



# Kalyani Charitable Trust's Late G. N. Sapkal College of Engineering

Kalyani Hills, Anjaneri, Trimbakeshwar Road,  
Nashik – 422 213



Department of Electronics and Telecommunication Engineering

CO-PO mapping and attainment 2022-23 Sem-II

Program: - E&TC Engineering						Class: - SE(sem-2)				Div.: - A		
Course Name: - Signals & Systems-C201						Course Code: - 204191				Course -2019 Course		
Subject Teacher: - Prof Sachin.G.Bagul										A.Y.: - 22-23 SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	--	--	2	2	2	2	--	2	2	2
CO2	--	2	2	1	1	2	2	2	--	2	2	2
CO3	3	2	1	2	2	2	2	2	--	2	2	2
CO4	3	2	2	1	--	2	2	2	2	2	2	2
CO5	3	2	1	2	1	2	2	2	2	2	2	2
CO6	3	2	1	2	1	2	2	2	2	2	2	2
<b>CO</b>	<b>2.33</b>	<b>2</b>	<b>1.16</b>	<b>1.33</b>	<b>1.16</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>

Program: - Electronics &						Class: - S.E.				Div.: - A		
Course Name: - Control Systems C202						Course Code: - 204192				Course - Regular		
Subject Teacher: - Mrs. Kavita J. Mahajan										A.Y.: - 2022-23 SEM-II		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	2	-	-	-	1	1	1	1	1
CO2	3	3	-	-	-	-	-	3	-	-	-	-
CO3	3	3	2	2	-	-	-	-	-	-	-	1
CO4	3	3	2	2	2	1	1	-	1	-	1	2
CO5	3	3	-	-	-	-	-	3	-	-	-	-
CO6	2	3	2	2	-	-	1	1	-	-	1	1
CO7	2	3	2	2	1	1	1	1	-	1	1	1
<b>CO</b>	<b>2.71</b>	<b>2.85</b>	<b>2</b>	<b>2</b>	<b>1.5</b>	<b>1</b>	<b>1</b>	<b>1.8</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1.2</b>





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Program: - E&TC Engineering										Class: - SE			Div.: - A		
Course Name: - Principles of Communication Systems C203										Course Code: - 204193			Course -2019 Course		
Subject Teacher: - Prof Manjusha S. Borse										A.Y.: - 22-23			SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO1	PO11	PO12			
CO1	2	2	--	--	2	2	2	2	--	2	2	2			
CO2	2	2	2	1	1	--	2	2	--	2	2	2			
CO3	3	2	1	--	2	2	2	2	--	2	--	2			
CO4	--	2	2	1	--	2	2	2	2	2	2	2			
CO5	1	2	1	2	1	2	--	--	2	2	2	--			
CO6	3	2	1	2	1	2	2	2	2	2	2	2			
<b>CO</b>	<b>2.2</b>	<b>2</b>	<b>1.4</b>	<b>1.5</b>	<b>1.4</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>			

Program: - E&TC Engineering										Class: - SE(sem-2)			Div.: - A		
Course Name: - Object Oriented Programming C204										Course Code: - 204194			Course -2019 Course		
Subject Teacher: - Prof H.R.Deshmane										A.Y.: - 22-23			SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	3	-	-	2	3	-	-	3	-	-	-	-			
CO2	3	2	-	-	3	-	-	3	2	-	-	-			
CO3	3	3	-	3	3	-	-	3	-	-	-	-			
CO4	3	-	3	3	3	-	-	3	-	-	-	-			
CO5	3	-	-	-	3	-	-	3	-	-	2	2			
CO6	3	-	-	-	3	-	-	3	-	2	-	-			
<b>CO</b>	<b>3</b>	<b>2.5</b>	<b>3</b>	<b>2.66</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>			

Program: - Electronics &										Class: - S.E.			Div.: - A		
Course Name: - Signal & Control Lab C205										Course Code: - 204195			Course - Regular		
Subject Teacher: - Mrs. Kavita J. Mahajan & Prof. S. G. Bagul										A.Y.: - 2022-23			SEM-II		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12			
CO1	3	3	-	-	-	-	-	3	-	-	-	-			
CO2	3	3	2	2	-	-	-	-	-	-	-	1			
CO3	3	3	2	2	2	1	1	-	1	-	1	2			
CO4	3	3	2	-	2	1	-	-	-	-	1	1			
CO5	3	3	2	3	2	1	-	-	-	-	1	2			
CO6	3	3	2	3	2	1	-	-	-	-	1	2			
<b>CO</b>	<b>3.00</b>	<b>3.00</b>	<b>2.00</b>	<b>2.50</b>	<b>2.00</b>	<b>1.00</b>	<b>1.00</b>	<b>3.00</b>	<b>1.00</b>		<b>1.00</b>	<b>1.60</b>			





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Program: - E&TC Engineering					Class: - SE(sem-2)					Div.: - A		
Course Name: - Data Analytics Lab C206					Course Code: - 204198					Course -2019 Course		
Subject Teacher: - Prof.J.L.Pingle										A.Y.: - 22-23 SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	-	-	2	3	-	-	3	-	-	-	-
CO2	3	2	-	-	3	-	-	3	2	-	-	-
CO3	3	3	-	3	3	-	-	3	-	-	-	-
CO4	3	-	3	3	3	-	-	3	-	-	-	-
CO	3	2.5	0	2	3	0	0	3	2	0	0	0

Program: - E&TC Engineering					Class: - SE					Div.: - A		
Course Name: - Employability Skills Development C207					Course Code: - 204199					Course -2019 Course		
Subject Teacher: - Prof Manjusha S. Borse										A.Y.: - 22-23 SEM-4		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	--	--	2	2	2	2	--	2	2	2
CO2	--	2	2	1	1	2	2	2	--	2	2	2
CO3	3	2	1	2	2	2	2	1	--	2	2	2
CO4	2	2	2	1	--	2	2	2	2	2	2	2
CO5	3	2	1	2	1	2	2	-	2	2	2	2
CO	2.5	2	1.5	1.5	1.5	2	2	1.75	2	2	2	2

Program: - Electronics &					Class: - S.E.					Div.: - A		
Course Name: - Project Based Learning C208					Course Code: - 204200					Course – 2019 Pattern		
Subject Teacher: - Mrs. Kavita J. Mahajan										A.Y.: - 2022-23 SEM-II		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	3	-	2	-	-	-	-	-	-	-	-
CO2	-	2	1	-	-	3	1	3	-	-	-	-
CO3	2	1	3	2	1	-	-	-	3	-	-	-
CO4	-	3	2	3	2	-	-	-	-	-	-	-
CO5	-	2	1	1	2	3	-	-	-	3	1	-
CO6	-	-	-	-	-	-	-	-	3	-	-	-
CO	2	2.2	1.75	2	1.67	3	1	3	3	3	1	-



Program: - E&TC						Class: - TE SEM-2				Div.: - A		
Course Name: - Cellular Networks C301						Course Code: - 304192				Course -2019 Pat		
Subject Teacher: - Prof M. S. Borse						A.Y.: - 22-23 SEM-VI						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	2	--	--	2	--	2	2	1	2	2
CO2	2	2	1	2	3	1	3	2	1	1	1	1
CO3	2	2	2	2	3	2	2	2	3	2	2	2
CO4	2	2	2	3	2	2	1	1	2	2	2	3
CO5	2	1	2	1	1	1	--	2	3	3	1	1
CO6	1	--	1	--	2	3	2	2	3	1	3	3
CO	1.83	1.80	1.67	2.00	2.20	1.83	2.00	1.83	2.33	1.67	1.83	2.00

Program: - E&TC						Class: - TE SEM-2				Div.: - A		
Course Name: - Project Management C302						Course Code: - 304193				Course -2019 Pat		
Subject Teacher: - Prof S.G.Bagul						A.Y.: - 22-23 SEM-VI						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	--	2	--	2	2	3	2	2
CO2	2	2	1	2	3	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	3	2	2	2
CO4	2	2	2	3	2	2	2	3	2	2	2	3
CO5	2	1	2	1	1	1	--	2	3	3	3	3
CO6	--	--	--	--	--	3	3	3	3	3	3	3
CO	2.20	1.80	1.80	2.00	2.25	2.17	2.50	2.33	2.33	2.67	2.17	2.33

Program: - Electronics &						Class: - T.E.				Div.: - A		
Course Name: - Power Devices & Circuits C303						Course Code: - 304194				Course - Regular		
Subject Teacher: - Mrs. Kavita J. Mahajan						A.Y.: - 2022-23 SEM-						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO	PO11	PO12
CO1	3	3	2	-	-	-	3	-	-	-	-	3
CO2	3	2	3	1	1	2	1	-	-	-	1	2
CO3	2	3	2	2	1	2	1	-	2	-	2	2
CO4	2	2	3	-	-	-	-	-	-	-	-	-
CO5	3	3	2	2	2	2	1	-	2	-	-	2
CO6	3	3	1	2	3	2	2	-	-	-	-	2
CO	2.67	2.67	2.17	2.00	1.75	2.00	1.60	--	2.00	--	1.50	2.20



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Program: - E&TC						Class: - TE SEM-2				Div.: - A		
Course Name: - Embedded Processors (Elective - II) C304 B						Course Code: - 304195				Course -2019 Pat		
Subject Teacher: - Mrs. H. R. Deshmane										A.Y.: - 22-23 SEM-VI		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	--	-	--	3	-	-	-	2
CO2	2	2	1	2	3	-	-	3	2	-	-	-
CO3	2	2	2	2	3	-	-	3	-	-	-	-
CO4	2	2	2	3	2	-	2	3	-	-	-	-
CO5	2	2	2	1	1	-	--	3	-	-	2	2
CO6	2	--	--	--	--	-	-	3	-	2	-	-
<b>CO</b>	<b>2.16</b>	<b>2.0</b>	<b>1.80</b>	<b>2.00</b>	<b>2.25</b>	<b>-</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
Program: - E&TC						Class: - TE Sem-2				Div.: - A		
Course Name: - Internship C305						Course Code: - 304199				Course -2019 Pat		
Subject Teacher: - Prof.S.G.Patil										A.Y.: - 22-23 SEM-VI		
Cos	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	2	--	--	2	2	1	3	2	1
CO2	3	2	1	2	3	3	3	2	1	3	1	1
CO3	3	2	2	2	3	2	2	2	3	2	2	2
CO4	2	2	2	3	2	2	2	3	2	2	2	3
CO5	2	1	2	1	1	1	--	2	3	3	3	3
CO6	--	--	--	--	--	3	3	3	3	3	3	3
<b>CO</b>	<b>2.6</b>	<b>1.8</b>	<b>1.6</b>	<b>2</b>	<b>2.25</b>	<b>2.2</b>	<b>2.4</b>	<b>2.33</b>	<b>2.16</b>	<b>2.66</b>	<b>2</b>	<b>2.16</b>

Program: - E&TC Engineering						Class: - TE Sem-2,				Div.: - A		
Course Name: - Mini Project C306						Course Code: - 304200				Course -2019 Pat		
Subject Teacher: - Prof S.G.Bagul										A.Y.: - 22-23 SEM-VI		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	2	2	3	1	1	3	2	3	3
CO2	3	3	2	2	3	2	2	1	3	1	3	3
CO3	2	3	--	--	--	--	--	--	3	2	3	3
CO4	2	--	--	--	--	--	--	--	2	3	3	3
<b>CO</b>	<b>2.50</b>	<b>2.67</b>	<b>2.00</b>	<b>2.00</b>	<b>2.50</b>	<b>2.50</b>	<b>1.50</b>	<b>1.00</b>	<b>2.75</b>	<b>2.00</b>	<b>3.00</b>	<b>3.00</b>



Program: - E&TC Engineering						Class: - BE(SEM-2)				Div.: - A		
Course Name: - Fiber Optic Communication C401						Course Code: - 404190				Course –BE 2019 Pattern		
Subject Teacher: - Prof S.G.Patil						A.Y.: -2022-23						
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	3	2	2	---	2	---	---	---	1
CO2	3	2	3	2	3	2	2	3	---	---	2	2
CO3	3	3	3	2	2	2	2	2	---	2	2	---
CO4	3	2	---	3	2	2	3	2	3	---	2	2
CO5	3	2	3	2	2	2	--	3	3	2	3	3
CO6	3	2	3	--	2	3	2	3	3	3	3	3
CO	3	1.83	1.83	2	1.83	2.16	1.5	2.5	1.5	1.16	2	1.83

Program: - E&TC Engineering						Class: - BE(SEM-2)				Div.: - A		
Course Name: - ELECTIVE -5(BSP) C402						Course Code: - 404191				Course –BE 2019 Pattern		
Subject Teacher: - Prof S. B. Borse						A.Y.: -2022-23						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	2	--	2	2	1	2	2
CO2	2	3	1	2	2	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	2	2	2	2
CO4	1	2	2	1	2	2	2	3	2	2	2	3
CO5	2	--	2	1	1	1	--	2	3	3	3	2
CO6	--	1	--	1	--	3	3	3	3	2	2	3
CO	2	2	1.8	1.4	1.8	2.17	2.50	2.33	2.17	2.17	2	2.17

Program: - E&TC Engineering						Class: - BE(SEM-2)				Div.: - A		
Course Name: - ELECTIVE -6(Digital Marketing) C403A						Course Code: - 404192				Course –BE 2019 Pattern		
Subject Teacher: - Prof J.L.Pingle						A.Y.: -2022-23						
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	2	--	2	2	1	2	2
CO2	2	3	1	2	2	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	2	2	2	2
CO4	1	2	2	1	2	2	2	3	2	2	2	3
CO5	2	--	2	1	1	1	--	2	3	3	3	2
CO6	--	1	--	1	--	3	3	3	3	2	2	3
CO	2	2	1.8	1.4	1.8	2.17	2.50	2.33	2.17	2.17	2	2.17



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Program: - E&TC Engineering					Class: - BE(Sem-II)					Div.: - A		
Course Name: - Innovation & Entrepreneurship C404A					Course Code: - 404193					Course –BE 2019 Pattern		
Subject Teacher: - Prof S. B. Borse										A.Y.: -2022-23		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	2	--	2	2	1	2	2
CO2	2	3	1	2	2	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	2	2	2	2
CO4	1	2	2	1	2	2	2	3	2	2	2	3
CO5	2	--	2	1	1	1	--	2	3	3	3	2
CO6	--	1	--	1	--	3	3	3	3	2	2	3
CO	2	2	1.8	1.4	1.8	2.17	2.50	2.33	2.17	2.17	2	2.17

Program: - E&TC Engineering					Class: - BE(SEM-2)					Div.: - A		
Course Name: - ELECTIVE -6(Digital Buisness Management) C405					Course Code: - 404192					Course –BE 2019 Pattern		
Subject Teacher: - Prof J.L.Pingle										A.Y.: -2022-23		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	2	--	2	2	1	2	2
CO2	2	3	1	2	2	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	2	2	2	2
CO	2	2	1.8	1.4	1.8	2.17	2.5	2.17	2.17	2.17	2	2.17

Program: - E&TC Engineering					Class: - BE (Sem-II)					Div.: - A		
Course Name: - Project Phage II C406					Course Code: - 404197					Course –BE 2019 Pattern		
Subject Teacher: - Prof S. B. Borse										A.Y.: -2022-23		
COs	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	2	--	1	2	--	2	2	1	2	2
CO2	2	3	1	2	2	3	3	2	1	3	1	1
CO3	2	2	2	2	3	2	2	2	2	2	2	2
CO4	1	2	2	1	2	2	2	3	2	2	2	3
CO	2	2.25	1.75	1.66	2	2.25	2.33	2.25	1.75	2	1.75	2



**Table 1: Program level Course-PO matrix for all the courses**

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	2.33	2	1.16	1.33	1.16	2	2	2	1	2	2	2
C202	2.71	2.85	2	2	1.5	1	1	1.8	1	1	1	1.2
C203	2.2	2	1.4	1.5	1.4	2	2	2	2	2	2	2
C204	3	2.5	3	2.66	3			3	2	2	2	2
C205	3	3	2	2.5	2	1	1	3	1		1	1.6
C206	3	2.5	3	2	3			3	2			
C207	2.5	2	1.5	1.5	1.5	2	2	1.75	2	2	2	2
C208	2	2.2	1.75	2	1.67	3	1	3	3	3	1	
C301	1.83	1.8	1.67	2	2.2	1.83	2	1.83	2.33	1.67	1.83	2
C302	2.2	1.8	1.8	2	2.25	2.17	2.5	2.33	2.33	2.67	2.17	2.33
C303	2.67	2.67	2.17	2	1.75	2	1.6		2		1.5	2.2
C304B	2.16	2	1.8	2	2.25		2	3	2	2	2	2
C305	2.6	1.8	1.6	2	2.25	2.2	2.4	2.33	2.16	2.66	2	2.16
C306	2.5	2.67	2	2	2.5	2.5	1.5	1	2.75	2	3	3
C401	3	1.83	1.83	2	1.83	2.16	1.5	2.5	1.5	1.16	2	1.83
C402	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C403 A	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C404 A	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C405	2	2	1.8	1.4	1.8	2.17	2.5	2.17	2.17	2.17	2	2.17
C406	2	2.25	1.75	1.66	2	2.25	2.33	2.25	1.75	2	1.75	2
<b>Target level overall POs</b>	<b>2.39</b>	<b>2.19</b>	<b>1.88</b>	<b>1.84</b>	<b>1.97</b>	<b>2.05</b>	<b>1.94</b>	<b>2.31</b>	<b>1.98</b>	<b>2.05</b>	<b>1.86</b>	<b>2.06</b>





**Table 2: Program level Course-PSO matrix for all the courses**

Course	PSO1	PSO2	PSO3
C201	2.16	1.33	2
C202	2.14	3	1
C203	1.66	1.33	1.83
C204	2.16	1.33	2
C205	3	2.67	1.33
C206	2.25	1.5	2
C207	2	1.4	2
C208	2	2.67	2.2
C301	1.84	1.5	1.84
C302	2.16	1.33	2
C303	2.67	2	1.4
C304B	2.6	2	
C305	2.16	1.33	2
C306	3	1.75	2.25
C401	2.5	2	1.5
C402	2	1.5	1.8
C403A	2	1.5	1.8
C404A	2	1.5	1.8
C405	2	1.5	1.8
C406	2.25	1.5	1.75
<b>Target level overall PSOs</b>	<b>2.23</b>	<b>1.73</b>	<b>1.81</b>



Course Outcome Attainment

Course	Theory (%)						Oral / Practical (%)						Term Work (%)					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
C201	67.19	67.19	67.19	67.19	67.19	67.19	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C202	62.5	62.5	62.5	62.5	62.5	62.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C203	100	100	100	100	100	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA	NA
C204	82.81	82.81	82.81	82.81	82.81	82.81	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C205	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C206	NA	NA	NA	NA	NA	NA	88.89	88.89	88.89	88.89	88.89	NA	NA	NA	NA	NA	NA	NA
C207	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C208	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C301	100	100	100	100	100	100	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C302	76.7	76.7	76.7	76.7	76.7	76.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C303	47.92	47.92	47.92	47.92	47.92	47.92	95.56	95.56	95.56	95.56	95.56	95.56	NA	NA	NA	NA	NA	NA
C304B	91.49	91.49	91.49	91.49	91.49	91.49	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C305	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C306	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C401	96.97	96.97	96.97	96.97	96.97	96.97	100	100	100	100	100	100	100	100	100	100	100	100
C402	100	100	100	100	100	100	100	100	100	100	100	100	NA	NA	NA	NA	NA	NA
C403A	90	90	90	90	90	90	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C404A	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C406	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100	100	100	100	100	100	100



Internal Assessment:

Course	Unit Test (%)						Term work (%)					
	CO1	CO2	CO3	CO4	CO5	CO6	CO1	CO2	CO3	CO4	CO5	CO6
C201	89.06	96.88	95.31	96.88	96.88	100	98.44	98.44	98.44	98.44	98.44	98.44
C202	80.3	77.27	83.33	75.76	92.42	84.85	100	100	100	100	100	100
C203	89.39	96.97	95.45	96.97	96.97	96.97	NA	NA	NA	NA	NA	NA
C204	90.63	98.44	93.75	98.44	96.88	98.44	NA	NA	NA	NA	NA	NA
C205	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C206	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C207	NA	NA	NA	NA	NA	NA	93.94	93.94	93.94	93.94	93.94	93.94
C208	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C301	83.33	91.67	97.92	100	100	100	NA	NA	NA	NA	NA	NA
C302	80	94.29	97.14	100	100	100	NA	NA	NA	NA	NA	NA
C303	80	94.29	97.14	100	100	100	NA	NA	NA	NA	NA	NA
C304B	80	94.29	97.14	100	100	100	NA	NA	NA	NA	NA	NA
C305	NA	NA	NA	NA	NA	NA	100	100	100	100	100	100
C306	NA	NA	NA	NA	NA	NA	80	94.29	97.14	100	NA	NA
C401	97.14	94.29	97.14	97.14	100	97.14	NA	NA	NA	NA	NA	NA
C402	80	94.29	97.14	100	100	100	NA	NA	NA	NA	NA	NA
C403A	80	94.29	97.14	100	100	100	NA	NA	NA	NA	NA	NA
C404A	NA	NA	NA	NA	NA	NA	80%	94.29%	97.14%	100%	100%	100%
C405	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
C406	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Indirect Assessment:

Course	Course Exit Survey (%)					
	CO1	CO2	CO3	CO4	CO5	CO6
C201	96.9	96.9	93.75	92.19	90.91	92.19
C202	98.44	96.88	90.63	92.19	93.75	95.31
C203	96.97	96.97	93.94	92.42	93.94	90.91
C204	98.4	96.9	95.31	92.19	92.42	93.75
C205	NA	NA	NA	NA	NA	NA
C206	98.4	96.9	95.31	92.19	NA	NA
C207	96.97	96.97	93.94	92.42	93.94	90.91
C208	NA	NA	NA	NA	NA	NA
C301	100	95.83	91.67	91.67	85.42	87.5
C302	100	94.28	88.57	88.57	88.57	88.57
C303	97.92	100	85.42	87.5	89.58	93.75
C304B	100	94.28	88.57	88.57	88.57	88.57
C305	100	94.03	88.57	88.57	88.57	88.57



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C306	100	94.28	88.57	88.57	NA	NA
C401	97	94	91	100	100	100
C402	100	94.28	88.57	88.57	88.57	88.57
C403A	100	94.28	88.57	88.57	88.57	88.57
C404A	100%	94.28%	88.57%	88.57%	88.57%	88.57%
C405	100	94.11	88.24	NA	NA	NA
C406	100%	94.28%	88.57%	88.57%	NA	NA

Overall CO Attainment A.Y 2022-23

Course	Direct CO Attainment		Indirect CO Attainment	Overall CO Attainment
	External	Internal		
C201	3	3	3	3
C202	3	3	3	3
C203	3	3	3	3
C204	3	3	3	3
C205	NA	3	3	3
C206	3	NA	3	3
C207	NA	3	3	3
C208	NA	3	3	3
C301	3	3	3	3
C302	3	3	3	3
C303	2.5	3	3	2.64
C304B	3	3	3	3
C305	NA	3	3	3
C306	3	3	3	3
C401	3	3	3	3
C402	3	3	3	3
C403A	3	3	3	3
C404A	NA	3	3	3
C405	3	NA	3	3
C406	3	3	3	3



Table: 3 PO attainment values

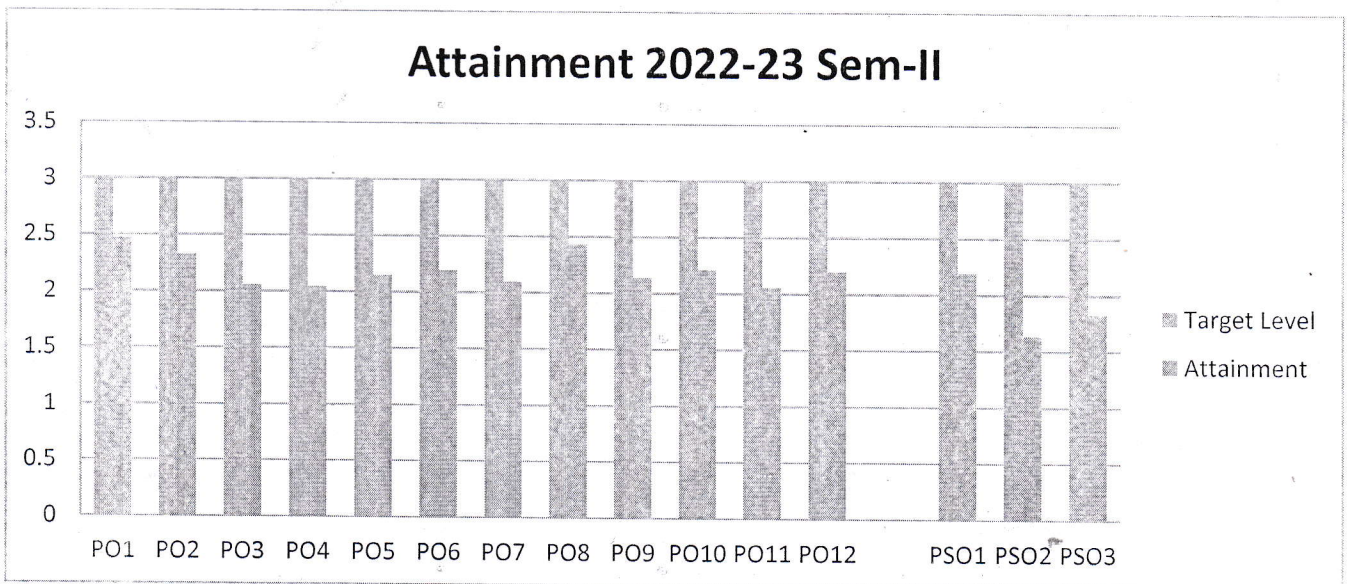
Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
C201	2.33	2	1.16	1.33	1.16	2	2	2	1	2	2	2
C202	2.71	2.85	2	2	1.5	1	1	1.8	1	1	1	1.2
C203	2.2	2	1.4	1.5	1.4	2	2	2	2	2	2	2
C204	3	2.5	3	2.66	3			3	2	2	2	2
C205	3	3	2	2.5	2	1	1	3	1		1	1.6
C206	3	2.5	3	2	3			3	2			
C207	2.5	2	1.5	1.5	1.5	2	2	1.75	2	2	2	2
C208	2	2.2	1.75	2	1.67	3	1	3	3	3	1	
C301	1.83	1.8	1.67	2	2.2	1.83	2	1.83	2.33	1.67	1.83	2
C302	2.2	1.8	1.8	2	2.25	2.17	2.5	2.33	2.33	2.67	2.17	2.33
C303	2.35	2.35	1.91	1.76	1.54	1.76	1.41		1.76		1.32	1.94
C304B	2.16	2	1.8	2	2.25		2	3	2	2	2	2
C305	2.6	1.8	1.6	2	2.25	2.2	2.4	2.33	2.16	2.66	2	2.16
C306	2.5	2.67	2	2	2.5	2.5	1.5	1	2.75	2	3	3
C401	3	1.83	1.83	2	1.83	2.16	1.5	2.5	1.5	1.16	2	1.83
C402	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C403A	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C404A	2	2	1.8	1.4	1.8	2.17	2.5	2.33	2.17	2.17	2	2.17
C405	2	2	1.8	1.4	1.8	2.17	2.5	2.17	2.17	2.17	2	2.17
C406	2	2.25	1.75	1.66	2	2.25	2.33	2.25	1.75	2	1.75	2
Direct PO Attainment	2.37	2.18	1.87	1.83	1.96	2.03	1.92	2.31	1.96	2.05	1.85	2.04
Indirect PO Attainment	2.87	2.91	2.79	2.91	2.87	2.83	2.79	2.88	2.82	2.86	2.91	2.83
Overall PO Attainment	2.47	2.32	2.05	2.04	2.14	2.19	2.10	2.43	2.13	2.21	2.06	2.20

Table: 4 PSO attainment values

Course	PSO1	PSO2	PSO3
C201	2.16	1.33	2
C202	2.14	3	1
C203	1.66	1.33	1.83
C204	2.16	1.33	2
C205	3	2.67	1.33
C206	2.25	1.5	2
C207	2	1.4	2



C208	2	2.67	2.2
C301	1.84	1.5	1.84
C302	2.16	1.33	2
C303	2.35	1.76	1.23
C304B	2.16	1.33	
C305	2.16	1.33	2
C306	3	1.75	2.25
C401	2.5	2	1.5
C402	2	1.5	1.8
C403A	2	1.5	1.8
C404A	2	1.5	1.8
C405	2	1.5	1.8
C406	2.25	1.5	1.75
Direct PSO Attainment	2.19	1.69	1.80
Indirect PSO Attainment	--	--	--
Overall PSO Attainment	2.19	1.64	1.83



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