(DFN21A)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

(Second Year)

FOODS & NUTRITIONAL SCIENCE

Nutrition through Life Cycle

Time : 3 Hours

Maximum Marks: 70

<u>Answer all questions choosing one from each Unit</u> $(5 \ge 14 = 70)$ <u>Each question carries 14 marks</u>

<u>Unit - I</u>

Q1) a) Explain the food availability and meal pattern with respect to nutritional values to the individual family.

OR

b) Discuss the status of Agriculture production and population pressure in India. How they are balanced?

<u>Unit - II</u>

Q2) a) Write the plan of Pregnant Women's food aspects with respect to nutritional values to the mother and child.

OR

b) Explain the need and importance of food feeding to the infants. Write about the plan growth chart of nutritional food.

<u>Unit - III</u>

Q3) a) Discuss the importance of nutritional foods to school going children and programmes implemented by Government of Andhra Pradesh.

OR

b) Explain the effect of poor nutrition on the growing people and its impact on the future of adulthood

Q4) a) Discuss the need of nutritional food to Middle aged people and the effects of malnutrition in Middle aged people.

OR

b) Suggest cheap and nutritional foods to be taken by Middle aged people. How it improves their Psychological effects.

<u>Unit – V</u>

Q5) a) Suggest the nutritional plan chart Geriatric people.

OR

b) Discuss the Nutritional needs for industrial workers.





[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

Second Year

FOODS & NUTRITIONAL SCIENCE

Food Chemistry & Chemical Analysis of Foods

Time : 3 Hours

Maximum Marks : 70

<u>Answer all questions choosing one from each Unit</u> $(5 \ge 14 = 70)$ Each question carries 14 marks

<u>Unit - I</u>

Q1) a) Describe the important chemical aspects of water.

OR

b) What are True Solutions and Colloidal Solutions of Foods? Discuss the Physiochemical properties of these foods.

<u>Unit - II</u>

Q2) a) Discuss the structure and Physiochemical properties of various types of starches.

OR

b) How do you determine speciation number Iodine number and free fatty acid number of Fats?

<u>Unit - III</u>

Q3) a) Write the composition of Fruits and Vegetables explain browning reactions in Fruits and Vegetables.

OR

b) Explain the types of Food enzymes. Discuss the functions and their importance of food quality.

Q4) a) How do you determine total mineral content of foods? Write the applications of HPLC in Food analysis.

OR

b) Write the applications of Gas liquid Chromatography and paper Chromatography in the analysis of Foods.

<u>Unit – V</u>

Q5) a) Write the principles and applications of Flame Photometry and the method of preparation of Food samples for analysis.

OR

b) Explain the preparation and importance of Flour products. Write about factors effecting gluten formation.





[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

Second Year

FOOD & NUTRITIONAL SCIENCE

Nutritional Assessment Techniques

Time : 3 Hours

Maximum Marks : 70

<u>Answer all questions choosing one from each Unit</u> $(5 \ge 14 = 70)$ <u>Each question carries 14 marks</u>

<u>Unit - I</u>

Q1) a) Explain the Interrelationship between nutritional assessment and Health Status of different aged Men and Women.

OR

b) What are the important nutritional determinants in foods? Write any two methods of determination of nutrients.

<u>Unit - II</u>

Q2) a) Write any two direct methods of nutritional assessment of human groups.

OR

b) Discuss the process of Assessment of age using local events Calendar.

<u>Unit - III</u>

Q3) a) Explain any two methods by which nutritional status of people can be determined.

OR

b) Write the usage of sliding role and thickness chart for the inter-pretation of Growth Charts.

Q4) a) Explain any two methods for assessing dietary intakes of household level people. What are its limitations and uses?

OR

b) By taking various types of Dietary data, How do you interpret and Correlate with nutritional values?

<u>Unit – V</u>

Q5) a) Explain any two clinical methods for clinical assessment of nutritional status. How do you diagnose the malnutrition?

OR

b) Discuss the field level nutritional assessment techniques. What is its accuracy in the interpretation?





[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

Second Year

FOODS & NUTRITIONAL SCIENCE

Experimental Foods

Time : 3 Hours

Maximum Marks: 70

<u>Answer all questions choosing one from each Unit</u> $(5 \ge 14 = 70)$ Each question carries 14 marks

<u> Unit - I</u>

Q1) a) Write the stander disation methods of Meat preparations. How do you evaluate its quality?

OR

b) Explain the selection of Food Taste Panels.

<u>Unit - II</u>

Q2) a) What are the sources of starch? Explain retrogradation of Starch. Write about the formation of gluten in wheat flour

OR

b) Write the properties of oils. How do you determine smoking point of oil?

<u>Unit - III</u>

Q3) a) Write the stages of sugar cookery. What is crystallization process. Explain the factors effecting crystallization of sugar.

OR

b) Write the preparation of Cakes. And Indian Traditional Sweets.

Q4) a) Write the properties of Milk. Explain the stages involved in the Milk Cookery products.

OR

b) Write the basic steps of cooking pulses. Explain the factors affecting the quality of cooked products.

<u>Unit – V</u>

Q5) a) Explain the structure of vegetables giving examples. What are plant enzymes and write their uses.

OR

b) Write the extraction of Papain and its effect on meat.



(DFN23A)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

Second Year

FOOD & NUTRITIONAL SCIENCE

Clinical Nutrition and Dietetics

Time : 3 Hours

Maximum Marks: 70

<u>Answer all the questions choosing one from each Unit</u> $(5 \times 14 = 70)$ <u>Each question carries 14 marks</u>

<u>Unit - I</u>

Q1) a) What are the aims of Indian Dietitics Association? Explain the code of Ethics of Members of Board.

OR

b) Discuss the principles in the formulation of Therapeutic diets. What are the merits and demerits of the usage of therapeutic diets?

<u>Unit - II</u>

Q2) a) Discuss the risks associated with the obesity and under weight? How it effects the normal life span of persons?

OR

b) Explain the grades of obesity and Under Weight.

<u>Unit - III</u>

Q3) a) Explain the types of Food allergies. What are its symptoms? Give examples.

OR

b) How food allergies can be overcome by dietary Managements? Give examples.

Q4) a) Describe the causes for Ulcer. Write the symptoms for Ulcer and precautions to be taken in the Food habits give examples.

OR

b) Write about various types of Gastro interstinal disorders. Explain their symptoms and diagnostic methods.

<u>Unit – V</u>

Q5) a) How do you clinically test Jaundice and Hepatitis? Write the dietary plan for Jaundice patients.

OR

b) Explain the biochemical functions of pancreatitis. How do you diagnose pancreatitis disorders? Give examples.





[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

Second Year

FOODS & NUTRITIONAL SCIENCE

Food Microbiology and Toxicology

Time : 3 Hours

Maximum Marks : 70

<u>Answer all questions choosing one from each Unit</u> $(5 \ge 14 = 70)$ Each question carries 14 marks

<u>Unit - I</u>

Q1) a) Write the principles underlying in the spoilage of foods. Explain the chemical changes occur in the spoilage mechanism.

OR

b) What are food enzymes? Explain the factors relating in the destruction of naturally present food enzymes.

<u>Unit - II</u>

Q2) a) What is meant by micotoxin contamination of Foods? Write the prevention methods for the micotoxin contamination.

OR

b) Explain Growth Curves of microorganisms. What are the physicochemical factors influencing destruction of microorganisms?

<u>Unit - III</u>

Q3) a) What is toxicity? Explain the classification of Food toxicants with suitable examples. What are the diseases caused by Food toxicants.

OR

b) Discuss the importance of micro-organisms in Food preservation. Write the characteristics of yeast.

Q4) a) Discuss the toxicology of Marine foods.

OR

b) What are the toxic effects of food on human health? Explain neurotoxicity.

<u>Unit – V</u>

Q5) a) What are derived food toxicants? Explain the Toxins formed from fats.

OR

b) Explain the Toxins formed from proteins and their effects on human health.



(DFN24A)

Total No. of Questions : 05]

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

(Second Year)

FOODS & NUTRITIONAL SCIENCE

Diet Therapy and Counselling

Time: 3 Hours

Maximum Marks : 70

Answer all questions choosing one from each unit Each question carries 14 marks

<u>Unit - I</u>

Q1) a) What is the meaning of diet counselling. Explain the role of Counselor and Counsel.

OR

b) What is the impact of counselling on health and diseases? Discuss the role of counselling in hospitals.

<u>Unit - II</u>

Q2) a) Explain the methods available for diet counselling for obesity people.

OR

b) Explain various types of febrile conditions. Write the clinical symptoms and diagnosis of etiology.

<u>Unit - III</u>

Q3) a) What is diabetes mellitus? Write about the diet counselling for diabetes.

OR

b) Explain the types of metabolic changes occur in diabetic stages. How can you overcome by diet counselling.

Q4) a) What are cardiovascular diseases. Suggest preventive methods for cardiovascular diseases. Write diet counselling for cardiovascular patients.

OR

b) What is hypertension? Explain the symptoms and identification methods for hypertension? Explain diet counselling for hyper tension persons.

<u>Unit - V</u>

Q5) a) What is acute and chronic nephrotic syndrome? Write the diagnostic methods and diet counselling for nephrotic syndrome.

OR

b) What is HIV and AIDS? Write the diet counselling HID and AIDS patients.

[Total No. of Pages : 02

M.Sc. DEGREE EXAMINATION, MAY - 2017

(Second Year)

FOODS & NUTRITIONAL SCIENCE

Food Safety and Quality Assurance

Time : 3 Hours

Maximum Marks: 70

<u>Answer all questions choosing one from each unit</u> <u>Each question carries 14 marks</u>

<u>Unit-I</u>

Q1) a) Explain the need of food safety for all. What is the role of government and public in food safety?

OR

b) Discuss the systems and programmes in India for food quality and food safety.

<u>Unit-II</u>

Q2) a) Write the identification methods for food adulterants. Suggest methods for controlling food adulterants.

OR

b) Discuss the advantages and disadvantages of food preservatives and food stabilizers as food additives.

<u>Unit-III</u>

Q3) a) Discuss chemical hazards in foods due to agricultural residues and industrial contaminants.

OR

b) Write the important points of ISO 9000 quality system standards on food products.

<u>Unit-IV</u>

Q4) a) Discuss the GMP's pre requisite programs as business practice in the food industry.

OR

b) Explain HACCP pre requisite program premises and facilities in food industry.

<u>Unit-V</u>

Q5) a) How an HACCP team is assembled? Explain the construction of a process flow diagram for the food product quality verification.

OR

b) Discuss the chronology of food safety related events.
