

(DFN01)

Total No. of Questions : 5]

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M.Sc. DEGREE EXAMINATION, DEC. – 2018

First Year

FOODS & NUTRITIONAL SCIENCE

Fundamentals of Food and Nutrition

Time : 3 Hours

Maximum Marks : 70

Answer All questions, choosing one from each unit.

[5 × 14 = 70]

Unit - I

Q1) a) Explain the terms Food and Nutrition. Write in detail about balanced diet to various age people.

OR

b) What is the need of nutrient requirement? Explain RDA latest concepts in dietary recommendations.

Unit - II

Q2) a) What are Oils and Fats? Write about the requirements and biological functions of oils and fats.

OR

b) What are essential and non-essential amino acids? Give examples. Write the good food sources for proteins. Write the effects of deficiency of proteins.

Unit - III

Q3) a) Define vitamins and write its classification with examples. Explain the food sources and functions of vitamin B.

OR

b) What are water soluble vitamins? Give examples. Explain the food sources and functions of vitamin C.

Unit - IV

Q4) a) What are the Food sources for Sodium and Potassium? Write the biological functions of Sodium and Potassium.

OR

b) What are micro miners? Give examples. Explain the biological importance of copper, zinc and iron.

Unit - V

Q5) a) Discuss the role of ICMR in spreading Food and nutrition programmes.

OR

b) Discuss the vitamin deficiency diseases due to A and D. Suggest remedial measures for the improvement of vitamin 'A' and 'D'.



(DFN02)

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M.Sc. DEGREE EXAMINATION, DEC. – 2018

First Year

FOODS & NUTRITIONAL SCIENCE

Nutritional Biochemistry

Time : 3 Hours

Maximum Marks : 70

Answer All questions, choosing one from each unit

[5 × 14 = 70]

Each question carries 14 marks

Unit - I

Q1) a) Explain Urea Cycle in detail.

OR

b) Write biosynthesis of Fatty acids. Add a brief note on repair of DNA mechanism.

Unit - II

Q2) a) What are micronutrients? Explain their metabolism.

OR

b) Explain the factors affecting the utilization of minerals and the role of minerals in metabolism.

Unit - III

Q3) a) Explain the utilization and the metabolism of vitamins.

OR

b) What are Enzymes? Write about Enzyme inhibition and the factors affecting Enzyme inhibition.

Unit - IV

Q4) a) Write in detail about cell mediated immunity. Add a note on antigen-antibody reactions.

OR

b) Write about Immuno globulin and Nutrition immunity.

Unit - V

Q5) a) Write about High energy compounds and their role in Biochemical processes.

OR

b) Explain Biochemical oxidation and reductions with examples.

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(DFN03)

Total No. of Questions : 5]

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M.Sc. DEGREE EXAMINATION, DECEMBER – 2018

First Year

FOODS & NUTRITIONAL SCIENCE

Functional Foods

Time : 3 Hours

Maximum Marks : 70

Answer All questions, by choosing one from each unit

[5 × 14 = 70]

All questions carry equal marks

Unit - I

Q1) a) What are functional foods? Discuss the Public Demand on functional foods.

OR

b) Discuss the Indian market potential on functional foods by taking examples.

Unit - II

Q2) a) Write and explain the methods of extraction of proteins from seeds and oils.

OR

b) Explain the preparation and applications of Fat free Milk powders.

Unit - III

Q3) a) Discuss the role of nutraceuticals in health and their therapeutic applications.

OR

b) Give an account on Sodium free lactose free and fiber rich foods.

Unit - IV

Q4) a) What are dietary supplements? Give examples. Discuss their role in health.

OR

b) What are non-nutrient Sweetners? Give examples. Explain the development of sugar free products.

Unit - V

Q5) a) Discuss the techniques involved in Food Bio-Technology.

OR

b) How do you achieve food processing improvement through Biotechnology?



(DFN04)

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M.Sc. DEGREE EXAMINATION, DEC. – 2018

First Year

**FOODS & NUTRITIONAL SCIENCE
Institutional Foods Service Management**

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) Write and explain the principles and functions of Food Service Management.

OR

b) Discuss the Food Services required in Railways and Airlines.

Unit - II

Q2) a) Explain the classification and selection of equipment and their maintenance in Food Service Centres.

OR

b) Discuss the advantages and limitations of Mobile catering and self servicing.

Unit - III

Q3) a) Write about the laws governing Food Services in public catering and sanitation of Food services in public catering.

OR

b) Write about the Food safety awareness programmes to food handlers and consumers.

Unit - IV

Q4) a) Discuss the Financial and Personal Management in Food Catering.

OR

b) Explain the selection and Recruitment of Personal in Food catering industry. How do you monitor their work output?

Unit - V

Q5) a) Write about the Food Catering Services in temples and hospitals.

OR

b) Discuss the Food Safety Programmes in street food industry and canteens.



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M.Sc. DEGREE EXAMINATION, DEC. – 2018

First Year

FOODS & NUTRITIONAL SCIENCE

Nutritional Biochemistry

Time : 3 Hours

Maximum Marks : 70

Answer All questions, choosing one from each unit

[5 × 14 = 70]

Each question carries 14 marks

Unit - I

Q1) a) Explain Urea Cycle in detail.

OR

b) Write biosynthesis of Fatty acids. Add a brief note on repair of DNA mechanism.

Unit - II

Q2) a) What are micronutrients? Explain their metabolism.

OR

b) Explain the factors affecting the utilization of minerals and the role of minerals in metabolism.

Unit - III

Q3) a) Explain the utilization and the metabolism of vitamins.

OR

- b) What are Enzymes? Write about Enzyme inhibition and the factors affecting Enzyme inhibition.

Unit - IV

- Q4)** a) Write in detail about cell mediated immunity. Add a note on antigen-antibody reactions.

OR

- b) Write about Immuno globulin and Nutrition immunity.

Unit - V

- Q5)** a) Write about High energy compounds and their role in Biochemical processes.

OR

- b) Explain Biochemical oxidation and reductions with examples.

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