

D-4603

Sub. Code

36521

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Second Semester

NUTRITIONAL BIOCHEMISTRY

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is the importance of food?
2. Which is the most common errors of carbohydrate metabolism?
3. Who discovered protein?
4. Define: MSUD.
5. Write the classification of vitamins?
6. What are the symptoms of lack of minerals?
7. Enzymes: definition and function.
8. How does blood maintain pH?
9. How do buffers maintain pH?
10. What are signs of low potassium?

PART B — (5 × 5 = 25 marks)

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

11. (a) Describe about the sources of Carbohydrates.

Or

- (b) Why are carbohydrates the most important nutrient?

12. (a) Explain in detail about the Classification of Proteins.

Or

- (b) Elaborate about the Anaemia.

13. (a) Discuss about the structure and function of Nucleic acids.

Or

- (b) Describe about biological importance of Minerals.

14. (a) Write the mechanism of Enzyme action.

Or

- (b) Explain in detail about types of acid-base imbalance.

15. (a) What are the three types of buffer?

Or

- (b) Discuss in detail about interrelation between hormones and nutrients.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Mention briefly about Carbohydrate Metabolism Disorders.
 17. Enumerate the mechanism of β -oxidation pathway.
 18. Explain in detail about the Hormone deficiency diseases
 19. Elaborate in detail about industrially importance of enzymes.
 20. Explain in detail about diseases of electrolytes imbalance.
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36522

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Second Semester

FUNCTIONAL FOODS AND NUTRACEUTICALS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Mention any four natural sources of Prebiotics.
2. Define - Synbiotic.
3. Name the classes of phenolic compounds.
4. What do you mean by Antinutrient?
5. Give two examples of nutraceuticals of plant origin and animal origin each.
6. What are the most common phytochemicals found in the nutraceutical market?
7. What is Alzheimer's Disease?
8. Describe the term "glucosamine".
9. Expand the term "DHA".
10. List the symptoms of hypoglycaemia.

PART B — (5 × 5 = 25 marks)

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

11. (a) Explain the types of functional foods.

Or

- (b) Write a short note on inflammatory bowel disease

12. (a) Write a detailed note on alkaloids.

Or

- (b) How are fatty acids helpful? Explain.

13. (a) What is the difference between Nutraceuticals and Functional Foods?

Or

- (b) How are non-liquid filled capsules more useful? Explain in detail.

14. (a) Explain about melatonin and ornithine alpha ketoglutarate.

Or

- (b) Give a detailed note on lycopene and octacosanol.

15. (a) Explain the nutritional and health benefits of Spirulina and Kelp.

Or

- (b) Expand the term CVD. Discuss the various CVD's.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate a note on quality assurance of prebiotics and safety.
 17. Discuss the role of vitamins and minerals. Also give the chemical structures of some of the vitamins.
 18. Write in detail about the properties, structure and functions of various nutraceuticals.
 19. Enumerate a note on liver health supplements.
 20. Explain the symptoms and types of psoriasis and the remedy for its cure.
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36523

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.**

Second Semester

FOOD SERVICE MANAGEMENT

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Write the segmentation of Food service industry.
2. Define management.
3. List the importance of lighting in hotels.
4. Define menu planning.
5. What is production management?
6. Write about Self-service.
7. Define hygiene.
8. State about employee benefits.
9. Write the methods of training given for employee.
10. Define Marketing.

PART B — (5 × 5 = 25 marks)

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

11. (a) Illustrate the Scope of food industry.

Or

- (b) Elaborate on the types of flooring and wall covering in food service.

12. (a) Paraphrase on importance of organization structure in food service institution.

Or

- (b) Discuss on the different methods of holding foods for service.

13. (a) Write about the Tools of food management.

Or

- (b) Discuss on the criteria for menu planning.

14. (a) Write about conventional and non-conventional sources of energy.

Or

- (b) Describe on vending and mobile food service system.

15. (a) Discuss on Recruitment and selection of employees.

Or

- (b) Illustrate the laws governing of food service establishment.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate on role and equipment required in Storage area
 17. Discuss on Organizational chart of the food service team in hospital.
 18. Illustrate on managerial abilities needed for food service manager.
 19. Elaborate on Standardization and portion control.
 20. Describe the types and importance of leadership qualities.
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D-4606

Sub. Code

36531

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Third Semester

CLINICAL AND THERAPEUTIC NUTRITION

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Dietitian.
2. Psychology.
3. Transitional feeding.
4. Chronic fever.
5. Steatorrhea.
6. Cholecystitis.
7. Lactose intolerance.
8. Nephrolithiasis.
9. Epilepsy.
10. Trauma.

PART B — (5 × 5 = 25 marks)

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

11. (a) Write a note on role of dietitian in the hospital.

Or

- (b) Mention the problems of feeding children.

12. (a) Highlight the enteral and parental feeding in hospitals.

Or

- (b) List out the importance of diet in typhoid fever.

13. (a) Build an ecological factor for hepatitis.

Or

- (b) Mention the preparation of diet for gastrointestinal disorders.

14. (a) Mention three basic functions of liver that are affected in cirrhosis.

Or

- (b) Give a day's diet for a patient with infective hepatitis.

15. (a) Describe the dietary management and prevention of food allergy.

Or

- (b) Write the types of allergic reactions.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Give three recipes for soft diet, liquid diet and full fluid diet.
 17. Describe the contributing factors in the development of tuberculosis. What are the common signs and symptoms in this condition?
 18. Suggest protein concentrates and nutrition supplements available in the market for a patient recovering from malaria.
 19. Bring out the relationship between alcohol and cirrhosis of liver.
 20. Explain in detail about dietary modifications for treatment of glomerulonephritis.
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Sub. Code

36532

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Third Semester

DIETETICS IN LIFE STYLE DISEASES

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is psychosomatic disorders?
2. How to control weight gain?
3. What is meant by hyper cholesterolemia?
4. What are the cardiovascular risk factors?
5. Define stroke.
6. What is the importance of antistress foods?
7. Define BMR.
8. How the stress induces heart attack?
9. List out the classifications of hypertension.
10. Which factor is causing highly risk of arterial plaque?

PART B — (5 × 5 = 25 marks)

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

11. (a) Write about the weight management with functional adjustment.

Or

- (b) Describe about the effects of stress on brain.

12. (a) Explain shortly about the stress enhancing foods.

Or

- (b) Give short notes about the BMI and its complicating factors.

13. (a) List out the essential nutrient to prevent cardiac arrest.

Or

- (b) Explain about the risk of obesity and its effects.

14. (a) Mention about the major causes of hyperinsulinemia.

Or

- (b) How to improve the respiratory system by physiological activity?

15. (a) Write about the nature of polyuria and polydipsia.

Or

- (b) Give short notes of the main reason for surgical management in weight reduction.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Detail about the causes of dyslipidaemia with prevention measurements.
 17. Explain about the causes, symptoms and clinical findings of atherosclerosis.
 18. Explain about the types of diabetes mellitus and its current medications.
 19. Write about the major therapeutic diets for immune system development.
 20. Discuss about the major complications of gestational diabetes.
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36533

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.**

Third Semester

COMMUNITY NUTRITION

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. What are three causes of Goiter?
2. Recommended Dietary Allowances of Iron.
3. What is anemia? List the food sources to prevent anemia.
4. Recommended Dietary Allowances of Retinol and Beta Carotene.
5. Define – Micro minerals.
6. Define – ICARM.
7. Explain importance of environment sanitation in our life.
8. Name two chemicals used as preservative in food preservation.
9. Explain AFPRO.
10. List out the agents causing food spoilage.

PART B — (5 × 5 = 25 marks)

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

11. (a) List the types of resources needed in a food service establishment.

Or

- (b) Explain nutritional deficiency disorder and symptoms.

12. (a) Explain direct and indirect nutritional assessment.

Or

- (b) Briefly explain theories of PEM.

13. (a) Characteristics of Kwashiorkor and Marasmus.

Or

- (b) Write a short note on the prevalence of malnutrition in India.

14. (a) Illustrate briefly about the methods of food enrichment.

Or

- (b) Summarize in detail about the problems nutritional education programmes.

15. (a) Elaborate in detail about CWS and world bank.

Or

- (b) Discuss about the agriculture development consequences of malnutrition.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Illustrate detail about Greenhouse gas emission.
 17. List out detail about types of Women Empowerments.
 18. Elaborate in detail about calcium deficiency control programme.
 19. Detail notes on national agencies are working in the field of nutrition in India.
 20. Give the objectives, beneficiaries and components of the following programmes functional in our country.
 - (a) Mid-Day Meal (MDM) Programme.
 - (b) National Iodine Deficiency Disorder Control Programme.
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36541

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Fourth Semester

PAEDIATRIC NUTRITION

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is Immunization?
2. Recall the nutritional assessment methods.
3. What is the most common causes for Premature birth?
4. Describe – Jaundice.
5. What is seizure?
6. Define – PEM.
7. List the four symptoms of rickets.
8. How do you prevent constipation?
9. What is epilepsy?
10. AIDS.

PART B — (5 × 5 = 25 marks)

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

11. (a) Write about the physiological development of infants.

Or

- (b) Discuss the immunization schedule during infancy.

12. (a) What are the four stages of lactation? Explain.

Or

- (b) Write a short note on respiratory distress.

13. (a) Discuss about the disease of Vitamin-C deficiency.

Or

- (b) Explain the causes and treatment of typhoid.

14. (a) What is nutritional deficiency anemia in children? Explain.

Or

- (b) Explain about lactose intolerance.

15. (a) Discuss about fat absorption test.

Or

- (b) Write a short note on Autism.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. How do you perform Anthropometric measurement? Explain in detail.
17. State the nutritional management of children with developmental disabilities.

18. What are short term and long term effects of being of underweight in children? Give its dietary management.
 19. Discuss the nutritional management for children with ADH.
 20. How will you measure, record and plotting the growth of infants? Explain in detail.
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D-4610

Sub. Code

36542

DISTANCE EDUCATION

**M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.**

Fourth Semester

FOOD MICROBIOLOGY AND SANITATION

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is Microscopy?
2. Mention the industrial importance of yeast.
3. Define viruses.
4. What is spoilage?
5. List out the cereals products.
6. Explain control of microorganisms.
7. What is spoilage of canned foods?
8. Comment on food borne diseases.
9. Define personal hygiene.
10. Comment on international standards.

PART B — (5 × 5 = 25 marks)

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

11. (a) Define Microbiology. Explain the development of Microbiology.

Or

- (b) Explain the general morphology of bacteriophage.

12. (a) What is preservation? Explain the general principles of food preservation.

Or

- (b) Write a short note on (i) Drying (ii) Food additives.

13. (a) Give a brief account on the grouping of canned foods.

Or

- (b) Explain briefly about types of biological spoilage.

14. (a) Describe about Microbiology of poultry.

Or

- (b) Describe the food borne poisoning.

15. (a) Write a brief note on packaging laws and regulations.

Or

- (b) Explain any three Indian standards.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Define Microbiology. Explain the history of microbiology in detail.
 17. Explain the general morphology of virus.
 18. Give an account on Microbiology of poultry and fish.
 19. Discuss about food borne diseases.
 20. Explain in detail about the food sanitation and safety.
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D-4611

Sub. Code

36543

DISTANCE EDUCATION

M.Sc. (Home Science – Nutrition and Dietetics) DEGREE
EXAMINATION, MAY 2024.

Fourth Semester

FOOD BIOTECHNOLOGY AND BIOSTATISTICS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL the questions.

1. Define SCP.
2. Give any two enzymes in food industry.
3. What is meant by biosensor?
4. Define HFCS.
5. Write the effects of acid on milk proteins.
6. How many sides is a polygon?
7. Define median.
8. Give any two milk based beverage.
9. What is meant by fat shortening?
10. How is p-value calculated?

PART B — (5 × 5 = 25 marks)

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

11. (a) Differences between batch and continuous process.

Or

- (b) Explain in detail about the mechanism of enzyme reaction.

12. (a) Write the health benefits of citric acid.

Or

- (b) List out the advantages of food additives.

13. (a) How do ensure a representative sample?

Or

- (b) What are types of data in statistics?

14. (a) Contrast between the discrete and continuous variables.

Or

- (b) Explain about the tabulation scheme.

15. (a) Give an short notes about the coefficient of correlation.

Or

- (b) Write about the rank correlation.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explain about the stages involved in sugar cookery.
 17. Elaborate about the bread-yeast leavened and its ingredients.
 18. Mention briefly about the application of immobilized enzymes.
 19. Discuss about the importance and applications of SCP.
 20. Elaborate in detail about the primary and secondary methods of collection data.
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