

SRI VENKATESWARA UNIVERSITY
B.Sc Degree Course in Food Science and Technology
Under CBCS W.E.F – 2021-22
Scheme of Instructions and Examinations.

Year	Semester	Course	Title of the Course	No. of Hrs / Week	No. of Credits	INT	UNI	Total Marks
1st	I	I	Fundamentals of Food Science And Technology	4	4	25	75	100
			Fundamentals of Food Science And Technology Practicals	2	1	0	50	50
	II	II	Food Chemistry	4	4	25	75	100
			Food Chemistry Practicals	2	1	0	50	50

SRI VENKATESWARA UNIVERSITY
B.Sc. FOOD SCIENCE AND TECHNOLOGY
Course Syllabus under CBCS
(with effect from the Academic Year 2021-22)

SEMESTER – I
PAPER-I :: FUNDAMENTALS OF FOOD SCIENCE AND TECHNOLOGY

Teaching Hours: 4 Hours/Week

(Total-60Hours)

Credits:4

Mid Sem. Exam:25Marks

Sem. end exam: 75Marks

UNIT-I: CONCEPTS OF FOOD SCIENCE AND TECHNOLOGY

- Introduction of Food Science and Technology- Scope, Importance, History & Evolutionary Aspects.
- Classification of Foods-Different Types of Foods, Basic Food Groups, Food Pyramids, Nutritional Importance of foods.

UNIT-II: CEREALS, PULSES AND OIL SEEDS

Cereals & Millets – Classification, Production, Nomenclature, Structure, Composition, Nutritional Importance, Processing Methods, Byproducts & Their Potential Utilization.

Pulses & Legumes – Classification, Production, Nomenclature, Structure, Composition, Nutritional Importance, Processing Methods, Byproducts & Their Potential Utilization, Anti-Nutritional Factors, Out Breaks of Adulteration.

Oil Seeds – Classification, Production, Nomenclature, Structure, Composition, Processing Methods, Byproducts & Their Potential Utilization.

UNIT-III: MILK AND MILK PRODUCTS

Milk - Definition, Classification, Composition, Nutritive Values;Procurement, Transportation, Processing & Storage, Adulteration of Milk-Qualitative Test to identify adulteration.

Milk Products: Different Types of Milk Products, Value addition, Packaging, Adulteration of Milk Products.

UNIT-IV: FRUITS AND VEGETABLES

Fruits - Classification, Production, Composition, Nutritivevalue& Their Importance, Harvesting, Processing, Storage and Transportation.

Vegetables-Classification, Production, Composition, Nutritivevalue & Importance,Harvesting, Processing, Storage and Transportation.

UNIT-V: EGG, MEAT AND SEA FOOD

Egg - Structure, Composition, Nutritive Value, Grading, Storage and Transportation.

Meat - Sources of Meat, Types of Meat, Muscle Structure, Composition, Nutritive value, Rigor Mortis, Post-Mortem Changes, Grading, Storage and Transportation.

Sea Foods- Classification, Production, Different Types of Sea Foods and Products, Composition and nutritive value, Selection, Importance of Sea Food and Storage and Transportation.

Recommended Readings :-

1. Manay NS and Shadaksharaswamy M, Food-Facts and Principles, New Age International (P) Ltd. Publishers, New Delhi, 1987.
2. Norman N Potter Joseph H and Hotchkirs, "Food Science", 5th edition, CBS, Publishers Distributor, New Delhi, 1996.
3. Ramaswamy H and MarcottM, Food Processing Principles and Applications, CRC Press,
4. B. Srilakshmi, Food science, New Age Publishers, 2002.
5. Lowe B., "Experimental Cookery", John Wiley & Sons Inc. New York, 1965.
Mahindru SN, " Food Additives Publishing Company Ltd., New Delhi-2000.

(LABORATORY COURSE-I)

PRACTICAL – I :: FUNDAMENTALS OF FOOD SCIENCE and TECHNOLOGY

(At the End of Semester-I)

Teaching Hours: 2 Hours/Week

Credits:1

Mid Sem. Exam:0Marks

Sem. end exam: 50Marks

1. Food groups- Grouping of foods and their nutritive value.
2. Measuring ingredients Methods of measuring different types of foods – grains, flours & liquids
3. Cooking methods Moist heat methods – (i) boiling, simmering, steaming, & Pressure cooking, (ii). Dry heat methods – baking. (iii), Fat as a medium for Coking-shallow and deep fat frying.
4. Testing the quality of milk by P^H, SNF and acidity.
5. Prevention of browning reactions in fruits and vegetables.
6. Selection and Quality inspection of Eggs, Meat and SeaFoods.