

U.P. TECHNICAL UNIVERSITY, LUCKNOW
REVISED STUDY AND EVALUATION SCHEME

B.Tech. First Year (Common to all Branches)

EFFECTIVE FROM THE SESSION: 2004-05

B.Tech. Food Technology

Year: 1 Semester- I

S.No	Course No.	Subject	Periods			Evaluation Schemes			Subject Total	
			L	T	P	Sessional Exam.		Exam. ESE		
						CT	TA			Total
THEORY SUBJECTS										
1.	TAS-101/ TAS-102	Physics/Chemistry	03	01	00	30	20	50	100	150
2.	TAS-103	Professional Communication	03	01	00	30	20	50	100	150
3.	TAS-104	Mathematics-I	03	01	00	30	20	50	100	150
4.	TEE-101/ TME-101	Electrical Engineering/ Mechanical Engineering	03	01	00	30	20	50	100	150
5.	TEC-101/ TIT-101	Electronics Engineering/ Information Technology	03	01	00	30	20	50	100	150
PRACTICAL / DESIGN / DRAWING										
6.	TAS-151/ TAS-152	Physics/ Chemistry	0	0	02	10	10	20	30	50
7.	TEE-151/ TME-151	Electrical Engineering/ Mechanical Engineering	0	0	02	10	10	20	30	50
8.	TCS-151/ TWS-151	Computer Programming Lab / Workshop Practice	0	1	02	10	10	20	30	50
9.	TCE-151	Engineering Graphics	0	0	03	10	10	20	30	50
10.	GP 101	General Proficiency	-	-	-	-	-	50	-	50
		Total	15	6	9	-	-	350	650	1000

B.Tech. Food Technology

Year: 1 Semester- II

S.No	Course No.	Subject	Periods			Evaluation Schemes			Subject Total	
			L	T	P	Sessional Exam.		Exam. ESE		
						CT	TA			Total
THEORY SUBJECTS										
1.	TES-201	Environmental Studies	03	01	00	30	20	50	100	150
2.	TAS-202/ TAS-201	Chemistry/ Physics	03	01	00	30	20	50	100	150
3.	TAS-204	Mathematics-II	03	01	00	30	20	50	100	150
4.	TME-201/ TEE-201	Mechanical Engineering/ Electrical Engineering	03	01	00	30	20	50	100	150
5.	TIT-201/ TEC-201	Information Technology/ Electronics Engineering	03	01	00	30	20	50	100	150
PRACTICAL / DESIGN / DRAWING										
6.	TAS-252/ TAS-251	Chemistry/ Physics	0	0	02	10	10	20	30	50
7.	TME-251/ TEE-251	Mechanical Engineering/ Electrical Engineering	0	0	02	10	10	20	30	50
8.	TWS-251/ TCS-251	Workshop Practice / Computer Programming Lab	0	1	02	10	10	20	30	50
9.	TAS-253	Communication Lab (English)	0	0	03	30*	20*	50	-	50
10.	GP 201	General Proficiency	-	-	-	-	-	50	-	50
		Total	15	6	9	-	-	410	590	1000

CT - Cumulative test, TA -Teacher Assessment, ESE - End Semester Examination

- - Day to day evaluation

B.Tech. Food Technology
Year: II Semester- III

Sl. No.	Course Code	Subject	Periods			Evaluation Scheme				Subject Total
			L	T	P	Sessionals			ESE	
THEORY SUBJECTS						CT	TA	Total		ESE
1.	* TAS – 301	Mathematics – III	3	1	0	30	20	50	100	150
2.	**T CY – 301	Chemistry – I	3	1	0	30	20	50	100	150
3.	***T CH – 307	Fluid Flow and Solid Handling	3	1	0	30	20	50	100	150
4.	TFT – 301	Composition, Quality & safety of Food	3	1	0	30	20	50	100	150
5.	***TME-307	Mechanics of Solids	3	1	0	30	20	50	100	150
Practicals										
6.	***TCH-357	Fluid Mechanics lab	0	0	3	10	10	20	30	50
7.	** TCY – 351	Chemistry – I Lab.	0	0	3	10	10	20	30	50
8.	TFT- 351	Analysis of Food Constituents	0	0	6	20	20	40	60	100
9.	GP-301	General Proficiency						50	-	50
Grand Total										1000

* Common to all engineering and chemical Technology Branches; ** Common to Chemical Engineering and Chemical Technology; *** Common to all Branches of Chemical Technology

B.Tech. Food Technology
Year: II Semester- IV

S. No.	Course code	Subject	Periods			Evaluation Scheme				Subject Total
			L	T	P	Sessionals			Exam.	
						CT	TA	Total	ESE	
THEORY SUBJECTS										
1.	T AS-401	Computer Based Numerical Methods	3	1	0	30	20	50	100	150
2.	**TCY-401	Chemistry-II	3	1	0	30	20	50	100	150
3.	**TCH-401	Heat Transfer Operations	3	1	0	30	20	50	100	150
4.	**TCH-407	Industrial Fuels and Process Calculations	3	1	0	30	20	50	100	150
5.	TFT-401	Basic & Food Microbiology	3	1	0	30	20	50	100	150
Practicals										
6.	TAS-451	Numerical Techniques Lab	0	0	3	10	10	20	30	50
7.	**TCY-451	Chemistry-II Lab	0	0	3	10	10	20	30	50
8.	TFT-451	Basic & Food Microbiology	0	0	6	20	20	40	60	100
9.	GP-401	General Proficiency						50	--	50
Grand Total										1000

*Common to all Engineering and Chemical Technology Branches.

**Common to Chemical Engineering and Chemical Technology Branches.

***Common to Chemical Technology Branches.

B.Tech. Food Technology

Year: III Semester- V

S.No.	Course Code	Subject	Evaluation Scheme							
			Period			Sessionals			Exam.	Sub Total
THEORY SUBJECTS			L	T	P	TA	CT	Total	ESE	
1.	*THU – 501	Industrial Economics & Principles of Management	3	1	0	30	20	50	100	150
2.	**TCH – 506	Mass Transfer Operations –I	3	1	0	30	20	50	100	150
3.	TFT – 501	Food Additives	3	1	0	30	20	50	100	150
4.	TFT – 502	Food Chemistry	3	1	0	30	20	50	100	150
5.	TFT – 503	Food Biochemistry & Biotechnology	3	1	0	30	20	50	100	150
Practicas										
6.	TFT – 551	Food Chemistry Lab	0	0	6	20	20	40	60	100
7.	TFT – 552	Food Biochemistry & Biotechnology Lab	0	0	6	20	20	40	60	100
8.	GP – 501	General Proficiency						50		50
									Grand Total	1000

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**Common to Chemical Engineering and Chemical Technology Branches.

***Common to Chemical Technology Branches.

B.Tech. Food Technology

Year: III Semester- VI

S.No.	Course Code	Subject	Evaluation Scheme							
			Period			Sessionals			Examination	Sub Total
THEORY SUBJECTS			L	T	P	TA	CT	Total	ESE	
1.	***TCH-606	Chemical Engineering Thermodynamics	3	1	0	30	20	50	100	150
2.	**TCH-607	Mass Transfer Operations –II	3	1	0	30	20	50	100	150
3.	TFT – 601	Food Preservation & Processing Principles	3	1	0	30	20	50	100	150
4.	TME-609	Machine Design	3	1	0	30	20	50	100	150
5.	TFT – 602	Cereals, Pulses, and Oil Seed Products	3	1	0	30	20	50	100	150
Practicals										
6.	***TCH-655	Chemical Engineering Operations lab	0	0	3	10	10	20	30	50
7.	TFT- 651	Food Preservation & Processing Lab	0	0	6	20	20	40	60	100
8.	TFT- 652	Seminar	0	0	3	50	-	50	-	50
9.	GP – 601	General Proficiency						50	-	50
									Grand Total	1000

*Common to all Engineering and Chemical Technology Branches.

**Common to Chemical Engineering and Chemical Technology Branches.

***Common to Chemical Technology Branches.

B.Tech. Food Technology
Year: IV Semester- VII

			Evaluation Scheme							
S.No	Course Code	Subject	Periods			Sessionals			Exam.	Sub Total
THEORY SUBJECTS			L	T	P	TA	CT	Total	ESE	
1	TFT-701	Fruits, vegetables & Plantation Products	3	1	0	30	20	50	100	150
2.	TFT-702	Food Quality & Food Laws	3	1	0	30	20	50	100	150
3.	***TCH-706	Instrumentation and Process Control	3	1	0	30	20	50	100	150
4.	***TCH-707	Chemical Reaction Engineering	3	1	0	30	20	50	100	150
5.	##TOE-40	Open Elective – Nutritional Aspects of Natural & Processed Foods	3	1	0	30	20	50	100	150
Practicals										
6	TFT-751	Food Quality Evaluation Lab	0	0	6	20	20	40	60	100
7.	TFT-752	Project(Term Work)	0	0	3	25	25	50		50
8.	TFT-753	Industrial Training	0	0	3	25	25	50		50
9	GP-701	General Prophecy	0	0	3			50		50
									Grand Total	1000

*Common to all Engineering and Chemical Technology Branches.

**Common to Chemical Engineering and Chemical Technology Branches.

***Common to Chemical Technology Branches.

For Branches other than Oil Technology

B.Tech. Food Technology
Year: IV Semester- VIII

			Evaluation Scheme							
S.No	Course Code	Subject	Periods			Sessionals			Examination	Sub Total
THEORY SUBJECTS			L	T	P	CT	TA	Total	ESE	
1.	TFT-011 TFT-012 TFT-013 TFT-014	Elective Specialty Foods Food Products & Process Development Food Processing & Waste Management Rheological & Sensory Assessment	3	1	0	30	20	50	100	150
2.	TFT-801	Technology of Animal Foods	3	1	0	30	20	50	100	150
3.	TFT-802	Traditional & Fermented Foods	3	1	0	30	20	50	100	150
4.	TFT-803	Food Packaging	3	1	0	30	20	50	100	150
5.	***TCH-806	Industrial Safety and Hazard Management	3	1	0	30	20	50	100	150
Practicals										
6.	TFT-851	Project	0	0	12	25	25	50	100	150
7.	TFT-852	Industrial Tour						50		50
8.	GP-801	General Proficiency						50		50
									Grand Total	1000

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U.P. TECHNICAL UNIVERSITY LUCKNOW



Syllabus
of

B.Tech. I Year (I & II Semester)
[Common to all Branches]

Effective from the Session : 2004-05