

(DFN21A)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOODS & NUTRITIONAL SCIENCE

Nutrition through Life Cycle

Time : 3 Hours

Maximum Marks : 70

Answer all questions, choosing one from each Unit.

All questions carry equal marks

(5 x 14 = 70)

Unit - I

Q1) a) Discuss the need and importance of agriculture production for the well being nutrition among a family.

OR

b) Discuss the socio cultural aspects for nutrition well being at National Context.

Unit - II

Q2) a) Give an account on the importance of breast milk among infants. Write its advantages in the growth of infants.

OR

b) Discuss the need of supplementary foods to wear the child. Write about its nutritional values.

Unit - III

Q3) a) Write about the nutritional demand among school going children and the existing practices with regard to Andhra Pradesh.

OR

b) Discuss the importance of growth charts and supplementary foods for School Children.

Unit – IV

Q4) a) Discuss the biochemical changes and effects of malnutrition among adolescents.

OR

b) Explain the physiological effects and malnutritional effects in pre-adolescents.

Unit – V

Q5) a) Discuss the body changes among Geriatric and the need of nutritional changes to be supplemented.

OR

b) Discuss the nutritional needs among industrial workers.



(DFN21B)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOODS & NUTRITIONAL SCIENCE

Food Chemistry & Chemical Analysis of Foods

Time : 3 Hours

Maximum Marks : 70

Answer all questions, choosing one from each Unit.

All questions carry equal marks

(5 × 14 = 70)

Unit - I

Q1) a) Write the composition of Water and its Chemical activity in Food Science.

OR

b) Explain the physico chemical principles of True solutions and Colloidal solutions.

Unit - II

Q2) a) Write the physical and chemical properties of starch. Explain the methods of extraction of starches.

OR

b) Explain the natural sources and types of proteins. Write the structure and properties of proteins.

Unit - III

Q3) a) Discuss the chemical changes occur in Fruits and Vegetable during harvesting stage.

OR

b) What are Food enzymes? Write their functions and importance in food quality.

Unit – IV

Q4) a) How do you determine the total mineral content of foods? Write the principle and applications of paper chromatography in Food Samples.

OR

b) Write the principle and applications of HPLC in the analysis of Food Samples.

Unit – V

Q5) a) Write the basic instrumentation, working principle and applications of Colorimetry in Food analysis.

OR

b) Write the instrumentation, working principle and applications of Flame Photometry in Food analysis.



(DFN22A)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOODS & NUTRITIONAL SCIENCE

Nutritional Assessment Techniques

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each Unit.

All questions carry equal marks

(5 × 14 = 70)

Unit - I

Q1) a) Discuss the methods of assessment of health status.

OR

b) Make an overview of nutritional surveillance.

Unit - II

Q2) a) Explain the direct methods of nutritional assessment of human groups.

OR

b) Explain the assessment of age using local events Calender.

Unit - III

Q3) a) Discuss the methods used for calculation of malnutrition of different groups.

OR

b) Explain the guidelines for interpretation of growth charts.

Unit – IV

Q4) a) Write about the methods used for assessing dietary intakes of individual household level.

OR

b) Explain the process of interpretation of dietary data. Write about the accuracy of dietary measurements.

Unit – V

Q5) a) Write about the techniques for clinical assessment of nutritional status.

OR

b) Explain the biochemical methods used for major nutritional disorders and standards of comparison.



(DFN22B)

Total No. of Questions : 5]

[Total No. of Pages : 01

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOODS & NUTRITIONAL SCIENCE

Experimental Foods

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit

All questions carry equal marks

[5 × 14 = 70]

Unit – I

Q1) a) Write and explain the classifications of foods into basic five groups with suitable examples.

OR

b) Explain the sensory evolution of foods and selection of taste panel.

Unit – II

Q2) a) Write about the stages of sugar cookery and sugar crystallization and mention the factors affecting crystallization.

OR

b) Write the physical and chemical properties of oils and fats. How do you determine melting point of oils?

Unit – III

Q3) a) Discuss various types of starch and the use of starch in the preparation of sauces.

OR

b) Explain the process of pulse cookery and the factors affecting the quality of coloured products.

Unit – IV

Q4) a) Explain the structure of vegetable tissues, starches and sugars.

OR

b) What are plant pigments and plant enzymes? Write their uses.

Unit – V

Q5) a) Write the properties of egg proteins and their uses in egg preparations. How eggs are used as emulsify agent?

OR

b) Write the properties of milk proteins, cheese and other milk products.



(DFN23A)

Total No. of Questions : 5]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOODS AND NUTRITIONAL SCIENCE

Clinical Nutrition and Dietetics

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit

All questions carry equal marks

[5 × 14 = 70]

UNIT – I

Q1) a) Write about the origin, history and functions of dietetics association of India.

OR

b) Explain the principles involved in the preparation of therapeutic diets. Write the uses of therapeutic diets.

UNIT – II

Q2) a) Write about causes and problems of obesity. Explain the grades of obesity and suggest dietetic controls for obesity.

OR

b) Discuss the causes for underweight. Write about the metabolic changes and complications due to under weight.

UNIT – III

Q3) a) Explain food allergy. Write the types of allergy and its symptoms. How do you control food allergy.

OR

b) Discuss the metabolic changes and diagnostic tests for various types of allergy.

UNIT – IV

Q4) a) Explain the causes and symptoms for Gastro intestinal disorders. Suggest control measures through food for Gastro intestinal disorders.

OR

b) Explain the diagnostic tests, symptoms and control measures for Ulcers.

UNIT – V

Q5) a) What are causes for Liver and gall bladder disorders. Write diagnostic tests and control measures for these disorders.

OR

b) Explain the causes and symptoms for Jaundice and Hepatitis. Write about food precautions to be forward for control these diseases.



(DFN24B)

Total No. of Questions : 5]

[Total No. of Pages : 01

M.Sc. DEGREE EXAMINATION, MAY - 2018

Second Year

FOOD AND NUTRITIONAL SCIENCE

Food Microbiology and Toxicology

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit

All questions carry equal marks

Unit – I

Q1) a) Write about the important microorganisms in food presentation. How do you identify yeast and write its characteristics.

OR

b) Write the causes for food spoilage. Explain control methods for food spoilage.

Unit – II

Q2) a) Explain the classification of microtoxins with examples. Write methods for their detection.

OR

b) Explain the process of micotox in contamination of foods.

Unit – III

Q3) a) Explain the classification of food toxicants with examples. Write about the diseases due to food toxicants.

OR

b) Write about the factors affecting the toxicity of foods.

Unit – IV

Q4) a) What is neurotoxicity and hepatic toxicity? Write their effects on human health

OR

b) Write about mushroom poisoning and types of mushroom poisoning. What are its effects on health.

Unit – V

Q5) a) Discuss the food toxins formed due to fats by oxidation and other reactions occurring with contaminants.

OR

b) Explain the toxins formed due to amino acids by the reactions with alkali and other contaminants



(DFN24A)

Total No. of Questions : 5]

[Total No. of Pages : 01

M.Sc. DEGREE EXAMINATION, MAY - 2018

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FOODS AND NUTRITIONAL SCIENCE

Diet Therapy and Counseling

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit

All questions carry equal marks

Unit – I

Q1) a) Define diet counseling. Explain the diet counseling to individual and family. What is the role of diet counselor?

OR

b) Write the impact of diet counseling on health. Explain emotion therapy and reality therapy.

Unit – II

Q2) a) Discuss the diet counseling for obese people both men and women.

OR

b) Explain types of fertile conditions write metabolic changes observed during fertility.

Unit – III

Q3) a) What is diabetes mellitus? Write the diagnostic tests and food suggestions for diabetes.

OR

b) Write about the treatment methods for diabetes at various stages.

Unit – IV

Q4) a) What are cardiovascular diseases? Explain consecutive cardiac failure and its symptoms.

OR

- b) Write about preventive methods for cardiovascular diseases. How diet and fibre foods are useful in this regard?

Unit – V

- Q5)** a) Write about the causes and preventive methods for HIV and AIDS.

OR

- b) What are renal disorders, write the diagnostic tests and treatment through diet control.



(DFN24B)

Total No. of Questions : 5]

[Total No. of Pages : 01

M.Sc. DEGREE EXAMINATION, MAY - 2018

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FOODS & NUTRITIONAL SCIENCE

Food Safety and Quality Assurance

Time : 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit

[5 × 14 = 70]

All questions carry equal marks

Unit – I

Q1) a) How do you explain the quality assurance of food. Explain the need of food quality.

OR

b) Discuss the biological hazards in foods. Write about the health risks with food hazards.

Unit – II

Q2) a) Explain the food quality systems and programmes for food quality.

OR

b) What are food additives? Write about food stabilizers and preservatives with suitable examples.

Unit – III

Q3) a) Explain the physical hazards of foods by taking specific materials.

OR

b) Write in detail about ISO 9000 quality standard systems on foods.

Unit – IV

Q4) a) Write about GMP prerequisite programs and GMP assurance practice in food industry.

OR

- b) Discuss HACCP prerequisite programmes and HACCP assurance practice in food industry.

Unit – V

- Q5)** a) Write about chronology of food safety related events.

OR

- b) Construct a process flow diagram for the food product and verify the process flow diagram.

