

**SCHEME OF TEACHING AND EXAMINATION
B.E. CHEMICAL ENGINEERING
III SEMESTER**

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching hours/week		Examination			
				Theory	Pract.	Duration (Hrs)	Marks		
							IA	Theory/Pract.	Total
1	10MAT31	Engg. Mathematics – III	Maths	04	--	03	25	100	125
2	10CH32	Momentum Transfer	Chem. Engg.	04	--	03	25	100	125
3	10CH33	Chemical Process Calculations	Chem. Engg.	04	--	03	25	100	125
4	10CH34	Technical Chemistry	Chemistry	04	--	03	25	100	125
5	10CH35	Mechanical Operations	Chem. Engg.	04	--	03	25	100	125
6	10CH36	Comp. Aided Chemical Equipment Drawing	Chem. Engg.	--	03	03	25	100	125
7	10CHL37	Momentum Transfer Lab	Chem. Engg.	--	03	03	25	50	75
8	10CHL38	Technical Chemistry Lab - I	Chemistry	--	03	03	25	50	75
Total				20	09	24	200	700	900

**SCHEME OF TEACHING AND EXAMINATION
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IV SEMESTER**

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching hours/week		Examination			
				Theory	Pract.	Duration (Hrs)	Marks		
							I.A	Theory/Pract.	Total
1	10MAT41	Engg. Mathematics – IV	Maths	04	--	03	25	100	125
2	10CH42	Material Science	Chem. Engg.	04	--	03	25	100	125
3	10CH43	Chemical Engg. Thermodynamics	Chem. Engg.	04	--	03	25	100	125
4	10CH44	Process Heat Transfer	Chem. Engg.	04	--	03	25	100	125
5	10CH45	Computational Methods	Chem. Engg.	04	--	03	25	100	125
6	10CH46	Instrumental Methods of Chemical Analysis	Chem. Engg. / Chemistry	04	--	03	25	100	125
7	10CHL47	Mechanical Operations Lab	Chem. Engg.	--	03	03	25	50	75
8	10CHL48	Technical Chemistry Lab - II	Chemistry	--	03	03	25	50	75
Total				24	06	24	200	700	900

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V SEMESTER**

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching hours/week			Examination		
				Theory	Pract.	Duration (Hrs)	Marks		
							I.A	Theory/Pract.	Total
1	10AL51	Management & Entrepreneurship	@	04	--	03	25	100	125
2	10CH52	Chemical Process Industries	Chem. Engg.	04	--	03	25	100	125
3	10CH53	Mass Transfer – I	Chem. Engg.	04	--	03	25	100	125
4	10CH54	Chemical Reaction Engg. – I	Chem. Engg.	04	--	03	25	100	125
5	10CH55	Pollution Prevention & Control Engg.	Chem. Engg.	04	--	03	25	100	125
6	10CH56	Chemical Equipment Design	Chem. Engg.	04	--	03	25	100	125
7	10CHL57	Pollution Control & Instrumental Analysis Lab	Chem. Engg.	--	03	04	25	50	75
8	10CHL58	Heat Transfer Lab	Chem. Engg.	--	03	04	25	50	75
Total				24	06	--	200	700	900

Note: @ indicates that teaching department can be any Engineering Department/Department of Management Studies

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Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching hrs./week		Examination			
				Theory	Pract.	Duration (Hrs)	Marks		
							IA	Theory/ Pract.	Total
1	10CH61	Chemical Plant Utilities & Safety	Chem. Engg.	04	--	03	25	100	125
2	10CH62	Mass Transfer – II	Chem. Engg.	04	--	03	25	100	125
3	10CH63	Chemical Reaction Engg. – II	Chem. Engg.	04	--	03	25	100	125
4	10CH64	Energy Technology	Chem. Engg.	04	--	03	25	100	125
5	10CH65	Process Equipment Design & Drawing	Chem. Engg.	02	02	04	25	100	125
6	10CH66x	Elective – I (Group A)	Chem. Engg.	04	--	03	25	100	125
7	10CHL67	Chemical Reaction Engg. Lab	Chem. Engg.	--	03	04	25	50	75
8	10CHL68	Mass Transfer Lab	Chem. Engg.	--	03	04	25	50	75
Total				22	08	27	200	700	900

Elective – I (Group A)		
Sl. No.	Subject Code	Title of the Subject
1	10CH661	Petroleum Refinery Engg.
2	10CH663	Operations Research
3	10CH662	Pharmaceutical Technology
4	10CH664	Polymer Technology

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VII SEMESTER**

Sl. No.	Subject Code	Title of the Subject	Teaching Dept.	Teaching hrs./week		Examination			
				Theory	Pract.	Duration (Hrs)	Marks		
							IA	Theory/Pract.	Total
1	10CH71	Chemical Process Integration	Chem. Engg	04	--	03	25	100	125
2	10CH72	Instrumentation & Process Control	Chem. Engg	04	--	03	25	100	125
3	10CH73	Computer Applications & Modeling	Chem. Engg	04	--	03	25	100	125
4	10CH74	Bio Chemical Engineering	Chem. Engg	04	--	03	25	100	125
5	10CH75x	Elective – II (Group B)	Chem. Engg	04	--	03	25	100	125
6	10CH76x	Elective – III (Group C)	Chem. Engg	04	--	03	25	100	125
7	10CHL77	Process Control Lab	Chem. Engg	--	03	04	25	50	75
8	10CHL78	Computer Applications & Simulation Lab	Chem. Engg	--	03	04	25	50	75
Total				24	06	--	200	700	900

Elective – II (Group B)		
Sl. No.	Subject Code	Title of the Subject
1	10CH751	Food Technology
2	10CH752	Multi Component Distillation
3	10CH753	Electrochemical Technology
4	10CH754	Interfacial Phenomenon & Surface Engg.

Elective – III (Group C)		
Sl. No.	Subject Code	Title of the Subject
1	10CH761	Applied Mathematics in Chemical Engg.
2	10CH762	Sugar Technology
3	10CH763	Petrochemicals
4	10CH764	Oils and Fats

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Sl. No	Subject Code	Title of the Subject	Teaching Dept.	Teaching hrs./week		Examination			
				Theory	Pract.	Duration (Hrs)	Marks		
							I.A	Theory/Pract.	Total
1	10CH81	Process Engineering Economics	CH	04	--	03	25	100	125
2	10CH82	Transport Phenomena	CH	04	--	03	25	100	125
3	10CH83x	Elective D	CH	04	--	03	25	100	125
4	10CH84x	Elective E	CH	04	--	03	25	100	125
5	10CH85	Project	CH	--	09	03	100	100	200
6	10CH86	Seminar	CH	--	06	--	50	--	50
7	10CH87	In-plant Training/ Industrial Visit	--	--	--	--	50	--	50
Total				16	15	--	300	500	800

Elective – IV (Group D)		
Sl. No.	Subject Code	Title of the Subject
1	10CH831	Nanotechnology Applications in Chemical Engineering
2	10CH832	Advanced Bio Process Engineering
3	10CH833	Novel Separation Techniques
4	10CH834	Composite Materials

Elective – V (Group E)		
Sl. No.	Subject Code	Title of the Subject
1	10CH841	Pilot Plant and Scale up Methods
2	10CH842	Solid Waste Management
3	10CH843	Safety and Environmental Audit of Chemical Process Industries
4	10CH844	Pulp and Paper Technology