

#### **B.TECH PETROCHEMICAL TECHNOLOGY**

### (FOUR YEAR FULL TIME)

# **REGULATION 2008**

## **SEMESTER I**

CODE NO.	COURSE TITLE	L	Т	Р	С			
THEORY								
XPC101	Technical English	3	1	0	4			
XPC102	Mathematics- I	3	1	0	4			
XPC103	Applied Physics	3	1	0	4			
XPC104	Applied Chemistry	3	1	0	4			
XPC105	Engineering Graphics	2	0	3	4			
XPC106	Basic Engineering	4	0	0	4			
	PRACTICAL							
XPC107	Applied Physics Lab	0	0	3	2			
XPC108	Applied Chemistry Lab	0	0	3	2			
XPC109	Basic Workshop Practice	0	0	3	2			

### **Total Hours: 34**

#### **Total Credits:30**

#### **SEMESTER II**

CODE NO.	COURSE TITLE	L	Т	Р	С		
THEORY							
XPC201	Mathematics – II	3	1	0	4		
XPC202	Computer Programming	4	0	0	4		
XPC203	Physical chemistry	3	1	0	4		
XPC204	Organic Chemistry	3	1	0	4		
XPC205	Material Technology	4	0	0	4		
XPC206	Environmental Science & Engineering	3	0	0	3		
	PRACTICAL						
XPC207	Computer Programming Lab	0	0	3	2		
XPC208	Communication Skills Enhancement	2	0	2	3		
XPC209	Physical and Organic Chemistry Lab	0	0	3	2		
Total Hours: 33 Total Credits: 30				)			

**Total Hours: 33** 

**Total Credits:30** 

# SEMESTER III

CODE NO.	COURSE TITLE	L	Т	Р	С			
	THEORY							
XPC301	Mathematics-III	3	1	0	4			
XPC302	Fluid mechanics	3	1	0	4			
XPC303	Electrical Machines and Drives	3	1	0	4			
XPC304	General Chemical Technology	4	0	0	4			
XPC305	Process Calculations	3	1	0	4			
XPC306	Professional Ethics and Human values (PC)	3	0	0	3			
PRACTICAL								
XPC307	Basic Engineering Lab	0	0	3	2			
XPC308	Fluid Mechanics Lab	0	0	3	2			

**Total Hours: 29** 

**Total Credits:27** 

## SEMESTER IV

CODE NO.	COURSE TITLE	L	Т	Р	С		
THEORY							
XPC401	Mechanical Operations	3	0	0	3		
XPC402	Petroleum Refinery Engineering I	3	1	0	4		
XPC403	Heat Transfer	3	1	0	4		
XPC404	Process Instrumentation	3	1	0	4		
XPC405	Petroleum Thermodynamics	3	1	0	4		
XPC406	Petrochemical technology I	3	1	0	4		
PRACTICAL							
XPC407	Mechanical Operations Lab	0	0	3	2		
XPC408	Heat Transfer Lab	0	0	3	2		

**Total Hours: 29** 

**Total Credits: 27** 

### SEMESTER V

CODE NO.	COURSE TITLE	L	Т	Р	C			
	THEORY							
XPC501	Numerical Methods and Statistics	3	1	0	4			
XPC502	Petroleum Refinery Engineering II	3	1	0	4			
XPC503	Petroleum Exploration and Exploitation Techniques	3	1	0	4			
XPC504	Chemical Reaction Engineering - I	3	1	0	4			
XPC505	Mass Transfer - I	3	1	0	4			
XPC506	Petrochemical technology II	3	0	0	3			
PRACTICAL								
XPC507	Mass Transfer Lab	0	0	3	2			
XPC508	Petrochemical Analysis Lab - I	0	0	3	2			

**Total Hours: 29** 

**Total Credits: 28** 

# SEMESTER VI

CODE NO.	COURSE TITLE	L	Т	Р	С			
	THEORY							
XPC601	Process Dynamics and Control	3	1	0	4			
XPC602	Natural Gas and Synthetic Fuels Technology	3	0	0	3			
XPC603	Plant Utilities	3	0	0	3			
XPC604	Chemical Reaction Engineering - II	3	1	0	4			
XPC605	Mass Transfer -II	3	1	0	4			
XPC606	Elective – I	3	0	0	3			
	PRACTICAL							
XPC607	Chemical Reaction Engineering Lab	0	0	3	2			
XPC608	Petrochemical Analysis Lab - II	0	0	3	2			

**Total Hours: 27** 

**Total Credits: 25** 

## SEMESTER VII

CODE NO.	COURSE TITLE	L	Т	Р	С			
	THEORY							
XPC701	Social Engineering	3	0	0	3			
XPC702	Process Engineering Economics	3	1	0	4			
XPC703	Transport Phenomena	3	0	0	3			
XPC704	Process Modeling and Simulation	3	1	0	4			
XPC705*	Elective – II	3	0	0	3			
XPC706*	Elective – III	3	0	0	3			
	PRACTICAL							
XPC707	Process Dynamics and Control Lab	0	0	3	2			
XPC708	Process Equipment Design and Drawing Lab	1	1	3	4			
XPC709	Mini Project	0	0	4	4			

**Total Hours: 31** 

**Total Credits: 30** 

# SEMESTER VIII

CODE NO.	COURSE TITLE	L	Т	Р	С		
	THEORY						
XPC801	Entrepreneurial development management	3	0	0	3		
XPC802	Safety and Risk Management	3	1	0	4		
XPC803*	Elective – IV	3	0	0	3		
XPC804*	Elective – V	3	0	0	3		
PRACTICAL							
XPC805	Project Work & IPT Evaluation	0	0	24	12		

**Total Hours: 37** 

**Total Credits: 25** 

**Over all Credits: 222**