

D-2335

Sub. Code

36512

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2023.

First Semester

Home Science – Nutrition and Dietetics

NUTRITION AND HEALTH

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is balanced diet?
2. Mention two importance of RDA.
3. Name any two important vaccines given during pregnancy.
4. What is the role of prolactin and oxytocin hormone in lactation?
5. Name any two intervention programme to eradicate malnutrition among pre-schoolers.
6. What is 'weaning'?
7. How will you associate nutrition and academic performance during school age?
8. List any four risk factors which cause infertility among women.
9. What is 'geriatrics'?
10. Write any two factors to be considered in space nutrition.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) Discuss briefly the importance of nutrition for ensuring adequate growth.

Or

- (b) Describe the basic five food groups.

12. (a) Describe the complications of pregnancy.

Or

- (b) Define colostrum. Write the nutritional significance of colostrum.

13. (a) Differentiate between breast feeding and artificial feeding.

Or

- (b) What are the special factors to be considered regarding the nutritional management of LBW babies?

14. (a) State the changes in food habits during adolescence.

Or

- (b) Explain briefly the risk factors of infertility.

15. (a) What nutritional modifications would you suggest for an athlete during endurance activity.

Or

- (b) State the various functions of the ICDS programme.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. What do you mean by Recommended Dietary Allowances? Discuss briefly the importance of a balance diet.
 17. State the significance of immunisation during pregnancy.
 18. Explain the nutritional problems in teenage and old age pregnancy.
 19. Explain the physiological and psychological changes that occur during adolescence.
 20. What is gerontology? Explain the importance of nutrition during old age.
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D-2337

Sub. Code

36521

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics)
DEGREE EXAMINATION, DECEMBER 2023.**

Second Semester

NUTRITIONAL BIOCHEMISTRY

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. How are the carbohydrates important to our body?
2. Define: Hyperglycemia
3. What foods is highest in protein?
4. What is Phenylketonuria?
5. Write the types of lipids?
6. What are the sources of Vitamins?
7. Define : Co-enzymes.
8. How does the body balance acid and base levels?
9. Definition of buffer
10. What are the different signs of an electrolyte imbalance?

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) What is the biological importance of carbohydrates?

Or

- (b) Detail about the Chemical properties of Proteins.

12. (a) Describe in detail about biological role of protein.

Or

- (b) What are the stages of protein synthesis?

13. (a) Explain in detail about the disorders of lipid metabolism.

Or

- (b) Explain in detail about Scurvy diseases.

14. (a) What diseases are caused by nucleic acids?

Or

- (b) Explain in detail about functions of nucleic acids.

15. (a) Detail about the important roles of hormone.

Or

- (b) Discuss about physiological role of different buffer system.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain in detail about Structure, Classification, and Functions of Carbohydrates.

17. Discuss about the signs and symptoms of protein deficiency.

18. Mention briefly about the Glycolytic pathway.
 19. Elaborate in detail about the factors affecting enzyme activity.
 20. Mention briefly about Electrolyte Imbalance: Types, Symptoms.
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D-2338

Sub. Code

36522

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics)
DEGREE EXAMINATION, DECEMBER 2023.**

Second Semester

FUNCTIONAL FOODS AND NUTRACEUTICALS

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What you mean by functional food?
2. Define “Probiotic”
3. Name any four terpenoides.
4. How spices are helpful?
5. What are nutraceuticals? Give any two examples.
6. Define – isoflavonoids.
7. What is Parkinson’s Disease?
8. Write in brief about lycopene.
9. Why fish is considered significant nutritional food?
10. Explain the terms CKD.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write the role and types of prebiotics.
Or
(b) Describe the potential applications in risk reduction of diseases.
12. (a) Explain phenols and its classification.
Or
(b) Elaborate a note on condiments.
13. (a) What are the different ways in which nutraceuticals can be classified?
Or
(b) How is nutraceuticals used with anti-inflammatory activities?
14. (a) Write a short note on Cardiovascular Diseases.
Or
(b) Write a short note on Alzheimer's Disease.
15. (a) Illuminate the nutritional significance of Aloe Vera and Blue Tea.
Or
(b) Explain the changes that occur in the ageing brain.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate the various types of probiotics. Give the health benefits of probiotics.
17. Discuss about spices in detail. Also explain how spices are used in foods and what nutritive value they support.

18. How are the nutraceuticals divided on the basis of their 'Mechanism of Action'?
 19. Write in brief about alkaloids and other nitrogen-containing metabolites.
 20. Enumerate the role of nutraceuticals in CVD.
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D-2339

Sub. Code

36523

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics)
DEGREE EXAMINATION, DECEMBER 2023.**

Second Semester

FOOD SERVICE MANAGEMENT

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define Organization.
2. List the importance of ventilation in hotels.
3. What is Hospital food production?
4. Write the classification of equipment.
5. List the types of menu.
6. Define purchasing.
7. Write about tray service.
8. Define Sanitation.
9. What is Human resource management?
10. State about dietary accounting.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write about the administration of food service industry.

Or

- (b) Discuss the Importance of receiving raw materials for hotels.

12. (a) Paraphrase on the process of food production.

Or

- (b) What are the Principles followed in Hospital food service management?

13. (a) Illustrate the selection criteria of food service equipment.

Or

- (b) Discuss about waiter-waitress service.

14. (a) Write about environmental hygiene and sanitation.

Or

- (b) Review on the importance of personal hygiene.

15. (a) Write about performance appraisal.

Or

- (b) Review on marketing as a managerial function.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate on recommended Size and different type of kitchen.

17. Write in detail about the Purchasing of food materials for hotels.

18. Illustrate the care and maintenance done for equipment.
 19. Discuss on safe food handling practices.
 20. Elaborate on Book of account.
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D-2340

Sub. Code

36531

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics)
DEGREE EXAMINATION, DECEMBER 2023.**

Third Semester

CLINICAL AND THERAPEUTIC NUTRITION

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is the test follows in food allergy?
2. Define : IBS.
3. What is the role of dietitian?
4. What is esophagitis?
5. Short notes on cholecystitis.
6. How to prevent food allergy?
7. Define: nephrolithiasis.
8. List out the gastrointestinal disorders.
9. Definition : IBD.
10. What is meant by metabolic stress?

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Elaborate in detail about role of dietitian and community.

Or

- (b) Explain about hepatitis & hepatic coma.

12. (a) Explain about routine hospital diets.

Or

- (b) Describe about H1N1 and its febrile condition diet.

13. (a) Write detail about diet in gastrointestinal disorder.

Or

- (b) Describe about dengue fever and its febrile condition diet.

14. (a) Write about hepatic failure and its diet follows.

Or

- (b) Describe about during cardiovascular complication.

15. (a) Give an account on dietitian role in hospital and community.

Or

- (b) Discuss about Nephrosclerosis and Nephrolithiasis.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain in detail about diet condition for IBD and IBS.
17. Write an elaborate about diet during neurological disorder.

18. Explain about metabolic stress with following diet control.
 19. Explain about diet routine in renal disorders.
 20. Give brief explain about food allergy and its diet routine.
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D-2341

Sub. Code

36532

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics)
DEGREE EXAMINATION, DECEMBER 2023.**

Third Semester

DIETETICS IN LIFE STYLE DISEASES

(CBCS 2018 – 19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What are non vital organs?
2. List the antistress foods.
3. How to assess Obesity?
4. State few weight reduction techniques.
5. Write about the classification of Diabetes mellitus.
6. Define dyslipidemia.
7. What is myocardial infarction?
8. Define cancer.
9. What is Hyperkinetic Behaviour Syndrome?
10. List the etiology of dysphagia.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Elaborate on psychosomatic disorders due to stress.

Or

- (b) Describe on Stress enhancing food.

12. (a) Illustrate on adipose tissue and regulation of body weight.

Or

- (b) Paraphrase on the complications of diabetes.

13. (a) Write about the role of diet and insulin.

Or

- (b) Illustrate the Risk factors of Cardiovascular diseases.

14. (a) Discuss the effects of Dietary management in angina pectoris.

Or

- (b) Write about the Nutritional effects of cancer – cachexia.

15. (a) Paraphrase on chemotherapy and radiation therapy.

Or

- (b) Discuss about nutritional management in musculo skeletal diseases.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Describe the biological effects of stress on cardiovascular system.
 17. Elaborate on complications and dietary management of underweight condition.
 18. Illustrate the causes and life style management of Gestational diabetes.
 19. Write about the complications and dietary management of Hypertension.
 20. Elaborate on the development, hereditary and nutritional causes of cancer.
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D-2342

Sub. Code

36533

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2023.

Third Semester

Home Science — Nutrition and Dietetics

COMMUNITY NUTRITION

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What do you mean by “nutritional status”?
2. Define Nutritional Assessment.
3. What is PEM?
4. Mention any four symptoms of iron deficiency anaemia.
5. What is a nutrition intervention programme?
6. What is the role of agriculture in nutrition?
7. What is CSWB?
8. Mention the role of WHO in promoting nutrition education.
9. What do you mean by green revolution?
10. Mention any two causes of food spoilage.

SECTION B — (5 × 5 = 25 marks)

Answer ALL the questions, choosing either (a) or (b).

11. (a) How will you assess the nutritional status of an individual by indirect method?

Or

- (b) What is the significance of Nutritional Assessment? Explain briefly about the dietary survey.

12. (a) State the vicious cycle of poverty and malnutrition.

Or

- (b) Discuss National Nutritional Anaemia Prophylaxis Programme.

13. (a) What is the significance of agriculture sector to nutrition interventions for improved health outcomes?

Or

- (b) Explain the role of non-governmental agencies for the vulnerable sections of the population.

14. (a) What is the role of ICMR in preventing malnutrition?

Or

- (b) How will you train an employee for conducting nutrition education programme?

15. (a) How will you prevent food losses in post-harvest period?

Or

- (b) How will you evaluate the nutrition education programme?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain in detail the techniques of nutritional anthropometry and biochemical estimation.
 17. Describe the need for an integrated approach to solving the problems of malnutrition.
 18. Enumerate the prevalence, etiology, symptoms and consequences of iron deficiency anaemia.
 19. Explain in detail the nutrition intervention programme.
 20. Describe the importance of nutrition education for the community.
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D-2343

Sub. Code

36541

DISTANCE EDUCATION

M.Sc. (Home Science) DEGREE EXAMINATION,
DECEMBER 2023.

Fourth Semester

Nutrition and Dietetics

PEDIATRIC NUTRITION

(CBCS 2018-19 Academic Year onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is nutrition?
2. Write a comment on infancy.
3. What is immunization?
4. Explain briefly about premature baby.
5. Brief note on abdominal distention.
6. Write the condition of anaemia.
7. Define TB.
8. Compare short term and long consequences in infants.

9. Explain the lactose intolerance.
10. Define AIDS.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Describe about assessment or nutritional status.

Or

- (b) Write the importance of immunization schedule during pregnancy.

12. (a) Categorize the premature baby, low birth weight baby and disability baby.

Or

- (b) Evaluate the complications of infant's lactation.

13. (a) Explain the detection of abnormal sign of respiratory distress.

Or

- (b) Examine the protein energy malnutrition in infants.

14. (a) Discuss about obesity of childhood.

Or

- (b) Give a short note on (i) diarrhea (ii) typhoid.

15. (a) Determine the role of nutrition management for children with special conditions.

Or

- (b) Give a brief account on inflammatory bowel disease.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate the physiological development and assessment of nutritional status in infants.
 17. Categorize the identification of new born sickness.
 18. Give an account on vitamin A deficiency diseases.
 19. Discuss about the nutritional management for children with hepatitis diseases.
 20. Define ADH. Elucidate the nutritional management for children with ADH.
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D-2344

Sub. Code

36542

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, DECEMBER 2023.

Fourth Semester

FOOD MICROBIOLOGY AND SANITATION

(CBCS 2018-19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Spontaneous generation theory
2. Brewer's yeast
3. Bread mold
4. Food contamination
5. Asepsis
6. Appertization
7. Food intoxication
8. Food additives
9. Food sanitation
10. FAO

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Choosing the development of microbiology.

Or

- (b) Give an account of cultural characteristics of microorganisms.

12. (a) Sketching the importance about viruses in foods.

Or

- (b) Explain the contamination of foods from external source.

13. (a) Estimating in detail about spoilage of cereals.

Or

- (b) Elucidate the causes of spoilage of canned foods.

14. (a) Commending the bacterial food borne illness.

Or

- (b) Describe —Salmoellosis,

15. (a) Bring out the nutrition labeling and nutrition claims.

Or

- (b) Facilitating the importance of Food laws.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss in detail about scope of Food Microbiology.
 17. Summarizing about microbiology of fruits and vegetables.
 18. Rating in detail about food preservation.
 19. Selecting in detail about food borne poisoning.
 20. Briefly explain about the food sanitation.
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D-2345

Sub. Code

36543

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, DECEMBER 2023.**

Fourth Semester

FOOD BIOTECHNOLOGY AND BIOSTATISTICS

(CBCS 2018-19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What is fed-batch fermentation?
2. What are poisonous mushrooms? Give examples.
3. Define – Biosensors.
4. Describe the term “Food Toxicants”. give examples.
5. Define – Acidulants. Is citric acid an acidulant.
6. Write about Ogive curve.
7. Define about Primary data collection.
8. What is Discrete Variables?
9. When would cluster sampling be used? What is Cluster sampling?
10. Define “MEAN” with suitable example.

PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).

11. (a) Write a detailed account on biomass production.

Or

- (b) Give an account on regulatory aspects of Biotechnology.

12. (a) Explain the role of food additives in Biotechnology.

Or

- (b) Write an account on Cynogens.

13. (a) Illustrate some applications of Biostatistics.

Or

- (b) Give a brief introduction of Biostatistics.

14. (a) Give a detailed account of coefficient of correlation with suitable example.

Or

- (b) Give an account on analysis of variance and applications.

15. (a) Give a detailed account on standard deviation with suitable illustrations.

Or

- (b) Give an account on Percentile and Percentile Ranking.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Briefly discuss the significance of Single Cell Protein (SCP) giving appropriate examples.
 17. Explain in brief about the Culture methods and process of Spirulina and its applications
 18. Illustrate the safety aspects of foods produced by biotechnology
 19. Give a detailed account on graphical representation by histogram, pie chart and Ogive curve.
 20. Analyse the Chi-Squared Test. State its applications in probability theory.
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