

# **SWAMI VIVEKANAND UNIVERSITY, SIRONJA, SAGAR (M.P.)**



## **SYLLABUS**

**For**

**BACHELOR OF TECHNOLOGY (B.Tech)  
FOOD ENGINEERING**

**Course Code :BTFTE**

Department of Food Technology Engineering

Faculty of Engineering

Duration of Course	: 4 Years
Examination Mode	: Semester
Examination System	: Grading

Swami Vivekananda University, Sironja Sagar (M.P.)  
2016-2017



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFTE

Semester/Year :- 1<sup>st</sup> Sem

S. No.	Subject Code	Subject	Periods per Week				Distribution of Marks							Grand Total (i) = (d)+(h)	
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)		Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0101	Mathematics - I	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0102	Fundamentals of Physics	3	1	2	6	80	25	20	100	50	15	50	100	200
3	BTFTE-0103	Chemistry	3	1	2	6	80	25	20	100	50	15	50	100	200
4	BTFTE-0104	Basic Engg.- I	3	1	2	6	80	25	20	100	50	15	50	100	200
5	BTFTE-0105	Computer Lab	-	-	2	2	-	-	-	-	-	-	50	50	50
6	BTFTE-0106	Workshop Practice	-	-	2	2	-	-	-	-	50	15	50	100	100
7	BTFTE-0107	English	3	1	-	4	80	25	20	100	-	-	-	-	100
8	BTFTE-0108	Project - I	-	-	4	4	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			<b>15</b>	<b>5</b>	<b>14</b>	<b>34</b>	<b>400</b>	<b>-</b>	<b>100</b>	<b>500</b>	<b>200</b>	<b>-</b>	<b>300</b>	<b>500</b>	<b>1000</b>



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFTE

Semester/Year :- 2<sup>nd</sup> Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks								Grand Total (i) = (d)+(h)
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)	Total (h) = (e)+(f)	
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0201	Mathematics - II	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0202	Material Physics	3	1	2	6	80	25	20	100	50	15	50	100	200
3	BTFTE-0203	Energy & EnvironFTnt Science	3	1	-	4	80	25	20	100	-	-	-	-	100
4	BTFTE-0204	Basic Engg.- II	3	1	2	6	80	25	20	100	50	15	50	100	200
5	BTFTE-0205	Computer Science	3	1	2	6	80	25	20	100	50	15	50	100	200
6	BTFTE-0206	Engg. Graphics Lab	-	-	2	2	-	-	-	-	50	15	50	100	100
7	BTFTE-0207	Seminar/GD/Lang. Lab	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0208	Project work-II	-	-	4	4	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			<b>15</b>	<b>5</b>	<b>14</b>	<b>34</b>	<b>400</b>	<b>-</b>	<b>100</b>	<b>500</b>	<b>200</b>	<b>-</b>	<b>300</b>	<b>500</b>	<b>1000</b>



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFTE

Semester/Year :- 3 Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks							Grand Total (i) = (d)+(h)	
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)		Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0301	Mathematics-III	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0302	Introduction of Food Science	3	1	-	4	80	25	20	100	-	-	-	-	100
3	BTFTE-0303	Sensory evaluation	3	1	2	6	80	25	20	100	50	15	50	100	200
4	BTFTE-0304	Food Chemistry –I	3	1	2	6	80	25	20	100	50	15	50	100	200
5	BTFTE-0305	Food Microbiology-1	3	1	2	6	80	25	20	100	50	15	50	100	200
6	BTFTE-0306	Computer Programming	-	-	2	2	-	-	-	-	50	15	50	100	100
7	BTFTE-0307	Seminar	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0308	Project Work - III	-	-	2	2	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			15	5	12	32	400		100	500	200	-	300	500	1000



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFT

Semester/Year :- 4 Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks						Grand Total (i) = (d)+(h)		
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical			TW (g)	Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0401	Principles of Food Science	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0402	Food chemistry-II	3	1	2	6	80	25	20	100	50	15	50	100	200
3	BTFTE-0403	Food Microbiology-II	3	1	2	6	80	25	20	100	50	-	-	-	200
4	BTFTE-0404	Food Engineering-I	3	1	2	6	80	25	20	100	50	15	50	100	200
5	BTFTE-0405	Food Plant Sanitation and Waste Management	3	1	2	6	80	25	20	100	50	15	50	100	200
6	BTFTE-0406	Tour Report & Viva-Voce	-	-	2	2	-	-	-	-	50	15	50	100	100
7	BTFTE-0407	Self Study	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0408	Seminar & Group Discussion	-	-	2	2	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			15	5	12	32	400		100	500	200		30	500	1000



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFT

Semester/Year :- 5 Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks						Grand Total (i) = (d)+(h)		
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical			TW (g)	Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0501	Food Quality and Sensory Evaluation	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0502	Food formulation and Preservation	3	1	-	4	80	25	20	100	-	-	-	-	100
3	BTFTE-0503	Food Engineering-II	3	1	2	6	80	25	20	100	50	17	50	100	200
4	BTFTE-0504	Technology of Fruits, Vegetables and Plantation Crops	3	1	2	6	80	25	20	100	50	17	50	100	200
5	BTFTE-0505	Technology of Cereals, Pulses and Oilseeds	3	1	2	6	80	25	20	100	50	17	50	100	200
6	BTFTE-0506	Software lab III	-	-	2	2	-	-	-	-	50	17	50	100	100
7	BTFTE-0507	Self study (Internal Assessment)	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0508	Project Work - V	-	-	2	2	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			15	5	12	32	400	-	100	500	200	-	300	500	1000



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFT

Semester/Year :- 6 Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks							Grand Total (i) = (d)+(h)	
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)		Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0601	Food Safety and Regulations	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0602	Food Packaging Technology – I	3	1	-	4	80	25	20	100	-	-	-	-	100
3	BTFTE-0603	Introduction of, Dairy Science	3	1	2	6	80	25	20	100	50	17	50	100	200
4	BTFTE-0604	Processing of dairy product	3	1	2	6	80	25	20	100	50	17	50	100	200
5	BTFTE-0605	Techniques for Dairy product Analysis	3	1	2	6	80	25	20	100	50	17	50	100	200
6	BTFTE-0606	Project Work	-	-	2	2	-	-	-	-	50	17	50	100	100
7	BTFTE-0607	Self Study (Internal Assessment)	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0608	Seminar / Group Discussion	-	-	2	2	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			15	5	12	32	400		100	500	200	-	300	500	1000



# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFT

Semester/Year :- 7 Sem

S. No.	Subject Code	Subject	Periods per Week				Distribution of Marks							Grand Total (i) = (d)+(h)	
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)		Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0701	Food Quality Management	3	1	-	4	80	25	20	100	-	-	-	-	100
2	BTFTE-0702	Food Packaging Technology - II	3	1	-	4	80	25	20	100	-	-	-	-	100
3	BTFTE-0703	Fermentation Technology	3	1	2	6	80	25	20	100	50	17	50	100	200
4	BTFTE-0704	Introduction of Non veg food product	3	1	2	6	80	25	20	100	50	17	50	100	200
5	BTFTE-0705	Technology of meat Fish and Egg	3	1	2	6	80	25	20	100	50	17	50	100	200
6	BTFTE-0706	Seminar /Minor Project	-	-	2	2	-	-	-	-	50	17	50	100	100
7	BTFTE-0707	Industrial Training	-	-	2	2	-	-	-	-	-	-	50	50	50
8	BTFTE-0708	Seminar	-	-	2	2	-	-	-	-	-	-	50	50	50
<b>Total -&gt;</b>			15	5	12	32	400		100	500	200		300	500	1000

Elective – I

BTFTE-0705(A) – Department of Food Technology Elective - A

BTFTE-0705(B) – Department of Food Technology – B





# Swami Vivekanand University, Sagar (M.P.)

## Scheme of Examination



Faculty of Engineering  
Scheme of Course : B.Tech in Food Engineering

Department of Food Technology  
Course Code : BTFT

Semester/Year :- 8 Sem

S. No.	Subject Code	Subject	Period s per Week				Distribution of Marks							Grand Total (i) = (d)+(h)	
			L	T	P	C	Theory		MST (c)	Total (d) = (a)+(c)	Practical		TW (g)		Total (h) = (e)+(f)
							Max (a)	Min (b)			Max (e)	Min (f)			
1	BTFTE-0801	Introduction of Bakery and Confectionary	3	1	2	6	80	25	20	100	50	17	50	100	200
2	BTFTE-0802	Management	3	1	-	4	80	25	20	100	-	-	-	-	100
3	BTFTE-0803	Beverage technology	3	1	2	6	80	25	20	100	50	17	50	100	200
4	BTFTE-0804	Sugar technology	3	1	2	6	80	25	20	100	50	17	50	100	200
5	BTFTE-0805	Major Project-II	-	-	6	6	-	-	-	-	100	34	100	200	200
6	BTFTE-0806	Elective –II	3	1	-	4	80	25	20	100	-	-	-	-	100
<b>Total -&gt;</b>			15	5	12	32	400	-	100	500	250	-	250	500	1000

Elective – I

BTFTE-0806(A) – IPR & Company laws

BTFTE-0806(B) - Fundamental of biotechnology