GUJARAT TECHNOLOGICAL UNIVERSITY
Chemical Engineering (05)
BE 1st To 8th Semester Exam Scheme & Subject Code

EVALUATION SCHEME

University Exam (Theory) (E)		University Exam (Practical) (E)		Continuous Evaluation Process(M)		Practical (I)	
MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
70	23	X	50% of X	20	8	10	4
				30	12	X	50% of X

NOTE :
X = Marks of the Particular Subject.
Continuous Evaluation(M) 20/8 and Practical (I) 10/4 scheme apply up to April 2009
Continuous Evaluation(M) 30/12 and Practical X/ 50% of X scheme apply from April 2009 onward.
University Exam (Practical) (E) Component is applicable only in 7th & 8th Semester.

1st Year

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
110001	Chemistry	3	0	2	5	70	ь	30	50	150	5
110002	Communication Skills	1	0	2	3	70	ь	30	50	150	5
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	ь	30	50	150	5
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	ь	30	50	150	5
110005	Elements of Electrical Engineering	4	0	2	6	70	ь	30	50	150	5
110006	Elements of Mechanical Engineering	4	0	2	6	70	ь	30	50	150	5
110007	Environmental Studies	3	0	0	3	70	ь	30	50	150	5

110008 OR 110014	Maths-I (entry year 2008-10 having backlog)OR Calculus (entry year 2011-12)	3	2	0	5	70	ъ	30	50	150	5
110009 OR 110015	Maths-II (entry year 2008-10 having backlog) OR Vector Calculus and Linear Algebra (entry year 2011-12)	3	2	0	5	70	ъ	30	50	150	5
110010	Mechanics of Solids (Revised)	3	0	2	5	70	ъ	30	50	150	5
110011	Physics	3	0	2	5	70	ъ	30	50	150	5
110012	Workshop	0	0	4	4	0	ъ	0	100	100	5
110013	Engineering Graphics	2	0	4	6	70	ъ	30	50	150	5
	TOTAL	**35**	**4**	**26**	**65**						

Semester III

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
130001/ 130002	Mathematics-3 / Advanced Engineering Mathematics (New)	3	2	0	5	70	ъ	30	50	150	5
130501	Organic Chemistry and Unit Processes	3	0	3	6	70	ъ	30	50	150	5
130502	Fluid Flow Operation	3	0	3	6	70	ъ	30	50	150	5
130503	Computer Oriented Numerical Techniques	0	0	2	2	0	ъ	0	100	100	5
130504	Process Calculation	4	1	0	5	70	ъ	30	50	150	5
130505	Chemical Process Industries-1	3	0	3	6	70	ъ	30	50	150	5
	TOTAL	**16**	**3**	**11**	**30**						

Semester IV

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
140001	Mathematics-4	3	2	0	5	70	ъ	30	50	150	5
140002	Management-1	2	0	0	2	70	ъ	30	50	150	5
140501	Physical And Inorganic Chemistry	3	0	4	7	70	ъ	30	50	150	5
140502	Chemical Engineering Thermodynamics -I	3	1	0	4	70	ъ	30	50	150	5
140503	Process Heat Transfer	3	0	3	6	70	ъ	30	50	150	5
140504	Institute Elective-1(Fundamental Chemical Engineering Calculations & Stoichiometry)	4	0	2	6	70	ъ	30	50	150	5
	TOTAL	**18**	**3**	**9**	**30**						

SemesterV

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
150001	Management - II	2	0	0	2	70	ь	30	50	150	5
150501	Mass Transfer Operation ï I	3	0	3	6	70	ь	30	50	150	5
150502	Mechanical Operation	3	0	3	6	70	ь	30	50	150	5
150503	Chemical Engineering Thermodynamics-II	3	1	0	4	70	ь	30	50	150	5
150504	Instrumentation & Process Control	3	0	3	6	70	ь	30	50	150	5
150505	Fundamentals of Chemical Engineering Unit Operations(Institute Elective - II)	4	0	2	6	70	ь	30	50	150	5
	TOTAL	**18**	**1**	**11**	**30**						

Semester VI

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
160501	Mass Transfer Operation ï II	3	0	3	6	70	ь	30	50	150	5
160502	Chemical Process Industries-II	3	0	3	6	70	ь	30	50	150	5
160503	Process Equipment Design-I	4	0	3	7	70	ь	30	50	150	5
160504	Pollution Control & Safety Management	3	0	0	3	70	ь	30	50	150	5
160505	Computer Aided Process Synthesis	4	0	4	8	70	ь	30	50	150	5
	TOTAL	**17**	**0**	**13**	**30**						

Semester VII

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical) (E)	Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
170501	Chemical Reaction Engineering-I	3	0	3	6	70	30	30	20	150	5
170502	Process Equipment Design-II	3	0	3	6	70	30	30	20	150	5
170503	Plant Design & Project Engineering	3	0	0	3	70	0	30	50	150	5
170504	New Separation Techniques	3	0	2	5	70	30	30	20	150	5
170505	Energy Technology (Department Elective-I)	4	0	2	6	70	30	30	20	150	5
170506	Biochemical Engineering (Department Elective-I)	4	0	2	6	70	30	30	20	150	5
170001	Project - I	0	0	4	4	0	100	0	50	150	5
	TOTAL	**16**	**0**	**14**	**30**						

Semester VIII

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory)	University Exam (Practical)	Continuous Evaluation Process	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
180501	Chemical Reaction Engineering II	3	0	3	6	70	30	30	20	150	5
180502	Petroleum Refining & Petrochemicals	4	0	2	6	70	30	30	20	150	5
180503	Process Simulation & Optimization	3	0	3	6	70	30	30	20	150	5
180504	Project II	0	0	8	8	0	100	0	50	150	5
180505	Multi Component Distillation (Department Elective-II)	3	1	0	4	70	30	30	20	150	5
180506	Chemical System Modelling (Department Elective-II)	3	1	0	4	70	30	30	20	150	5
	TOTAL	**13**	**1**	**16**	**30**						