engineering	A	2.43	2.36	2.08										2.38			
		B	2.38	2.18	2										2.2			2.36
	Engineering Mechanics	A	2.4	2.1			1.86						2.18		2.08			
		B	2.34	2.02			1.78						2.1		2.11			
	Computer Aided Drafting and Modeling Laboratory	A	2.56	2.38	2.58													
		B	2.56	2.52	2.48													
	Physics & Chemistry Laboratory II	A	2.56	2.42	2.36													2.38
		B	2.52	2.36	2.3											2.04		2.36
	Transforms And Partial Differential Equation	A	2.32	1.98	1.96										2			
		B	2.16	1.6	1.72												2.68	
	Strength of Materials	A	2.56	2.15	2.12	2.16										2.59		
		B	2.48	2.04	2.02	1.98										2.14		2.44
	Engineering Thermodynamics	A	2.03	2.03	2.14	2.18	1.72									2.08		2.32
		B	1.64	2.3	2.02	2.08	1.68											2.32
	Fluid Mechanics and Machinery	A	2.22	2.22	2.08	2.28												2.24
		B	2.56	2.48	2.01	2.17							2.24					

Year	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
III	Manufacturing Technology I	A				2.14			2.04	2.24								
		B				2.02			1.92	2.12								
	Electrical Drives and Control	A	2.42	2.36	2.18											2.36		
		B	2.48	2.14	2.02											2.22		
	Manufacturing Technology Lab I	A	2.42	2.36	2.32													2.42
		B	2.38	2.32	2.18													2.36
	Fluid Mechanics and Machinery Laboratory	A	2.52	2.48	2.31										2.36			2.38
		B																
	Electrical Engineering Laboratory	A																
		B	2.48	2.36	2.23												2.34	2.2
IV	Statistics and Numerical Methods	A	2.41	2.37	2.18	2.18												2.36
		B	2.45	2.29	2.04	2.04												2.24
	Kinematics of Machinery	A	2.49	2.42	2.16	2.16											2.02	
		B	2.12	2.15	2.02	2.02											2.48	
	Manufacturing Technology – II	A	2.28	2.26	2.08									2.41				
		B	2.19	2.02	1.98									2.27				
	Engineering Materials and Metallurgy	A	2.12	2.17	2.16	2.26								2.18				
		B	2.08	2.03	2.04	2.08								2.14				
	Environmental Science & Engineering	A	2.46	2.16	1.98													
		B	2.1	2.15	1.92	2.18												
	Thermal Engineering	A	2.38	2.52	2.18	2.04						2.36						2.52
		B	2.32	2.48	2.02	2.07						2.24						2.48
	Manufacturing Technology Lab – II	A	2.56	2.42	2.28	2.36												
		B	2.46	2.38	2.24	2.24												
	Thermal Engineering Laboratory-I	A	2.52	2.48	2.5													
		B	2.48	2.46	2.44													
	Strength of Materials Laboratory	A	2.28	2.36	2.22	2.42												
		B	2.24	2.26	2.18	2.34												
V	Computer Aided Design	A	2.21	2.24	2.18	2								2.56				
		B	2.12	2.18	2.08									2.44				
	Heat & Mass Transfer	A	2.1	2.1	2.02													
		B	2.08	2.03	1.98													
	Design of Machine Elements	A	2.46	2.1	2.08		2.14							2.14				
		B	2.09	2.01	2.01		1.96							2.1				
	Metrology and Measurement	A	2.28	2.57	2.12									2.18	2.16			2.32
		B	2.12	2.5	2									2.16	2.08			2.08
	Dynamics of Machines	A		2.34	2.18		2.26											2.28
		B		2.37	2.04		2.34											2.14
	Professional Ethics in Engineering	A		2.54	2,42		2.26											2.36
		B		2.52	2.4		2.34											2.32
	Dynamics Laboratory	A	2.56	2.56	2.36									2.18	2.16			2.36
		B	2.48	2.48	2.28									2.06	2.08			2.22
	Thermal Engineering Laboratory II	A	2.54	2.48	2.34	2									2.56			
		B																
	Metrology & Measurements Laboratory	A												2.44				
		B	2.44	2.44	2.32													

Sem	Course	A/B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VI	Design of Transmission Systems	A	2.47	2.62	2.18	2.24		2.38							2.27	2.26	2.42
		B	2.56	2.38	2.02	2.08											
	Principles of Management	A	2.34	1.93	2.18			2.1			2.36				2.38	2.12	2.32
		B	2.23	1.67	2.01			2.28							2.52	2.2	
	Automobile Engineering	A	2.46	2.3	2.08			2.1							2.36	2.34	
		B	2.56	2.63	2.01									2.36	2.48		
	Finite Element Analysis	A	2.46	2.1	1.96									2.28	2.34		
		B	2.22	2.08	1.86									2.36			
	Gas Dynamics and Jet Propulsion	A	2.56	2.32	2.16									2.22			
		B	2.23	2.12	2.08												
	Unconventional Machining Processes	A	2.24	2.42	2.18								2.42				
		B	2.17	2.26	2.06								2.28				
	CAD / CAM Laboratory	A	2.52	2.46	2.36							2.46					2.44
		B	2.48	2.32	2.24							2.24					2.36
	Design & Fabrication Project	A	2.54	2.46	2.36												
		B	2.36	2.4	2.32						2.22						
	Communication Skills - Laboratory based	A	2.46	2.42	2.46							2.36	2.36				2.36
		B	2.03	2.3	2.32								2.24				2.32
VII	Power Plant Engineering	A		2.18		2.21	1.84										2.36
		B		2.12		2.02	1.7										2.22
	Mechatronics	A	2.46		2.12	2.28	1.94	2.28							2.24	2.21	
		B	2.56		2	2.08	1.86	2.21							2.38	2.07	
	Computer Integrated Manufacturing Systems	A	2.37	2.37	2.18	2.14	1.72									2.1	
		B	2.03	2.27	2.03	2.04	1.68									2.04	
	Total Quality Management	A	2.12	2.32													
		B	2.56	2.1													
	Process Planning & Cost Estimation	A		2.48		2.24											
		B		2.37		2.12											
	Maintenance Engineering	A		2.48		2.48	2.56										2.42
		B		2.44		2.38	2.38										2.38
	Mechatronics Lab	A														2.21	
		B															
	Comprehension	A														2.21	
		B															
	Simulation & Analysis Laboratory	A	2.46		2.44	2.44	2.52	2.46							2.46	2.48	2.34
		B	2.38		2.36	2.38	2.32	2.24							2.38	2.34	2.32
VIII	Engineering Economics	A				2.51		2.26								2.46	
		B				2.58		2.18								2.24	
	Production Planning & Control	A			2.12	2.28		2.48									
		B			2.04	2.18		2.31									
	Advanced I.C. Engines	A	2.28	2.46	2.12			2.32							2.24		
		B	2.14	2.26	2			2.26							2.18		
	PROJECT WORK	A	2.56	2.62	2.42	2.44		2.46						2.48	2.36	2.48	2.56
		B	2.42	2.44	2.34	2.32		2.24						2.36	2.24	2.32	2.34
	ATTAINMENT LEVEL		2.36	2.30	2.15	2.17	2.07	2.25	2.20	2.14	2.23	2.18	2.21	2.23	2.35	2.21	2.34
	PERCENTAGE		79	77	72	72	69	75	73	71	74	73	74	74	78	74	78
	PERCENTAGE(80%)		62.88	61.40	57.34	57.93	55.13	59.96	58.61	57.07	59.52	58.15	58.99	59.47	62.77	59.06	62.48

HOD / MECH

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT FOR COURSES (2014- 18)

ESTD, 2001

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.38					2.16	✓	1.78	1.78	2.16					
		B	2.42					2.1		2.08	1.98	1.96					
	Mathematics-I	A	2.21	2.28			1.98					2.03					
		B	2.18	2.12			2.16					1.96					
	Engineering Physics-I	A	2.38	2.16											1.92		
		B	2.31	2.02											1.86		
	Engineering Chemistry-I	A	2.4	2.1											1.98		
		B	2.36	2											1.78		
	Computer Programming	A	2.31	2.16	1.18	2.14											2.24
		B	2.2	2.48	2.08	2.02											2.16
	Engineering Graphics	A		2.37	2.12		1.96					2.16					
		B		2.16	2		1.82					2.08					
	Computer Practice Laboratory	A	2.56	2.16	2.36												2.36
		B	2.42	2.36	2.3												2.28
	Engineering Practices Laboratory	A	2.34	2.38													
		B	2.26	2.18													
	Physics & Chemistry Laboratory	A	2.71	2.62	2.42												
		B	2.54	2.56	2.36												
II	Technical English II	A	2.1	2.17	1.02										2.56		
		B	2.02	1.83	1.98										2.38		
	Mathematics II	A	2.21	2.34	1.92										2.42		
		B	2.1	2.1	1.74										2.23		
	Engineering Physics II	A	2.08	2.48				1.98	1.98						2.32		
		B	2.12	2.16				1.88	1.76						2.04		
	Engineering Chemistry II	A	2.31	2.32	2.18	2.16	1.98								2.12		2.36
		B	2.42	3.27	2.04	2.04	1.96								2		2.22
	Basic Electrical & Electronics Engineering	A	2.43	2.36	2.08										2.38		
		B	2.38	2.18	2										2.2		
	Engineering Mechanics	A	2.4	2.1			1.86						2.18		2.08		
		B	2.34	2.02			1.78						2.1		2.11		
	Computer Aided Drafting and Modeling Laboratory	A	2.56	2.38	2.58												
		B	2.56	2.52	2.48												
	Physics & Chemistry Laboratory II	A	2.56	2.42	2.36												
		B	2.52	2.36	2.3												2.38
III	Transforms And Partial Differential Equation	A	2.32	1.98	1.96										2.04		
		B	2.16	1.6	1.72									2		2.68	
	Strength of Materials	A	2.3	2.15	2.12	2.16											
		B	2.48	2.04	2.02	1.98										2.59	
	Engineering Thermodynamics	A	2.02	2.02	2.14	1.98	1.72									2.14	2.44
		B	1.64	2.3	2.02	2.08	1.68									2.08	2.32
	Fluid Mechanics and Machinery	A	2.38	2.22	2.08	2.28						2.1					2.32
		B	2.38	2.48	2.01	2.17						2.04					2.24
	Manufacturing Technology I	A					1.98			2.04	2.24						
		B					2.02			2.02	2.12						

Sem	Subject	Sec	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11
	Electrical Drives and Control	A	2.42	2.36	2.18				2.36				
		B	2.48	2.14	2.02				2.02				
	Manufacturing Technology Lab I	A	2.42	2.36	2.32								2.02
		B	2.38	2.32	2.18								2.36
	Fluid Mechanics and Machinery Laboratory	A	2.52	2.48	2.31								
		B											2.38
	Electrical Engineering Laboratory	A											
		B	2.48	2.36	2.23								
IV	Statistics and Numerical Methods	A	2.41	2.37	2.38	2.18							2.02
		B	2.45	2.29	2.04	2.04							2.36
	Kinematics of Machinery	A	2.49	2.42	2.38	2.16				2.02			2.24
		B	2.12	2.15	2.02	2.02				1.86			
	Manufacturing Technology – II	A	2.28	2.26	2.08				2.41				
		B	2.38	2.02	1.98				2.27				
	Engineering Materials and Metallurgy	A	2.12	2.17	2.16	2.26			2.18				
		B	2.08	2.03	2.04	2.08			2.14				
	Environmental Science & Engineering	A	1.8	2.16	1.98								
		B	2.1	2.15	1.92	2.18							
	Thermal Engineering	A	2.38	2.52	2.18	2.04		2.36					2.52
		B	2.32	2.48	2.02	2.07		2.24					2.48
	Manufacturing Technology Lab – II	A	2.56	2.42	2.28	2.36							
		B	2.46	2.38	2.24	2.24							
	Thermal Engineering Laboratory-I	A	2.52	2.48	2.5								
		B	2.48	2.46	2.44								
	Strength of Materials Laboratory	A	2.28	2.36	2.22	2.42							
		B	2.24	2.26	2.18	2.34							
V	Computer Aided Design	A	2.21	2.24	2.18	2			2.56				
		B	2.12	2.18	2.08				2.44				
	Heat & Mass Transfer	A	2.1	2.1	2.02								
		B	2.08	2.03	1.98								
	Design of Machine Elements	A	2.13	2.1	2.08		2.14				2.14		
		B	2.09	2.01	2.01		1.96				2.1		
	Metrology and Measurement	A	2.28	2.57	2.12						2.18	2.16	2.2
		B	2.12	2.5	2						2.16	2.08	2.08
	Dynamics of Machines	A		2.34	2.18		2.26						2.28
		B		2.37	2.04		2.34						2.14
	Professional Ethics in Engineering	A		2.54	2.42		2.26						2.36
		B		2.52	2.4		2.34						2.3
	Dynamics Laboratory	A	2.56	2.56	2.36						2.18	2.16	2.36
		B	2.48	2.48	2.28						2.06	2.08	2.22
	Thermal Engineering Laboratory II	A	2.54	2.48	2.34	2						2.56	
		B											
	Metrology & Measurements Laboratory	A									2.44		
		B	2.44	2.44	2.32								

Sem	Subject	A/B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VI	Design of Transmission Systems	A	2.47	2.62	2.18	2.24			2.38					2.27	2.26	2.42	
		B	2.38	2.38	2.02	2.08			2.1								
	Principles of Management	A	2.34	1.93	2.18		2.28							2.31	2.12	2.26	
		B	2.23	1.67	2.01		2.1							2.52	2.2		
	Automobile Engineering	A	2.3	2.3	2.08									2.36	2.12		
		B	2.1	2.63	2.01								2.36	2.48			
	Finite Element Analysis	A	2.31	2.1	1.96								2.28	2.34			
		B	2.22	2.08	1.86								2.36				
	Gas Dynamics and Jet Propulsion	A	2.16	2.32	2.16								2.22				
		B	2.13	2.12	2.08												
	Unconventional Machining Processes	A	2.24	2.42	2.18								2.42				
		B	2.17	2.26	2.06								2.28				
	CAD / CAM Laboratory	A	2.52	2.46	2.36							2.46				2.44	
		B	2.48	2.32	2.24							2.24				2.36	
	Design & Fabrication Project	A	2.54	2.46	2.36												
		B	2.36	2.4	2.32						2.22						
	Communication Skills - Laboratory based	A	2.46	2.42	2.46						2.08	2.36				2.36	
		B	2.4	2.3	2.32							2.24				2.1	
VII	Power Plant Engineering	A		2.18		2.21	1.84									2.36	
		B		2.12		2.02	1.7									2.22	
	Mechatronics	A	2.03		2.12	2.28	1.94		2.28						2.24	2.21	
		B	2.17		2	2.08	1.86		2.21						2.14	2.07	
	Computer Integrated Manufacturing Systems	A	2.5	2.5	2.5	2.5	2.5	2.5	2.5		2.5				2.5	2.5	
		B	2.03	2.27	2.03	2.04	1.68								2.04		
	Total Quality Management	A	2.12	2.32													
		B	2.08	2.1													
	Process Planning & Cost Estimation	A		2.48		2.24											
		B		2.37		2.12											
	Maintenance Engineering	A		2.48		2.48	2.56									2.42	
		B		2.44		2.38	2.38									2.38	
	Mechatronics Lab	A															
		B															
	Comprehension	A															
		B															
	Simulation & Analysis Laboratory	A	2.46		2.44	2.44	2.52		2.46					2.46	2.48		2.34
		B	2.38		2.36	2.38	2.32		2.24					2.38	2.34		2.2
VIII	Engineering Economics	A					2.51		2.26						2.36		
		B					2.58		2.18						2.24		
	Production Planning & Control	A			2.12	2.28		2.48									
		B			2.04	2.18		2.31									
	Advanced I.C. Engines	A	2.28	2.46	2.12				2.32					2.24			
		B	2.14	2.26	2				2.26					2.18			
	PROJECT WORK	A	2.56	2.62	2.42	2.44			2.46					2.48	2.36	2.48	2.56
		B	2.42	2.44	2.34	2.32			2.24					2.36	2.24	2.32	2.34
	ATTAINMENT LEVEL		2.31	2.29	2.13	2.17	2.09	2.20	2.20	2.06	2.08	2.13	2.21	2.23	2.30	2.23	2.31
	PERCENTAGE		77	76	71	72	70	73	73	69	69	71	74	74	77	74	77
	PERCENTAGE(80%)		61.56	61.08	56.93	57.89	55.80	58.64	58.65	54.80	55.47	56.73	58.99	59.58	61.40	59.52	61.52

HOD / MECH

PRATHYUSHA ENGINEERING COLLEGE
DPEARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT FOR COURSES (2013-17)

SEM	COURSE NAME	SEC	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
I	Technical English-I	A	2.38					2.35		1.78	1.78	2.16					
		B	2.42					2.1		2.08	1.84	1.96					
	Mathematics-I	A	2.21	2.28			1.98					2.03					
		B	2.18	2.12			1.84					1.96					
	Engineering Physics-I	A	2.38	2.16											1.92		
		B	2.31	2.02											1.86		
	Engineering Chemistry-I	A	2.4	2.1											1.98		
		B	2.36	2											1.78		
	Computer Programming	A	2.31	2.62	1.18	2.14	1.86								2.24		
		B	2.2	2.48	2.08	2.02	1.96								2.16		
	Engineering Graphics	A		2.37	2.12		1.96					2.16					
		B		2.16	2		1.82					2.08					
	Computer Practice Laboratory	A	2.56	2.48	2.36												2.36
		B	2.42	2.36	2.3												2.28
	Engineering Practices Laboratory	A	2.34	2.38													
		B	2.26	2.18													
	Physics & Chemistry Laboratory	A	2.71	2.62	2.42												
		B	2.54	2.56	2.36												
II	Technical English II	A	2.1	2.17	1.02									2.56			
		B	2.02	1.83	1.98									2.38			
	Mathematics II	A	2.21	2.34	1.92									2.42			
		B	2.1	2.1	1.74									2.23			
	Engineering Physics II	A	2.08	2.48				1.96	1.98					2.32			
		B	2.12	2.16				1.88	1.76					2.04			
	Engineering Chemistry iI	A	2.31	2.32	2.18	2.16	1.98							2.12			2.36
		B	2.42	3.27	2.04	2.04	1.96							2			2.22
	Basic Electrical & Electronics Engineering	A	2.43	2.36	2.08									2.38			
		B	2.38	2.18	2									2.2			
	Engineering Mechanics	A	2.4	2.1			1.86			2.18		2.18		2.08			
		B	2.34	2.02			1.78			2.04		2.1		2.11			
	Computer Aided Drafting and Modeling Laboratory	A	2.56	2.38	2.58					2.16							
		B	2.56	2.52	2.48					2.02							
	Physics & Chemistry Laboratory II	A	2.56	2.42	2.36												
		B	2.52	2.36	2.3												2.38

	Subject																
III	Transforms And Partial Differential Equation	A	2.32	1.98	1.96								2.04			
		B	2.16	1.6	1.72								2			
	Strength of Materials	A	2.3	2.15	2.12	2.16								2.68		
		B	2.48	2.04	2.02	1.98								2.59		
	Engineering Thermodynamics	A	2.03	2.03	2.14	2.18	1.72							2.14		2.44
		B	1.64	2.3	2.02	2.08	1.68							2.08		2.32
	Fluid Mechanics and Machinery	A	2.22	2.22	2.08	2.28				2.1						2.32
		B	2.1	2.48	2.01	2.17				2.04						2.24
	Manufacturing Technology I	A				2.14		2.04	2.24							
		B				2.02		1.92	2.12							
	Electrical Drives and Control	A	2.42	2.36	2.18								2.36			
		B	2.48	2.14	2.02								2.22			
	Manufacturing Technology Lab I	A	2.42	2.36	2.32											2.42
		B	2.38	2.32	2.18											2.36
	Fluid Mechanics and Machinery Laboratory	A	2.52	2.48	2.31											2.38
		B														
	Electrical Engineering Laboratory	A														
		B	2.48	2.36	2.23											2.2
IV	Statistics and Numerical Methods	A	2.41	2.37	2.18	2.18										2.36
		B	2.45	2.29	2.04	2.04										2.24
	Kinematics of Machinery	A	2.49	2.42	2.16	2.16								2.02		
		B	2.12	2.15	2.02	2.02								1.86		
	Manufacturing Technology – II	A	2.28	2.26	2.08								2.41			
		B	2.19	2.02	1.98								2.27			
	Engineering Materials and Metallurgy	A	2.12	2.17	2.16	2.26							2.18			
		B	2.08	2.03	2.04	2.08							2.14			
	Environmental Science & Engineering	A	1.8	2.16	1.98											
		B	2.1	2.15	1.92	2.18										
	Thermal Engineering	A	2.18	2.52	2.18	2.04					2.36					2.52
		B	2.04	2.48	2.02	2.07					2.24					2.48
	Manufacturing Technology Lab – II	A	2.16	2.42	2.28	2.36						2.18				
		B	2.02	2.38	2.24	2.24										
	Thermal Engineering Laboratory-I	A	2.52	2.48	2.5											
		B	2.48	2.46	2.44											
	Strength of Materials Laboratory	A	2.28	2.36	2.22	2.42				2.18						
		B	2.24	2.26	2.18	2.34				2.04						

Sem	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14
V	Computer Aided Design	A	2.21	2.24	2.18	2					2.16			2.56		
		B	2.12	2.18	2.08						2.02			2.44		
	Heat & Mass Transfer	A	2.1	2.1	2.02											
		B	2.08	2.03	1.98										2.18	
	Design of Machine Elements	A	2.13	2.1	2.08		2.14				2.14					
		B	2.09	2.01	2.01		1.96				2.1				2.18	
	Metrology and Measurement	A	2.28	2.57	2.12						2.18	2.16				2.2
		B	2.12	2.5	2						2.16	2.08				2.08
	Dynamics of Machines	A		2.34	2.18		2.26									2.28
		B		2.18	2.04		2.34									2.14
	Professional Ethics in Engineering	A		2.04	2,42		2.26									2.36
		B		2.16	2.4		2.34									2.3
	Dynamics Laboratory	A	2.56	2.02	2.36						2.18	2.16				2.36
		B	2.48	2.48	2.28						2.06	2.08				2.22
	Thermal Engineering Laboratory II	A	2.54	2.48	2.34	2						2.56				
		B														
	Metrology & Measurements Laboratory	A										1.72				
		B	2.44	2.44	2.32									2.27	2.26	2.42
VI	Design of Transmission Systems	A	2.47	2.62	2.18	2.24			2.38	1.72				1.72	2.32	2.26
		B	2.38	2.38	2.02	2.08			2.1	2.18					2.52	2.4
	Principles of Management	A	2.34	1.93	2.18			2.28							1.72	2.12
		B	2.23	1.67	2.62			2.1						2.36	2.48	
	Automobile Engineering	A	2.3	2.3	2.08									2.28	2.34	
		B	2.1	2.63	2.01									2.36		
	Finite Element Analysis	A	2.62	2.62	1.96									2.22		
		B	2.22	2.08	1.86											
	Gas Dynamics and Jet Propulsion	A	2.16	2.32	2.16											
		B	2.13	2.12	2.08									2.42		
	Unconventional Machining Processes	A	2.24	2.42	2.18									2.28		
		B	2.17	2.26	2.06								1.72			2.44
	CAD / CAM Laboratory	A	2.52	2.46	2.36								2.24			2.36
		B	2.08	2.32	2.24											
	Design & Fabrication Project	A	2.14	2.46	2.36						2.22					
		B	2.36	2.4	2.32						2.08	2.36				2.36
	Communication Skills - Laboratory based	A	2.62	2.42	2.46									2.24		2.1
		B	2.4	2.3	2.32											

Sem	Subject	Sec	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
VII	Power Plant Engineering	A		2.18		2.21	1.84										2.36
		B	2.62	2.12		2.02	1.7										2.22
	Mechatronics	A	2.03		2.12	2.28	1.94		2.28						2.24	2.21	
		B	2.17		2	2.08	1.86		1.72						2.14	2.07	
	Computer Integrated Manufacturing Systems	A	2.37	2.37	2.18	2.14	1.72									2.17	
		B	2.03	2.27	2.03	2.04	1.68									2.04	
	Total Quality Management	A	2.12	2.32													
		B	2.08	2.1													
	Process Planning & Cost Estimation	A		2.48		2.24											
		B		2.37		2.12											
	Maintenance Engineering	A		2.48		2.48	1.72										2.42
		B		2.44		2.38	2.38										2.38
	Mechatronics Lab	A	2.62	2.46	2.36								2.46				2.44
		B	2.48	2.32	2.24								1.72				2.36
	Comprehension	A	2.52	2.46	2.36								2.46				2.44
		B	2.48	2.32	2.24								2.24				2.36
	Simulation & Analysis Laboratory	A	2.46		2.44	2.44	2.52		2.46					2.46	2.48		2.34
		B	2.38		2.36	2.38	2.32		2.24					2.38	2.34		2.2
VIII	Engineering Economics	A					2.51		2.26							2.36	
		B					2.08		2.18							2.24	
	Production Planning & Control	A			2.12	2.28		2.48				2.18					
		B			2.04	2.18		2.31							2.24		
	Advanced I.C. Engines	A	2.28	2.46	2.12				2.32						2.18		
		B	2.14	2.26	2				2.26			2.18			2.18		
	PROJECT WORK	A	2.62	2.62	2.42	2.44			2.46					2.48	2.36	2.48	2.56
		B	2.42	2.44	2.34	2.32			2.24					2.36	2.24	2.32	2.34
	ATTAINMENT LEVEL		2.30	2.29	2.14	2.17	2.00	2.18	2.14	2.09	1.94	2.14	2.16	2.22	2.24	2.23	2.33
	PERCENTAGE		77	76	71	72	67	73	71	70	65	71	72	74	75	74	78
	PERCENTAGE(80%)		61.26	61.07	57.07	57.89	53.31	58.20	56.95	55.60	51.82	56.93	57.67	59.26	59.66	59.44	62.13

HOD / MECH

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT 2016-2020 BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	62.42	18	20		19	81
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	61.35	16	20		19	80
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	56.86	16	20	18	18	75
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	59.25	16	20		18	77
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	56.47	18	20	17	18	75
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	59.62	13	20		17	76
7	Knowledge of contemporary issues.	60.01	14	20		17	77
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	54.93	19	20		20	74
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	58.51	18	20		19	78
10	An ability to communicate effectively with a range of audiences.	56.73	17	19	18	19	76
11	Recognition of the need for and an ability to engage in continuing professional development.	58.99	16	20	17	18	77
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.70	17	20		19	78
PROGRAMME SPECIFIC OUTCOMES							
1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber-Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	60.96	19	20	19	20	81
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	59.02	19	20	18	19	78
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	61.78	19	20	18	20	82

HOD/MECH
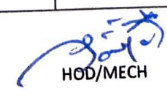
PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT 2015-2019 BATCH

ESTD. 2001

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	62.88	18	20		19	82
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	61.40	17	20		19	80
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	57.34	16	20	18	18	75
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	57.93	16	20		18	76
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	55.13	16	20	17	18	73
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	59.96	14	20		17	77
7	Knowledge of contemporary issues.	58.61	17	20		18	77
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	57.07	16	20		18	75
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	59.52	16	20		18	78
10	An ability to communicate effectively with a range of audiences.	58.15	18	19	17	18	76
11	Recognition of the need for and an ability to engage in continuing professional development.	58.99	18	20	17	18	77
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.47	14	20		17	77
PROGRAMME SPECIFIC OUTCOMES							
1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber-Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	62.77	16	20	19	18	81
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	59.06	18	20	18	19	78
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	62.48	18	19	18	18	81

HOD/MECH

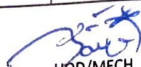| PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				% PO Attainment
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	61.56	16	20		18	80
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	61.08	15	20		17	79
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	56.93	16	20	18	18	75
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	57.89	14	20		17	75
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	55.80	16	20	17	18	73
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	58.64	14	20		17	76
7	Knowledge of contemporary issues.	58.65	17	20		18	77
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	54.80	16	20		18	73
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	55.47	17	20		18	74
10	An ability to communicate effectively with a range of audiences.	56.73	18	19	17	18	75
11	Recognition of the need for and an ability to engage in continuing professional development.	58.99	18	20	17	18	77
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.58	14	20		17	77
PROGRAMME SPECIFIC OUTCOMES							
1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	61.40	16	20	19	18	80
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	58.45	16	20	18	18	77
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	61.73	17	19	18	18	80

HOD/MECH

PRATHYUSHA ENGINEERING COLLEGE
DEPARTMENT OF MECHANICAL ENGINEERING
PO ATTAINMENT 2013-2017 BATCH

PO No	Method assessment	Direct assessment (80%)	Indirect Assessment (20%)				
			End of Course Survey (20%)	Student Exit Survey (20%)	Rubrics (20%)	Indirect Assessment (20%)	% PO Attainment
1	An ability to apply knowledge of computing, mathematics, science and engineering fundamentals appropriate to the discipline.	61.26	15	19		17	78
2	An ability to analyze a problem, and identify and formulate the computing requirements appropriate to its solution.	61.07	15	20		17	79
3	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, cultural, societal and environmental considerations.	57.07	16	19	16	17	74
4	An ability to design and conduct experiments, as well as to analyze and interpret data.	57.89	14	20		17	75
5	An ability to use current techniques, skills, and modern tools necessary for computing practice.	53.31	16	20	16	17	71
6	An ability to analyze the local and global impact of computing on individuals, organizations, and society.	58.20	14	20		17	75
7	Knowledge of contemporary issues.	56.95	17	20		18	75
8	An understanding of professional, ethical, legal, security and social issues and responsibilities.	55.60	16	19		18	73
9	An ability to function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.	51.82	17	20		18	70
10	An ability to communicate effectively with a range of audiences.	56.93	18	20	17	18	75
11	Recognition of the need for and an ability to engage in continuing professional development.	57.67	18	19	17	18	76
12	An understanding of engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.	59.26	14	20		17	76
PROGRAMME SPECIFIC OUTCOMES							
1	To Analyze, Design and Develop computer programs / Applications in the areas related to Web-Technologies, Networking, Algorithms, Cloud Computing, Data analytics, Computer Vision, Cyber Security and Intelligent Systems for efficient design of computer-based and Mobile-based systems of varying complexity	61.15	16	20	19	18	80
2	To use modern software tools (like NS2, MATLAB, OpenCV, etc..) for designing, simulating, analyzing and generating experimental results for real-time problems and case studies	59.44	16	19	18	18	77
3	To Apply Software Engineering practices and strategies for developing Projects related to emerging technologies.	62.13	12	20	18	17	79

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