

ST JOSEPH'S UNIVERSITY
SCHOOL OF LIFE SCIENCES
DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY
M.Sc. FOOD SCIENCE AND TECHNOLOGY-ENTRANCE EXAMINATION
2024-2025

QUESTION PAPER PATTERN: MULTIPLE CHOICE QUESTIONS: 50x1=50 marks

EXAM DURATION: 1 HOUR

SYLLABUS

UNIT I- Basic Chemistry:

Acid/Base, buffers, Preparation of Normal and Molar solutions.

Macromolecules- Carbohydrates, Proteins and Fats.

Micromolecules- Vitamins and Minerals

UNIT II- Food Science and Technology:

Food groups (plant and animal foods), Recommended Dietary Allowances (RDA).

Preservation of foods- Thermal and Non-Thermal; Pasteurization, Sterilization, Drying and Chemical preservation.

UNIT III- Food Microbiology:

Sources of contamination of foods, Spoilage microorganisms, Factors affecting the growth of microorganisms in foods.

Bacterial food borne infections and food poisoning.

Fermented products (Dairy, Meat, Fruits and Vegetables).

UNIT IV- Food Biotechnology:

Central dogma of Molecular biology, Molecular cloning.

Application of Recombinant DNA Technology in Food Science.

Analytical techniques for food Industry- PCR, ELISA Electrophoresis, Chromatographic and Blotting techniques.

UNIT V- Food Quality and Safety:

Food Adulteration, Additives and Contaminants.

HACCP, FSSAI, BIS. Food safety and Management Systems.