

(DFN 21 A)

M.Sc. DEGREE EXAMINATION,
NOVEMBER 2021.

Second Year

Food and Nutritional Sciences

NUTRITION THROUGH LIFE CYCLE

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing ONE from each Unit.

(5 × 14 = 70 marks)

UNIT I

1. (a) Explain the socio cultural aspects for nutrition well being at National contexts.

Or

- (b) Write an account on the food availability, meal pattern and interrelationships of socio-cultural and economic aspects and their impact on nutritional well being in the family.

UNIT II

2. (a) Describe the growth and development of infants feed on breast milk and trends in breast feeding.

Or

- (b) Describe the growth and development of infant existing practices and methods of introducing supplementary foods to wear the child.

UNIT III

3. (a) Describe the maintenance and importance of the growth charts and supplementary foods.

Or

- (b) Explain the importance and necessity of school feeding programmes with special reference to Andhra Pradesh.

UNIT IV

4. (a) Describe the psychological effects leading degenerative changes of middle aged with dietary modifications.

Or

- (b) Write an account on the participating diseases with regard to the dietary modifications in the middle aged.

UNIT V

5. (a) Describe the changes in body composition and changes in physiological requirements with Geriatric Nutrition.

Or

- (b) Explain the Nutritional needs for industrial workers and sports personnel.
-

(DFN 21 B)

M.Sc. DEGREE EXAMINATION,
NOVEMBER 2021.

Second Year

Food and Nutritional Science

FOOD CHEMISTRY AND CHEMICAL ANALYSIS OF FOODS

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Describe the components and chemistry of water.
Or
(b) Write an account on true solutions, colloidal solutions and suspensions.

UNIT II

2. (a) Describe the nature and types of proteins of plant foods.
Or
(b) Describe the physical and chemical structures and properties of different Oils.

UNIT III

3. (a) Describe the plant tissues and relationships, browning reaction in fruits and preventive methods.
Or
(b) Explain the chemical structure and changes on cooking effect of acid, alkali and metal ions.

UNIT IV

4. (a) Describe the ash as an indicator of total mineral content.
Or
(b) Explain the applications of HPLC techniques in food analysis with suitable examples.

UNIT V

5. (a) Describe the applications of Flame photometry and procedures in food analysis with suitable examples.
Or
(b) Enumerate the applications of calorimetric principles and procedures in food analysis with suitable examples.

(DFN 22 A)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Second Year

Food and Nutritional Science

NUTRITIONAL ASSESSMENT TECHNIQUES

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Write an account on the Nutritional surveillance.

Or

- (b) Describe the overview of the methods of assessment of Nutritional status.

UNIT II

2. (a) Explain the direct methods of Nutritional assessment of Human groups.

Or

- (b) Describe the indirect methods of Nutritional assessment of Human groups.

UNIT III

3. (a) Write an account on the classification used to categorise malnutrition, cut of points used to distinguish current and long term malnutrition.

Or

- (b) Explain the indications of Nutritional status such as weight/age, height/age, and weight/age.

UNIT IV

4. (a) Explain the methods for assessing dietary intakes of individual and institutional level.

Or

- (b) Describe the factors affecting the accuracy of dietary assessment.

UNIT V

5. (a) Explain the different techniques for clinical assessment of nutritional status and diagnosis of sign of relation to various nutrient deficiencies.

Or

- (b) Describe the methods for major nutritional disorders, standards for composition and field level assessment.
-

(DFN 22 B)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Second Year

Food and Nutritional Science

EXPERIMENTAL FOODS

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Write an account on the standardization of food preparations.

Or

- (b) Describe the food evaluation and selection of taste panels.

UNIT II

2. (a) Describe the starch as thickness and sources of starch retro gradation of starch.

Or

- (b) Describe the stages of sugar cookery, crystallisation, factors effecting size of crystals forming.

UNIT III

3. (a) Explain the effect of soaking, germination and fermentation on pulse cookery.

Or

- (b) Explain the properties of egg proteins, and uses of egg proteins.

UNIT IV

4. (a) Explain the post-mortem changes, changes in cooking of meat and changes during heat treatment.

Or

- (b) Explain the changes during storage, oxidative and hydrolytic, whipped cream as double emulsion.

UNIT V

5. (a) Describe the pectin substances, celluloses and their effect on palatability of fruits.

Or

- (b) Explain the plant pigments, and t enzymes and also the effect on meat browning reactions.
-

(DFN 23 A)

M.Sc. DEGREE EXAMINATION,
NOVEMBER 2021.

Second Year

Food and Nutrition Science

CLINICAL NUTRITION AND DIETETICS

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing ONE from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Describe the classification of foods and preparation of normal diets.

Or

- (b) Explain the principles in formulation of therapeutics diets, and factors to be considered for therapeutic diets.

UNIT II

2. (a) Describe the physiology, and metabolic changes of under weight.

Or

- (b) Describe the complications, and dietary modifications of obesity.

UNIT III

3. (a) Describe the types of allergens, symptoms and metabolic changes.

Or

- (b) Explain the, diagnostic tests and dietary management of food allergy.

UNIT IV

4. (a) Describe the symptoms and remedial measures of Dyspepsia and gastritis.

Or

- (b) Explain the symptoms, and remedial measures of Ulcers, spruce and malabsorbption syndrome disorders.

UNIT V

5. (a) Explain the symptoms and remedial measures of jaundice and cirrhosis.

Or

- (b) Describe the symptoms, and remedial measures of Hepatitis and Pancreatitis.
-

(DFN 23 B)

M.Sc. DEGREE EXAMINATION,
NOVEMBER 2021.

Second Year

Food and Nutritional Science

FOOD MICROBIOLOGY AND TOXICOLOGY

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each Unit.

(5 × 14 = 70)

UNIT I

1. (a) Describe the important microorganisms in food preservation, their characters and identification.

Or

- (b) Describe the factors relating in destruction of naturally present food enzymes.

UNIT II

2. (a) Explain the classification of mycotoxins and methods of detection and preservation.

Or

- (b) Describe the mycotoxin and mould contamination of foods.

UNIT III

3. (a) Explain toxicology and write an account on the classification of food toxicants.

Or

- (b) Describe the factors affecting toxicity of food and diseases outbreaks.

UNIT IV

4. (a) Describe Haemotoxicity, skeletal toxicity and Reproductive toxicity.

Or

- (b) Explain the toxicity of marine foods such as Mollusks, Fish and marine algae.

UNIT V

5. (a) Explain the toxins formed from fats by oxidation and rancidity.

Or

- (b) Describe the toxins formed by proteins and amino acids by alkali treatment.
-

(DFN 24 A)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Second Year

Food and Nutritional Science

DIET THERAPY AND COUNSELING

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Write an account on Emotion therapy, reality therapy and client centered approach.

Or

- (b) Describe the Model of counselling, Role of counsellor and counselling strategies of Diet.

UNIT II

2. (a) Describe the methods in techniques of Diet counselling for obese people.

Or

- (b) Explain the types, etiology, metabolic changes and clinical symptoms of Obese.

UNIT III

3. (a) Describe the etiology, diagnosis and complications, metabolic changes of Diabetes mellitus.

Or

- (b) Explain the Dietary management of Insulin and drugs for Diabetic people.

UNIT IV

4. (a) Describe etiology, metabolic changes, role of diet and fibre for Heart patients.

Or

- (b) Explain the preventive and curative aspects and diet counselling for Atherosclerosis.

UNIT V

5. (a) Describe the metabolic changes, diagnosis and role diet for Nephrotic syndrome.

Or

- (b) Write an account on the diet counselling for Cancer and AIDS patients.
-

(DFN 24 B)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Second Year

Food and Nutritional Science

FOOD SAFETY AND QUALITY ASSURANCE

Time : Three hours

Maximum : 70 marks

Answer ALL questions, choosing one from each unit.

(5 × 14 = 70)

UNIT I

1. (a) Write an account on definitions, and explanation of terms of food quality and safety.

Or

- (b) Write an account on the Recognized experts in the food quality.

UNIT II

2. (a) Describe the food stabilizers, preservatives and antioxidants.

Or

- (b) Explain the food quality and safety methods.

UNIT III

3. (a) Describe the physical and chemical hazards in foods.

Or

- (b) Explain the quality management and quality systems standards for the food industry.

UNIT IV

4. (a) Explain the programmes of GMPs and HACCP and their advantages.

Or

- (b) Describe the HACCP systems and quality systems, programme premisses and facilities.

UNIT V

5. (a) Describe the HACCP systems for food safety and recognition of the HACCP systems.

Or

- (b) Write an account on the record keeping, and documentation procedures for the HACCP plan and the HACCP system.
-