

PROGRAMME OUTCOMES:

Students having an academic background of science at 10+2 level can pursue B.Sc programme in various branches. After the completion of the B.Sc degree there are various options available for the science students, they can pursue master degree in Science i.e. M.Sc, work in research related fields and can even look for professional job oriented courses. Often, in some reputed universities or colleges the students are recruited directly by big MNC's after the completion of the course. The student is also eligible for the job of a Medical Representative. The student after graduating will be eligible for various government exams conducted by UPSC, SSC etc.

PROGRAMME SPECIFIC OUTCOMES:

After successful completion of B.Sc.(Hons.) Food Technology Course, the students will:

- Acquire a broad fundamental knowledge in field of food science and Technology
- Exhibit knowledge of main theoretical perspectives and major findings across broad areas of food technology
- Develop ability to think logically and technically for solving problems in field of food technology
- Communicate effectively by the means of oral, written and computational skills.
- Explain alternative views and positions within areas of food science and technology.
- Develop an Understanding of physical, chemical, and biochemical principle which underlie food processing, preservation and storage
- Be able to function in a multi-disciplinary team.
- Describe connections with other disciplines, e.g., food science, food and nutrition, food chemistry, and food processing
- Be eligible to join Master's program through entrance exam or work in private sectors as a trainee in field of quality and production of various food industries like Britannia, Parle, Patanjali, Haldiram, Cadbury, Pepsico, MTR foods etc.
- Will be able to join government sector job after qualifying the exam of FCI, FSSAI, FSO, Food Inspector etc.

COURSE OUTCOMES:

Semester I

Fundamentals of Food Technology TBFT-101

On completion of the course the student will be able:

- To understand the history and evolution of food processing.
- To study the structure, composition, nutritional quality and post-harvest changes of various plant foods.
- To understand the functions of food.

Principles of Food Science TBFT-102

On completion of the course the student will be able to understand the basic knowledge of:

- Food Dispersions
- Sensory Science
- Food Science
- Food Sanitation

- Packaging Materials

Chemistry of Food TBFT-103

On completion of the course the student will be able to:

- Understand the chemistry of foods - composition of food, role of each component and their interaction.
- Understand the functional aspects of food components and to study their role in food processing.

Environmental Studies TBES-104

After the completion of the course the student will have understanding of:

- Scope and importance of environmental studies.
- Forest, Grassland, Desert and aquatic ecosystems.
- Biodiversity and causes of environmental pollution and its impact on Human communities.
- Environmental issues Global warming, Climate change, Acid rain, Ozone depletion.
- Acts related to protection of Environment, wildlife, water air, etc.

Remedial Maths/ Remedial Biology RMM/RMB -105

On completion of the course the student will be able to:

- Understand the basic knowledge of Mathematics and Biology

Semester –II

Technology of Food Preservation TBFT-201

On completion of the course the student will be able

- To understand the importance of microorganisms in food preservation

Food Processing Technology TBFT-202

On completion of the course the student will be able:

- To understand the basics of various food processing and preservation technologies.

Bio-Analytical Techniques TBFT-203

On completion of the course the student will be able:

- To understand the basic knowledge of analytical techniques used in food industries for food analysis.

English Communication TBEC-204

On completion of the course the student will have understanding of:

- The use proper writing techniques relevant to the present day technological demands, including anticipating audience reaction,
- How to write effective and concise letters and memos,
- How to prepare informal and formal reports,
- How to proofread and edit copies of business correspondence
- How to develop interpersonal skills that contribute to effective personal, social and professional relationships

Computational Skills ADC/PADC-205

On completion of the course the student will have understanding of:

- Basic knowledge of computer
- How to use computer

Semester –III

Food and Nutrition TBFT- 301

On completion of the course student will able to:

- Understand the relationship between food, nutrition and health.
- Understand digestion, absorption and function of various nutrients and their sources
- Learn about various food groups and balanced diet

Technology of Fruits, Vegetables and Plantation Crops TBFT-302

On completion of the course student will able:

- To impart knowledge of different methods of fruits and vegetable processing.
- To learn about processing of various spices, tea, coffee and cocoa.

Technology of Dairy and Sea Food TBFT-303

On completion of the course student will able:

- To study processed milk products.
- To know the need and importance of dairy and fishery industry
- To know the compositional and technological aspects of milk and fish.
- To understand technology behind preparation of various animal food products and byproduct utilization.

Food Fermentation Technology TBFT 304

On completion of the course student will able:

- To understand the principles of food fermentation technology
- To study the types of starters used in Food Industry
- To study the production of various fermented food

Biochemistry TBFT-305

On completion of the course student will able to understand:

- The enzymes classification and their functions
- The metabolism of carbohydrates, lipid and protein
- Different type of DNA and RNA

Seminar Presentation ADP-306

On completion of the course student will able

- To improve communication skills
- To improve confidence, interaction and public dealing quality

Semester –IV

Technology of Cereals, Pulses and Oilseeds TBFT-401

On completion of the course student will able:

- To know the technology of milling of various cereals
- To impart technical knowledge of pulses and oilseeds refining

Food Microbiology TBFT- 402

On completion of the course student will able:

- To know the important genera of microorganisms associated with food and their characteristics.
- To understand the role of microbes in fermentation, spoilage and food borne diseases.

Technology of Meat Poultry and Eggs TBFT-403

On completion of the course student will able:

- To understand need and importance of livestock, egg and poultry industry
- To study structure, composition and nutritional quality of animal products.
- To study processing and preservation of animal foods.
- To understand technology behind preparation of various animal food products and byproduct utilization.

Project and Technical Report TBFT-404

After this course student will able:

- To improve the communication skill

- To improve practical knowledge

Sensory Evaluation of Food TBFT-405

After this course student will able:

- To acquaint with sensory quality parameters
- To know the methods of sensory evaluation of foods

Semester –V

Food Engineering TBFT-501

After completion of this course, students will be able to:

- Understand and make plant layouts for proper functioning of an food industry
- Able to detect problems and give solutions encountered in a food industry

Food Chemistry TBFT-502

After completion of this course, students will be able to:

- Understand the chemistry of foods - composition of food, role of each component and their interaction
- Understand the functional aspects of food components and to study their role in food processing

Food Plant Sanitation TBFT-503

After completion of this course, students will be able to:

- Identify different sources of contamination and thus maintain sanitation
- Design plant and processing equipment
- Develop comprehensive understanding of waste product handling and management

Baking Technology TBFT- 504

After completion of this course, students will be able to:

- Understand the fundamentals of baking
- Tell about the technologies behind bakery products

Presentation on Industrial Training/Visit ADP 506

After completion of this course, students will be able to:

- Understand industry trends and working
- Communicate effectively by the means of oral, written and computational skills
- Utilize this knowledge to get work in private sectors as a trainee in field of quality and production of various food industries like Britannia, Parle, Patanjali, Haldiram, Cadbury, Pepsico, MTR foods etc.

Semester –VI

Food Chemistry- II TBFT- 601

After completion of this course, students will be able to:

- Understand the functional aspects of food components and to study their role in food processing

- Tell properties and role of various constituents in foods, interaction and changes during processing
- Understand the concept of new product development

Food Quality and Sensory Evaluation TBFT- 602

After completion of this course, students will be able to:

- Understand about physical, chemical contaminants in foods and use this knowledge to maintain food quality
- Know about emerging concerns
- Understand about various food regulations (national as well as international)
- Know about sensory evaluation importance and its methods

Food Quality Management TBFT- 603

After completion of this course, students will be able to:

- Get acquainted with food quality parameters and control systems, food standards, regulations, specifications
- Identify hazards and prevent them from occurring
- Gets accustomed with various food safety management tools such as GHPs, GMPs, HACCP, ISO series, TQM - concept and need for quality etc.
- Know about Indian food regulatory regime, global scenario and other laws and standards related to food

Food Packaging TBFT- 604

After completion of this course, students will be able to:

- Solve problems and impart knowledge about packaging machinery, systems, testing and regulations of packaging
- Impart comprehensive overview of the scientific and technical aspects of food packaging

Dissertation (Major) & Presentation TBFT-605

After completion of this course, students will be able to:

- Develop ability to think logically and technically for solving problems in field of food technology
- Suggest processing conditions for the industrial manufacture of high quality food product.
- Understand the concept of development of a new product and prepare new products
- Choose and design technologies for the industrial manufacture of bio-based products, especially food products, with due regard to raw materials, energy, economics and sustainability in the system of industrial food technology
- Utilize this knowledge to get work in private sectors as a trainee in field of quality and production of various food industries.
- Become an entrepreneur and startup their own enterprise

