GUJARAT TECHNOLOGICAL UNIVERSITY
Chemical Technology(36)
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	–	30	50	150	36
110002	Communication Skills	1	0	2	3	70	–	30	50	150	36
110003	Computer Programming & Utilization (Revised)	2	0	4	6	70	–	30	50	150	36
110004	Elements of Civil Engineering (Revised)	4	0	2	6	70	–	30	50	150	36
110005	Elements of Electrical Engineering	4	0	2	6	70	–	30	50	150	36
110006	Elements of Mechanical Engineering	4	0	2	6	70	–	30	50	150	36
110007	Environmental Studies	3	0	0	3	70	–	30	50	150	36

110008 OR 110014	Maths-I (entry year 2008-10 having backlog)OR Calculus (entry year 2011-12)	3	2	0	5	70	–	30	50	150	36
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	–	30	50	150	36
110010	Mechanics of Solids (Revised)	3	0	2	5	70	–	30	50	150	36
110011	Physics	3	0	2	5	70	–	30	50	150	36
110012	Workshop	0	0	4	4	0	–	0	100	100	36
110013	Engineering Graphics	2	0	4	6	70	–	30	50	150	36
	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**							
130002	Advnaced Engineering Mathematics	3	2	0	5	70	–	30	50	150	36
133501	Organic Chemistry for Technologists-I	3	0	3	6	70	–	30	50	150	36
133502	Analytical Techniques	3	0	2	5	70	–	30	50	150	36
133503	Applied Physics	3	0	2	5	70	–	30	50	150	36
133504	Physical Chemistey	3	0	2	5	70	–	30	50	150	36
133601	Introduction to Medicinal Chemistry and Biochemistry(Department Elective-I)	4	0	0	4	70	–	30	50	150	36
133602	Polymer Chemistry for Chemical Technology(Department Elective-I)	4	0	0	4	70	–	30	50	150	36
133603	Introduction to Glass and Ceramic Technology-1 (Department Elective-I)	4	0	0	4	70	–	30	50	150	36
133604	Chemistry for intermediate and colorants-1 (Department Elective-I)	4	0	0	4	70	–	30	50	150	36
	TOTAL	**19**	**2**	**9**	**30**						

Semester IV

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical)	Continuous Evaluation Process	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
140001	Mathematics-4	3	2	0	5	70	–	30	50	150	36
140002	Management-1	2	0	0	2	70	–	30	50	150	36
143501	Organic Chemistry for Technologists-II	3	0	3	6	70	–	30	50	150	36
143502	Chemical Engineering Operations	3	1	3	7	70	–	30	50	150	36
143601	Medicinal Chemistry& Physio-pharmacology (Department Elective-II)	3	1	0	4	70	–	30	50	150	36
143602	Rubber Chemistry & Natural Polymers (Department Elective-II	3	1	0	4	70	–	30	50	150	36
143603	Introduction to Glass & Ceramic Technology-II (Department Elective-II)	3	1	0	4	70	–	30	50	150	36
143604	Chemistry of Intermediates & Colorants-II (Department Elective-II)	3	1	0	4	70	–	30	50	150	36
143605	Composite Materials (Institute Elective)	4	0	2	6	70	–	30	50	150	36
	TOTAL	**18**	**4**	**8**	**30**						

Semester V

ubject Co	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical)	Continuous Evaluation Process	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
150001	Management-II	2	0	0	2	70	0	30	50	150	36
153501	Process Instrumentation, Dynamics & Control	3	0	3	6	70	0	30	50	150	36
153502	Basics of Mass Transfer	3	0	3	6	70	0	30	50	150	36
153601	Pharmaceutical Chemistry (Department Elective-III)	3	0	2	5	70	0	30	50	150	36
153602	Technology of Polymeric & Rubber Materials-I (Department Elective-III)	3	0	2	5	70	0	30	50	150	36
153603	Processing of Glass & Ceramics - I (Department Elective-III)	3	0	2	5	70	0	30	50	150	36
153604	Technology of Intermediates & Colorants (Department Elective-III)	3	0	2	5	70	0	30	50	150	36
153605	Microbiology & Formulation Technology of Liquids & Topicals (Department Elective-IV)	3	0	2	5	70	0	30	50	150	36
153606	Polymeric & Rubber Materials - II (Department Elective-IV)	3	0	2	5	70	0	30	50	150	36

153607	Basics of Glass Technology (Department Elective-IV)	3	0	2	5	70	0	30	50	150	36
153608	Chemistry of Intermediates & Colorants - III (Department Elective-IV)	3	0	2	5	70	0	30	50	150	36
153609	Science & Technology of Additives (Institute Elective - II)	4	0	2	6	70	0	30	50	150	36
153610	Polymeric Materials (Institute Elective -II)	4	0	2	6	70	0	30	50	150	36
	TOTAL	**18**	**0**	**12**	**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							
163501	Economics & Industrial Management	4	0	0	4	70	0	30	50	150	36
163502	Material & Energy Balance Calculations	4	1	0	5	70	0	30	50	150	36
163503	Fluid Flow & Heat Transfer	4	0	3	7	70	0	30	50	150	36
163601	Medicinal Chemistry-I (Department Elective-V)	4	0	3	7	70	0	30	50	150	36
163602	Compounding & Processing of Plastics & Rubbers-I (Department Elective-V)	4	0	3	7	70	0	30	50	150	36
163603	Technology of Refractories (Department Elective-V)	4	0	3	7	70	0	30	50	150	36
163604	Technology of Pigments (Department Elective-V)	4	0	3	7	70	0	30	50	150	36
163605	Technology of Solid Dosage Forms & Medicinal	4	0	3	7	70	0	30	50	150	36
163606	Compounding & Processing of Plastics & Rubbers-II (Department Elective-VI)	4	0	3	7	70	0	30	50	150	36
163607	Technology of Ceramic Coatings (Department Elective-VI)	4	0	3	7	70	0	30	50	150	36
163608	Principles of Dyeing & Printing (Department Elective-VI)	4	0	3	7	70	0	30	50	150	36
	Total	**20**	**1**	**9**	**30**						

Semester - VII

Subject Code	Subject Name	Teaching Scheme (Hours)			Credits	University Exam		Continuous Evaluation Process (M)	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
173501	Chemical Process Technology	4	0	0	4	70	0	30	50	150	36
173502	Safety & Hygiene in Chemical Industries	4	0	0	4	70	0	30	50	150	36
173601	Basics of Catalysis	3	1	0	4	70	30	30	20	150	36
173602	Process Technology of Drugs & Intermediates (Department Elective-VII)	4	0	3	7	70	30	30	20	150	36
173603	Evaluation & Testing of Polymers & Rubbers(Department Elective-VII)	4	0	3	7	70	30	30	20	150	36
173604	Technology of Whitewares (Department Elective-VII)	4	0	3	7	70	30	30	20	150	36
173605	Environmental Aspects of Dyes & Pigment Industry (Department Elective-VII)	4	0	3	7	70	30	30	20	150	36
173606	Medicinal Chemistry - II & Technology of Sterile products (Department Elective-VIII)	4	0	3	7	70	30	30	20	150	36
173607	Product Design concepts : Structures & Additives (Department Elective-VIII)	4	0	3	7	70	30	30	20	150	36
173608	Special Topics in Glass & Ceramics - I (Department Elective-VIII)	4	0	3	7	70	30	30	20	150	36
173609	Analytical Methods for Dyestuff & Pigment Industry (Department Elective-VIII)	4	0	3	7	70	30	30	20	150	36
170001	Project - I	0	0	4	4	0	100	0	50	150	36
		19	**1**	**10**	**30**						

Semester - VIII

Subject Code	Subject Name	Teaching Scheme(Hours)			Credits	University Exam (Theory) (E)	University Exam (Practical)	Continuous Evaluation Process	Practical (I)	Total Marks	Branch Code
		Theory	Tutorial	Practical							
183501	Management of Chemical Industries	3	0	0	3	70	0	30	50	150	36
183502	Chemical Kinetics & Reaction Engineering	3	0	3	6	70	30	30	20	150	36

183503	Solid Fluid Operations	3	0	0	3	70	0	30	50	150	36
183601	Drug Delivery, Biotechnology & Validation Requirement (Department Elective- IX)	3	0	3	6	70	30	30	20	150	36
183602	Design & Fabrication of Molds (Department Elective- IX)	3	0	3	6	70	30	30	20	150	36
183603	Special Topics in Glass & Ceramics - II (Department Elective- IX)	3	0	3	6	70	30	30	20	150	36
183604	New Technologies & Products (Department Elective- IX)	3	0	3	6	70	30	30	20	150	36
183605	Project - II	0	0	12	12	0	150	0	50	200	36
	Total	**12**	**0**	**18**	**30**						