

D-5159

Sub. Code

36511

DISTANCE EDUCATION

**M.Sc. (Home Science- Nutrition and Dietetics) DEGREE
EXAMINATION, Dec 2020.**

First Semester

HUMAN PHYSIOLOGY

(CBCS 2018-19 Academic year onwards)

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is cell?
2. List out any four functions of Nervous Tissues.
3. Differentiate between bone and cartilage.
4. What is ESR?
5. Define Dyspnoea.
6. What is renal transplantation?
7. Give the meaning of the term 'Conception'.
8. List any four functions of pancreas.
9. Enlist any two functions of mucous gland.
10. Expand: MRI and NCV.

SECTION B — (5 × 5 = 25 marks)

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

11. (a) Write the functions of Nucleus and Endoplasmic reticulum.

Or

- (b) Explain the structure and functions of muscular tissues.

12. (a) Give the structure and functions of ligaments.

Or

- (b) Write a short notes on blood coagulation.

13. (a) What is Cardiac output? Explain.

Or

- (b) Explain the role of kidney in water and electrolyte balance.

14. (a) Draw and explain the structure of female reproductive system.

Or

- (b) Explain in brief the physiology of smell (tongue).

15. (a) Write a short note on Autonomic Nervous System.

Or

- (b) Distinguish between Adrenal cortex and adrenal medulla.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE out of five questions.

16. Give the classification of tissues with their functions.
 17. Differentiate between WBC and RBC.
 18. Discuss the gaseous exchange in lungs and tissues with suitable diagram.
 19. Elaborate on structure and functions of male reproductive organ.
 20. Describe the mechanism of action of hormones.
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D-5160

Sub. Code

36512

DISTANCE EDUCATION

**M.Sc. (Home Science) (Nutrition and Dietetics) DEGREE
EXAMINATION, Dec 2020.**

First Semester

NUTRITION AND HEALTH

(CBCS 2018–19 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 pregnancy?
3. Define Low birth weight.
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, choosing either (a) or (b).

11. (a) Highlight the factors affecting material nutritional status.

Or

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

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

Or

- (b) Write the importance 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 oldage.

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 diestrus and highlight its benefits to the infant.
 18. Write the hormonal changes during menopause.
 19. Explain ICDS in detail.
 20. Write on the metabolic changes during old age and the nutritional considerations.
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36513

DISTANCE EDUCATION

M.Sc (Home Science- Nutrition and Dietetics) DEGREE
EXAMINATION, Dec 2020.

First Semester

ADVANCED FOOD SCIENCE

(CBCS 2018–19 Academic Year onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Define caramelization.
2. List out the types of sensory test.
3. What is parboiling?
4. Classify the pigments presents in vegetables.
5. Enlist the factors influencing foaming of egg.
6. List the Nutritive value of fish.
7. Give the nutritive composition of Khoa.
8. Highlight any four role of fat in cookery.

9. Define crytalization.
10. What are GM foods?

PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing (a) or (b)

11. (a) Write the difference between Coagulation and Denaturation.

Or

- (b) Write a short notes on Emulsification.

12. (a) Give a brief account on Carboxymethyl cellulose.

Or

- (b) Explain the textural factors of foods.

13. (a) Distinguish between enzymatic and non enzymatic browning.

Or

- (b) Write a note on post harvest changes notices in fruits.

14. (a) Enumerate the nutritive value of ghee.

Or

- (b) Write a note on functional properties of paneer.

15. (a) Highlight the factors affecting crystallization of sugar.

Or

- (b) State the need of food additives in day to day life.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions out of five.

16. Explain the objectives evaluation of food.
 17. What is gelatinization? Highlight the factors affecting gelatinization.
 18. Discuss in detail on the post mortem changes that occurred in meat.
 19. Explain the processing methods of Khoa and ice cream.
 20. Define food additives. Explain the types of food additives.
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36531

DISTANCE EDUCATION

M.Sc.(Home Science-Nutrition and Dietetics) DEGREE
EXAMINATION, DEC 2020.

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 required qualification for becoming a Registered Dietitian (RD)?
2. Enlist two food each for a full fluid diet and soft diet.
3. What is esophagitis?
4. Name the causative organism of Tuberculosis and Malaria.
5. What is the principle of diet for cirrhosis?
6. How is gout caused?
7. What is hypermetabolic state? Give examples.
8. When is elimination diet suggested for a patient?
9. What nutrients help in delaying the onset of neurological disorders?
10. List foods to be avoided for a celiac patient.

PART B — (5 × 5 = 25 marks)

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

11. (a) Enlist the role of dietitian in the hospital.

Or

- (b) Give an account on complications that are noticed in parenteral feeding.

12. (a) What metabolic changes are seen in fever? Give the general dietary principle for fever.

Or

- (b) What is ulcerative colitis? Give the dietary modifications for an adult man suffering with the disease.

13. (a) Highlight on the causative factor and signs and symptoms of cholelithiasis.

Or

- (b) What dietary modifications you will recommend for a patient suffering from hyperthyroidism.

14. (a) Discuss in brief on dumping syndrome.

Or

- (b) Brief on conditions that lead to steatorrhea and dietary modifications.

15. (a) Write a note on dietary management for a patient suffering cardiovascular complications.

Or

- (b) Write a short note on significance of ketogenic diet.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Discuss in detail on the problems of feeding children.
 17. Elaborate on the etiology, Symptoms and dietary management in peptic ulcer.
 18. Explain in detail on etiology, symptoms and dietary modifications for an individual with glomerular nephritis.
 19. Give an account on food allergy. How will you prevent it?
 20. Elaborate on the dietary management for a tuberculosis patient.
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Sub. Code

36532

DISTANCE EDUCATION

M.Sc.(Home Science-Nutrition and Dietetics) DEGREE
EXAMINATION, DEC 2020.

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 is stress?
2. List the foods that enhances stress.
3. What biological changes are noticed in the cardiovascular system on being stressed?
4. What is bariatric surgery?
5. Give the meaning of myocardial infraction.
6. Enlist the foods that help in prevention of cancer.
7. What does the term hyperkinetic behaviour syndrome refer too?
8. Give the normal range of blood cholesterol and triglycerides.

9. How will you confirm an individual to be diabetic?
10. Mention the types of obesity.

PART B — (5 × 5 = 25 marks)

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

11. (a) Enlist the psychosomatic disorders related to stress and its pathogenesis.

Or

- (b) Brief on antistress foods and nutrients.

12. (a) Highlight on the causes and complications of under nutrition.

Or

- (b) Give an account on dietary management for a gestational diabetic mother.

13. (a) Write a short notes on classification of blood lipids.

Or

- (b) Enlist the causative factors of hypertension.

14. (a) Discuss in brief the nutritional problems associated with cancer therapy.

Or

- (b) What dietary modifications are made for an epileptic patient?

15. (a) Write the pathogenesis involved in atherosclerosis.

Or

- (b) Describe the role of food in prevention of cancer.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate on the biological effects of stress on the functioning of various organs of the body.
 17. Discuss in detail on classification, cause, symptoms diagnosis and dietary management of diabetes mellitus.
 18. Write in detail on cardiovascular diseases and its dietary management.
 19. Write short notes on (a) cancer cachexia (b) immuno therapy.
 20. Highlight on the dietary modifications required for (a) hypertension (b) obesity.
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Sub. Code

36533

DISTANCE EDUCATION

M.Sc.(Home Science-Nutrition and Dietetics) DEGREE
EXAMINATION, DEC 2020.

Third Semester

COMMUNITY NUTRITION

(CBCS 2018–19 Academic Year onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. Mention the biochemical methods of assessing nutritional status.
2. What is dietary survey?
3. Distinguish between under nutrition and malnutrition.
4. Mention any four rich sources of vitamin – A.
5. Define anaemia.
6. List any two functions of iodine.
7. State any two nutrition intervention programmes.
8. Expand : ICMR, UNICEF.
9. What do you mean by green revolution?
10. Define post harvest technology.

PART B — (5 × 5 = 25 marks)

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

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

Or

- (b) Give the classification of protein energy malnutrition.

12. (a) Explain the relationship between nutrition and infection.

Or

- (b) Why does night blindness occur in vitamin A deficiency?

13. (a) How will you overcome malnutrition among infants in India?

Or

- (b) Give your suggestions for improving environmental sanitation in rural areas.

14. (a) Explain the package of services given under ICDS.

Or

- (b) Highlight the role of CSWB in combating nutrition problems in rural area.

15. (a) Enumerate the salient feature of white revolution.

Or

- (b) Explain the functions of WHO in relation to nutrition.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Elaborate the direct methods of assessing the nutritional status of children in a rural community.
17. Discuss the etiology, prevalence, symptoms and preventive measures for combating malnutrition among children in India.
18. Elaborate on the objectives, delivery mechanism and implementation aspects of any one of the nutrition intervention programmes in India.
19. Discuss in detail the prevalence of anaemia among adolescent girls in India. Suggest remedial action.
20. Write short notes on : (a) Post harvest technology
(b) Yellow revolution.

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36541

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

Fourth Semester

Home Science Nutrition and Dietetics

PAEDIATRIC 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 still birth?
2. What is constipation?
3. Define autism.
4. What is growth chart?
5. Mention the types of protein energy malnutrition.
6. What is premature baby.
7. List out the foods rich in iron and vitamin C.
8. What is abdominal distention?
9. What is Typhoid?
10. What are electrolytes?

PART B — (5 × 5 = 25 marks)

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

11. (a) Explain the nutritional importance during infancy.

Or

- (b) List the problem of weaning and explain any two in detail.

12. (a) Differentiate between marasmus and Kwashiorkor.

Or

- (b) Explain the nutritional importance of tuberculosis for infants.

13. (a) Describe the disadvantages of artificial feeding.

Or

- (b) 'Breast milk is the best milk' - Justify.

14. (a) Write a note on nutritional management of diarrhoea.

Or

- (b) Explain the method of measurement and growth chart.

15. (a) Compare the nutrition value of human milk with cow's milk.

Or

- (b) Write a note on colostrum.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Give the nutritional importance for preterm baby and explain the problem involved in feeding them.
17. Describe short term and long term consequences of underweight in infants.
18. Explain anthropometric and biochemical parameters assessment of infants,
19. Describe physiological development and assessment of nutritional status of infants.
20. Describe the nutritional requirement of PEM in infants and explain the dietary treatment.

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36542

DISTANCE EDUCATION

M.Sc. (Home Science, Nutrition and Dietetics) DEGREE
EXAMINATION, DECEMBER 2020.

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. Define bacteriophage.
2. Define Moulds.
3. Define Asepsis.
4. Chemical changes of Micro organism.
5. What are canned foods?
6. Define Fleshy foods.
7. What are the types of packaging materials?
8. Expand : PFA, FPO.
9. Enlist the preservation techniques of tools.
10. Write Packaging Laws.

PART B — (5 × 5 = 25 marks)

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

11. (a) Illustrate the reproduction of Bacteriophage.

Or

- (b) Give an account on Moulds.

12. (a) Short notes on preservation and control of fruits and Vegetables.

Or

- (b) Explain the preservation of Poultry and Fish.

13. (a) Illustrate the types of Biological spoilage of Canned foods.

Or

- (b) Bring out Food borne illness.

14. (a) Give an account on Food packaging laws and vegetables.

Or

- (b) Describe the functions of CFL and BIS.

15. (a) Give a brief note on nutritional labelling and nutritional classes.

Or

- (b) Short note on Packaging laws and regulations.

PART C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Illustrate the morphology and Multiplication of yeast and Moulds.
 17. Elaborate the types and causes of spoilage in Canned foods.
 18. Write in detail on food borne illness.
 19. Elaborate about water supplies and sewage disposal.
 20. Describe in detail on Bureau of Indian standards.
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Sub. Code

36543

DISTANCE EDUCATION

M.Sc. DEGREE EXAMINATION, DECEMBER 2020.

Fourth Semester

Home Science Nutrition and Dietetics

FOOD BIOTECHNOLOGY AND BIO STATISTICS

(CBCS 2018 – 2019 Academic Year Onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is bioprocess control?
2. List out soluble enzymes.
3. What are saponins?
4. Define Humagglutinins.
5. What is High Fructose Corn Syrup?
6. What are alcoholic beverages?
7. What is fermentation?
8. What is Median?
9. Define Histogram.
10. What is Binomial?

PART B — (5 × 5 = 25 marks)

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

11. (a) How are enzymes apply in food industry?

Or

- (b) Write a note on Yeast Biomass production.

12. (a) Enumerate on impact of biotechnology on the nutritional quality of foods.

Or

- (b) Explain the sources and toxicity of carcinogens and saponins.

13. (a) Discuss the process of cheese making.

Or

- (b) Explain how fermented Soya based foods are developed.

14. (a) Describe the methods of data presentation.

Or

- (b) Explain how tabular forms are prepared.

15. (a) How are surveys carried out in data collection, by using any one type of sampling method?

Or

- (b) Give the advantages and disadvantages of mean and mode.

PART C — ($3 \times 10 = 30$ marks)

Answer any THREE questions.

16. Write the impact of Biotechnology on the nutritional quality of foods.
 17. Discuss about Single Cell Proteins.
 18. Discuss about glucose syrup and High Fructose corn syrup.
 19. Explain the different types of data collection.
 20. Describe the various process in Food Fermentation Technology.
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