

D-3251**Sub. Code****36511**

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2019.

First Semester

Home Science – Nutrition & Dietetics

HUMAN PHYSIOLOGY

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Enlist the parts of a prokaryotic cell.
2. List any two functions of Cartilage.
3. What are the Plasma Proteins.
4. Define ESR.
5. Mention the formula for Cardiac Output.
6. Give the etiological factors for female infertility.
7. Differentiate endocrine and exocrine glands.
8. Expand—EMG, MRI.
9. List out any four functions of pancreas.
10. What are the causes of dysphagia.

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Highlight the functions of bone.

Or

- (b) Write a short note on structure of cytoplasm

12. (a) Write on the blood coagulation factors.

Or

- (b) Bring out the importance of liver in digestive system.

13. (a) Explain the menstrual cycle.

Or

- (b) Discuss the physiology of taste.

14. (a) Highlight the functions of adrenal cortex and adrenal medulla.

Or

- (b) Explain the structure and function of salivary glands.

15. (a) Brief on the functions of Mitochondria?

Or

- (b) Discuss the factors which influence hypertension.

PART C — (3× 10 = 30 marks)

Answer any THREE questions.

16. Classify tissues and discuss its functions.
 17. Write in details on the Respiratory disorders.
 18. Elaborate the anatomy and functions of digestive system.
 19. Dialysis – Explain in detail.
 20. Explain the hormonal imbalance syndromes.
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D-3252

Sub. Code

36512

DISTANCE EDUCATION

M.Sc (Home Science, Nutrition and Diabetics) DEGREE
EXAMINATION, DECEMBER 2019.

First Semester

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. Define BMR
2. What are the physiological changes which occur during pregnant
3. Define GDM
4. Define MMR
5. List any four benefits of breast feeding.
6. What is weaning? Give an example
7. Mention the common food habits of adolescents
8. What are the risk factors of Infertility.
9. Define Isotonic sports drink.
10. Write on Nutrition Surveillance System.

PART B — (5 × 5 = 25 marks)

Answer ALL questions

11. (a) Highlight the factors affecting Material Nutritional statues.

Or

- (b) Mention the RDA suggested by JMR for pregnant mothers.

12. (a) Distinguish – Breast feeding and formula feeding

Or

- (b) Write on the important of diet during lactation.

13. (a) Mention the Nutritional problems during adolescence.

Or

- (b) Elaborate the importance of Breakfast in School going children.

14. (a) Elucidate the Nutritional problems in adult women

Or

- (b) Write a short note on Nutritional Requirements during stage.

15. (a) Give an account on space Nutrition.

Or

- (b) Brief out the need of Food Security programme in India.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions

16. Elaborate the nutritional requirements of a lactating women.
 17. Explain the Nutritional composition of colostrum and highlight its benefits to the infant.
 18. Discuss the growth and development in pre schoolers and the importance of supplementary foods.
 19. Explain ICDS in detail
 20. Write on the Metabolic changes during old age and the Nutritional considerations.
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D-3253

Sub. Code

36513

DISTANCE EDUCATION

M.Sc. (Home Science) DEGREE EXAMINATION,
DECEMBER 2019.

First Semester

Nutrition and Dietetics

ADVANCED FOOD SCIENCE

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. List any four advantages of cooking.
2. Define emulsification.
3. What are textured vegetable proteins?
4. Define non-enzymatic browning.
5. Define Rancidity.
6. Describe the properties of sugar.
7. Define GM foods.

8. Classify beverages.
9. What is CMC?
10. Differentiate subjective and objective evaluation.

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Elustrate the properties of pod hydrocolloids.
Or
(b) Elucidate the procedures to monitor shelf life.
12. (a) Describe the effect of moist and dry heat on starch.
Or
(b) Write a brief note on processing of pulses.
13. (a) Bring out the nutritional value of seaweed.
Or
(b) Explain the methods of cheese production.
14. (a) Types of Artificial Sweetness.
Or
(b) Highlight the role of fat in cooking.
15. (a) Elustrate the post mortem changes in meat.
Or
(b) Enlist and elustrate the factors affecting futen formation.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Explain in detail the objective evaluation of pods.
 17. Give an account on effect of cooking on pigments.
 18. Elaborate the effect of heat on egg and its products.
 19. Explain the types of food additives.
 20. Write in detail on different stages of sugar cookery.
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Sub. Code

36521

DISTANCE EDUCATION

M.Sc. (Home Science Nutrition and Dietetics) DEGREE
EXAMINATION, DECEMBER 2019.

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. What are Heteropolysaccharides? Give examples.
2. Name the enzymes defective in MSUD and Galactosemia.
3. What is β oxidation?
4. Name the deficiency disease of Iron, Vit C, Calcium, Vit B₁₂
5. Name the enzymes that help in identifying liver disorders.
6. What causes Niemann pick diseases?
7. Give the difference between Nucleotide and Nucleoside.
8. Name the deficiency conditions of Insulin, Aldosterone, Thyroxine, Calcitriol.
9. What is Homeostasis?
10. What causes oedema and dehydration?

PART B — ($5 \times 5 = 25$ marks)

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

11. (a) What are the biological role of Carbohydrate?

Or

- (b) Give the classification of Amino Acids and proteins.

12. (a) Write in brief the role of vitamins in metabolic reactions.

Or

- (b) Give an account on absorption of any two minerals.

13. (a) Write a note on enzyme specificity.

Or

- (b) Draw the structure of DNA and explain it in brief.

14. (a) What are hormones? How is the endocrine system regulated?

Or

- (b) Write a note on the physical properties of fats.

15. (a) How is the fluid and electrolytes balanced maintained in the body?

Or

- (b) Write a note on type of minerals with examples.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE following.

16. Describe the process of Glucose oxidation.
 17. How are proteins synthesised in the body? Explain.
 18. Explain β oxidation in detail.
 19. Wrote a short notes on
 - (a) Mineral deficiency diseases
 - (b) Factors affecting enzyme activity.
 20. How is acid base balanced maintained? Explain.
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D-3255

Sub. Code

36522

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION,
DECEMBER 2019.

Second Semester

Home Science –Nutrition and Dietetics

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. Give the meaning of functional foods.
2. Define probiotics.
3. What are flavonoids?
4. Mention the role of Lycopene.
5. List out any four nutraceuticals properties of Bioactive polyphenols.
6. Name the chemicals component found in wheat grass and Aloevera.
7. Mention the use of Proanthocynidins.
8. Give the role of Tea.

9. How nutraceuticals help in bridging the gap between food and drug?
10. Bring out the difference between antinutrients and nutraceuticals.

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions.

11. (a) Distinguish between functional foods and nutraceuticals.

Or

- (b) Give a brief account on phytochemicals as Nutraceuticals.

12. (a) Write short notes on the role of spices and condiments of functional foods.

Or

- (b) Explain the role of functional foods in gut health.

13. (a) Bring out the scope and future prospects of Nutraceuticals.

Or

- (b) Write short notes on Nutrigenomics.

14. (a) Highlight the food components of nutraceuticals on psoriasis.

Or

- (b) Write the concepts of Nutraceuticals drugs.

15. (a) Elucidate the role of dietary supplements from plant sources.

Or

- (b) Write a note on nutraceuticals remedies for circulatory problems.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE out of Five.

16. Discuss in detail on probiotic micro organisms in fermented milk products with quality assurance of safety.
 17. Elucidate the role of antinutrients present in plant foods.
 18. Discuss the sources of Nutraceuticals in detail with suitable examples.
 19. Write a note on nutraceutical remedies for
 - (a) Liver disorders
 - (b) Arthritis
 20. Discuss briefly on testing and evaluation of nutraceuticals products.
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Sub. Code

36523

DISTANCE EDUCATION

**M.Sc. (Home Science Nutrition and Dietetics)DEGREE
EXAMINATION, DECEMBER 2019.**

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. Mention the scope of food industry.
2. Illustrate organisational structure of a flight catering establishment.
3. Give the schematic representation of purchasing activity.
4. State the role of leadership.
5. Define Job description.
6. Give the meaning of A La Carte.
7. List the advantages of portion control.
8. What do you mean by self service styles?
9. What is marketing mix?
10. Define ledger.

PART B — (5 × 5 = 25 marks)

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

11. (a) List out the different types of planning a layout for food service operations.

Or

- (b) What are the factors that affect the development of a food service institutions.

12. (a) Give a brief note on worker's area of Reach.

Or

- (b) Highlight the food production process in Hospital.

13. (a) Describe the organizational chart of the food service unit in Hospital.

Or

- (b) Briefly explain on classification of equipment.

14. (a) Write the advantages and disadvantages of centralized food service system.

Or

- (b) Explain waiter service with suitable examples.

15. (a) Enumerate the importance of giving training for personnel management.

Or

- (b) What are the methods of controlling food costs? Explain.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE out of five

16. Explain in detail the organization structure and administration of Food service Institutions.
 17. Elaborate on the installation and operation of various equipments.
 18. Explain the methods of receiving and storing followed in Food Service Institutions.
 19. Discuss the importance of hygiene in a food service institutions.
 20. Define personnel management. What are the sources of recruitment of employee in food service institute?
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D-3257

Sub. Code

36531

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2019.

Third Semester

Home Science – Nutrition and Dietetics

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. Mention any four role of dietician in a community.
2. List any four problems of feeding children.
3. What are the foods to be included in a clear liquid diet?
4. Define the term 'Osmolality'.
5. Give examples of Acute and Chronic fever.
6. What is dumping syndrome?
7. List the foods to be avoided for an IBS patient.
8. Give the protein allowance for a patient suffering from hepatic coma.

9. Give the causative factors of Nephrolithiasis.
10. What is scratch test?

PART B — ($5 \times 5 = 25$ marks)

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

11. (a) Write in brief on the professional ethics required for a Dietitian.

Or

- (b) Write a note on Transitional feeding.

12. (a) What modifications in diet are required for person suffering from dengue fever?

Or

- (b) Brief on dietary modifications needed for a patient with Crohn's disease.

13. (a) Describe the role of diet in hepatitis.

Or

- (b) What is LI? Give the dietary modifications.

14. (a) How will you modify the diet for a patient suffering with Gastritis?

Or

- (b) What is epilepsy? Detail on the type of diet advocated for an epileptic patient.

15. (a) Discuss in brief on the dietary management for a patient suffering with stroke.

Or

- (b) How will you plan the diet for patient with Nephrosis.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Elaborate on hospital routine diets.
17. Discuss in detail on enteral feeding.
18. Explain the dietary management for any two Gastrointestinal disease.
19. Give an account on phenylketonuria.
20. Write a short note on the (a) importance of diet in Alzheimeri disease (b) Dietary management in 40 percent burns.
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D-3258

Sub. Code

36532

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2019.

Third Semester

Home Science – Nutrition and Dietetics

DIETETICS IN LIFESTYLE DISEASES

(CBCS – 2018-19 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define stress.
2. What does the term obesity and underweight refer to?
3. What is Diabetes insipidus?
4. What does Ischemia refers to?
5. Give the significance of H_{bA1C} test.
6. List any four foods that should be avoided for a patient with hypocholesterolemia.
7. Give the meaning of the term “Angina Pectoris”.
8. Expand DASH and give two significances of the diet.
9. What is Dysphagia?
10. List any four foods that prevents cancer.

PART B — ($5 \times 5 = 25$ marks)

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

11. (a) What foods help to overcome stress? Explain in brief its effect on its organs.

Or

- (b) How will you assess a patient for obesity? Classify the types.

12. (a) Write a short note on Artificial Sweetness.

Or

- (b) Highlight on the causes complications and dietary management related to underweight.

13. (a) Enlist the nutritional risk factors associated with CVD.

Or

- (b) Write a note on the pathogenesis of Atherosclerosis.

14. (a) Give an account of risk factors of cancer.

Or

- (b) Brief on the significance of diet modifications in Hyperkinetic Behaviour syndrome.

15. (a) Write in brief on changes occurring in energy metabolism of a cancer patient.

Or

- (b) Explain in brief on the complications that occur in a diabetic patients.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Elaborate on nutrition for weight management.
17. Discuss in detail on dietary management in Diabetes Mellitus.
18. Explain the cause, complications and diet management in Hypertension.
19. Describe the problems related to nutrition noticed in cancer therapy.
20. Write short notes on
 - (a) Role of food in cancer prevention
 - (b) Role of Nutrition in myocardial infraction.

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Sub. Code

36533

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2019.

Third Semester

Home Science – Nutrition and Dietetics

COMMUNITY NUTRITION

(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 BMI?
2. Mention the indirect methods of assessment of nutritional status.
3. Define protein Energy malnutrition.
4. What is Anaemia?
5. Distinguish between underweight and stunting.
6. State any two functions of vitamin A.
7. Define Infant mortality.

8. Expand : FAO, ICARM.
9. What are Croitrogens?
10. Define nutrition education.

PART B — ($5 \times 5 = 25$ marks)

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

11. (a) Enumerate the clinical signs and symptoms of nutritional adequacy.

Or

- (b) What kind of laboratory tests are used for nutritional assessment?

12. (a) Explain any two parameters used under vital statistics.

Or

- (b) List the signs and symptoms observed in marasmic child.

13. (a) Explain the factors responsible for Iodine Deficiency Disorders.

Or

- (b) Discuss the need for an integrated approach to solve the problems of malnutrition

14. (a) Explain any one of the programme of CHEB for preventing nutritional problems in a community.

Or

- (b) State the need and importance of impacting nutrition education to adolescent girls.

15. (a) Enumerate the principles of planning.

Or

- (b) Enlist the objectives in agriculture planning in relation to nutrition.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions

16. Discuss the causes and symptoms of common nutritional problems prevailing among children in India.
17. Explain the anthropometric measurements used to assess the nutritional status of a community.
18. Write short notes on: (a) ICMR (b) WHO.
19. Give a brief account on the losses of foods in the post-harvest period. How will you prevent such losses?
20. How will you plan, execute and evaluate nutrition education programmes for women in a rural community?
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