

**DEPARTMENT OF CHEMISTRY**

SUBJECT	ENGINEERING CHEMISTRY	SUBJECT CODE	17CHE12
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COURSE OUTCOME

- C01.** Use of free energy equilibria rationalize bulk properties and process of using thermodynamic consideration, electrochemical energy of systems.
- C02.** Causes and effects of corrosion of metals and control of corrosion modification of surface properties of metals to develop resistance to corrosion, wear and tear impact etc by electroplating and electroless plating.
- C03.** Production and consumption of energy for industrialisation of country and living standards of people. Electrochemical and concentration cells. Classical, modern batteries and fuel cells. Utilization of solar energy for different useful forms of energy.
- C04.** Environmental pollution, waste management and water chemistry.
- C05.** Different techniques of instrumental methods of analysis. Fundamental principle of Nanomaterials.

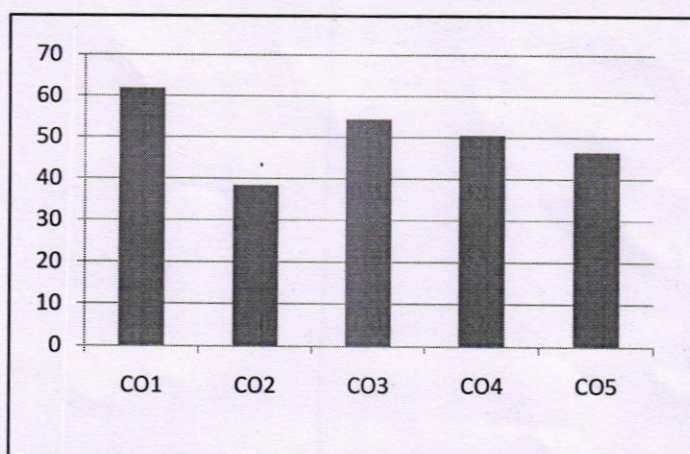
PROGRAM OUTCOMES

- P01** Engineering knowledge: An ability to apply knowledge of mathematics (including probability, statistics and discrete mathematics), science, and engineering for solving Engineering problems and Knowledge.
- P02** Problem analysis: Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- P03** Design / development of solutions: An ability to design solution for engineering problems and design system components or process to meet desired specifications and needs.
- P04** Conduct investigations of complex Problem: An ability to identify, formulate, comprehend, analyze, design synthesis of the information to solve complex engineering problems and provide valid conclusions.
- P05** Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling to complex engineering activities.
- P06** The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal, and cultural issues.
- P07** Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- P08** Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- P09** Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- P010** Communication: Communicate effectively on complex engineering activities with the engineering community and with the society.
- P011** Project management and finance: An ability to use the modern engineering tools, techniques, skills and management principles to do work as a member and leader in a team, to manage projects in multidisciplinary environments.
- P012** Life-long learning: A recognition of the need for, and an ability to engage in, to resolve contemporary issues and acquire lifelong learning.

COLLEGE	SHRIDEVI INSTITUTE OF ENGINEERING & TECHNOLOGY											
FACULTY NAME	Dr. CHANDRASEKHAR. N											
BRANCH	ME/ECE/EEE			ACADEMIC YEAR				2017-18				
COURSE	B.E	SEMESTER			I	SECTION			C			
SUBJECT	ENGINEERING CHEMISTRY						SUBJECT CODE			17CHE12		
CO & PO MAPPING												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	3	2	1	2	1	1	1	2	1	1	1	2
CO2	3	2	1	2	-	1	1	1	1	1	-	2
CO3	3	1	1	1	-	2	3	1	1	1	1	2
CO4	3	2	1	3	1	2	3	1	1	1	-	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	3	1.6	1	1.8	1	1.6	2	1.2	1	1	1	2
OVERALL MAPPING OF SUBJECT												1.38

CO AND PO ATTAINMENT

CO'S	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	61.854	1.86	1.24	0.62	1.24	0.62	0.62	0.62	1.24	0.62	0.62	0.62	1.24
CO2	38.343	1.15	0.77	0.38	0.77	-	0.38	0.38	0.38	0.38	0.38	-	0.77
CO3	54.421	1.63	0.54	0.54	0.54	-	1.08	1.63	0.54	0.54	0.54	0.54	1.08
CO4	50.59	1.52	1.01	0.51	1.52	0.51	1.01	1.52	0.51	0.51	0.51	-	1.01
CO5	46.529	1.39	0.47	0.47	0.47	0.47	0.93	0.93	0.47	0.47	0.47	0.47	0.93
AVERAGE		1.51	0.806	0.504	0.908	0.4	0.804	1.016	0.628	0.504	0.504	0.4	1.0
FINAL ATTAINMENT LEVEL													0.75



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**DEPARTMENT OF CHEMISTRY**

SUBJECT	ENGINEERING CHEMISTRY	SUBJECT CODE	17CHE22
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COURSE OUTCOME

- C01.** Use of free energy equilibria rationalize bulk properties and process of using thermodynamic consideration, electrochemical energy of systems.
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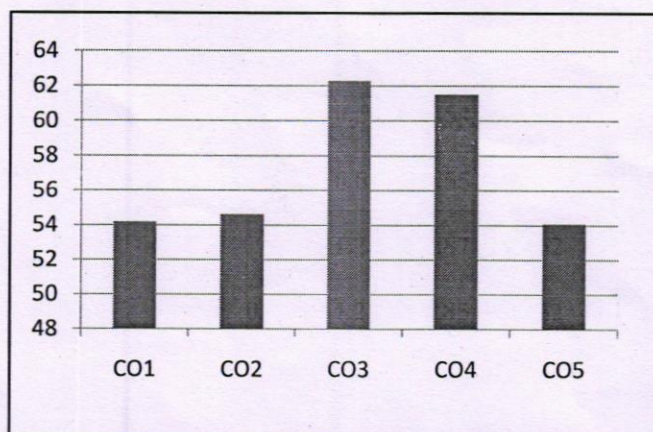
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BRANCH	ME/ECE/EEE			ACADEMIC YEAR				2017-18				
COURSE	B.E	SEMESTER			II	SECTION			A			
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CO3	3	1	1	1	-	2	3	1	1	1	1	2
CO4	3	2	1	3	1	2	3	1	1	1	-	2
CO5	3	1	1	1	1	2	2	1	1	1	1	2
AVERAGE	3	1.6	1	1.8	1	1.6	2	1.2	1	1	1	2
OVERALL MAPPING OF SUBJECT												1.38

CO AND PO ATTAINMENT

CO'S	CO%	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	54.18	1.63	1.08	0.54	1.08	0.54	0.54	0.54	1.08	0.54	0.54	0.54	1.08
CO2	54.63	1.64	1.09	0.55	1.09	-	0.55	0.55	0.55	0.55	0.55	-	1.09
CO3	62.28	1.87	0.62	0.62	0.62	-	1.25	1.87	0.62	0.62	0.62	0.62	1.25
CO4	61.50	1.85	1.23	0.62	1.85	0.62	1.23	1.85	0.62	0.62	0.62	-	1.23
CO5	54.08	1.62	0.54	0.54	0.54	0.54	1.08	1.08	0.54	0.54	0.54	0.54	1.08
AVERAGE		1.722	0.912	0.574	1.036	0.425	0.93	1.178	0.682	0.574	0.574	0.425	1.146
FINAL ATTAINMENT LEVEL													0.85



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