

S-6736

Sub. Code

23MHF1C2

M.Sc. DEGREE EXAMINATION, APRIL 2025

First Semester

Home Science

ADVANCED HUMAN PHYSIOLOGY

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer all questions.

1. Differentiate between mitotic and meiotic cell.
2. Comment on the structure of tissue.
3. Define blood coagulation.
4. List any two functions of heart.
5. State any two function of respiratory system.
6. Write about lung capacities.
7. Write about IV.
8. Identify the risk factors of contraception.
9. What do you understand by the term CSF?
10. Write down the mechanism formation of urine.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Draw the structure of cell and cycle.

Or

- (b) Draw the structure of stem cell.

12. (a) Narrate cardiac cycle and its conduction.

Or

- (b) How to monitor blood pressure and suitable measures to control?

13. (a) Write a short note on the hormone released by anterior pituitary.

Or

- (b) Write the complication of Thyroid.

14. (a) Write the functions of gastrointestinal system.

Or

- (b) Write the symptoms of menopause.

15. (a) Write a short note on structure of neuron.

Or

- (b) Discuss the role nerve impulse.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Enumerate cell theory and its cycle.
 17. Discuss on blood pressure and its regulation.
 18. Highlight on Henry's law of partial pressure and Dalton's law of partial pressure.
 19. Explain the digestion and absorption of carbohydrate, protein and fats with suitable examples.
 20. Write the role of kidney to regulating blood pressure.
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S-6741

Sub. Code

23MHF2C1

M.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Home Science

ADVANCED NUTRITION AND DIETETICS

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer all questions.

1. Write the major components of the energy requirement.
2. Write about the lactose intolerance.
3. List the foods rich in omega-3 fatty acids.
4. Mention the ways the body loses water.
5. What is the meaning of soft diet?
6. How to increase the absorption of iron from foods?
7. What is the main cause of irritable bowel syndrome?
8. Give the nutritional plan for fatty liver.
9. What is the best thing to do for rheumatoid arthritis?
10. List the foods that should be avoided by renal patients.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What is the difference between glycaemic index and glycaemic load?

Or

- (b) Discuss about the factors that affect energy requirements.

12. (a) Brief about the proteins and their function in the body.

Or

- (b) How are fats transported in the body?

13. (a) What is the difference between parenteral and enteral nutrition?

Or

- (b) Elaborate the underweight health risks: causes, symptoms and treatment.

14. (a) Outline the nutritional management of liver disease.

Or

- (b) Explain the gastrointestinal diseases: causes, indications and treatment.

15. (a) Brief the risk factors of atherosclerosis.

Or

- (b) How does nutrition play a role in cancer?

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Summarize the importance of dietary fibre in prevention of cardiovascular disease.
 17. Highlight the role of vitamins and minerals in the human body.
 18. Illustrate the risk factors and management of obesity.
 19. (a) List foods that can cause constipation and how to prevent it.
(b) Brief about the liver disease: signs and symptoms.
 20. Elaborate about the diabetes: symptoms, causes, treatment and prevention.
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S-6742

Sub. Code

23MHF2C2

M.Sc. DEGREE EXAMINATION, APRIL 2025.

Second Semester

Home Science

ADVANCES IN TEXTILES AND CLOTHING

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. List the manufacturing process of wool.
2. Define fiber.
3. Name the types of fancy weaves.
4. Mention the demerits of block printing.
5. Recall different type of body shapes.
6. Explain about pattern alteration.
7. State the term laundry agents.
8. Describe the purpose of pressing.
9. Discuss about applications of build tech.
10. What are the fibers used in eco friendly textiles manufacturing?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain novelty yarns with suitable diagram.

Or

- (b) Discuss the manufacturing process of nylon.

12. (a) Describe the purpose of textile finishes.

Or

- (b) Summarize the properties of woven fabrics.

13. (a) Illustrate and explain the parts of sewing machine.

Or

- (b) Explain the procedure for taking body measurements.

14. (a) Brief on principles of washing.

Or

- (b) What are the factors that affects clothing selection?

15. (a) Write a short note on application of build tech.

Or

- (b) Elaborate on banned dyes.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Classify textile fibers.
17. Give a brief note on basic weaves.

18. Explain dart manipulation techniques with suitable diagram.
 19. Enumerate on pressing equipments.
 20. Explain the concept of zero waste design techniques.
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S-6744

Sub. Code

23MHF2E2

M.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Home Science

Elective : FOOD PRODUCT DEVELOPMENT

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is a customer preference?
2. Define patent.
3. Write about the Triangle test.
4. Why is proper handling of laboratory equipment important?
5. Write the difference between cryovac and vacuum pack.
6. List the objectives of food packaging.
7. What is a smart food label?
8. Mention the nutrition facts table.
9. What do you mean by profit margin?
10. Why is food marketing important?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Explain why is food product formulation important.

Or

- (b) How to create a customer satisfaction questionnaire?

12. (a) Write a short note on the physical and sensory properties of food.

Or

- (b) Brief the aspects of judging quality of a given food item.

13. (a) Outline the significance of the Food Safety law in India.

Or

- (b) Discuss about the most environmentally friendly food packaging.

14. (a) How does the food labelling protect consumers?

Or

- (b) Mention the factors that influence the selection of packaging material for specific foods.

15. (a) Justify - Is taste the most important factor that influence food choices?

Or

- (b) Explain the principle of extending the shelf life of food by refrigeration.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Elaborate the steps to develop a product strategy.
 17. Summarize the importance of sensory evaluation in the quality of a new food.
 18. Write a short note on the following:
 - (a) Aseptic Packaging
 - (b) Product labelling.
 19. Explain the new technologies to revolutionize food labels and Packaging.
 20. Discuss the essential product pricing strategies for new products.
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S-6745

Sub. Code

23MHF2E3

M.Sc. DEGREE EXAMINATION, APRIL 2025.

Second Semester

Home Science

Elective : FOOD SAFETY AND QUALITY CONTROL

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What is the need for food safety of foods?
2. What are environmental toxins?
3. Expand and define TQM.
4. Write on one method of assessing quality of egg.
5. Write the objectives of codex alimentarius.
6. What is FPO?
7. Define adulteration.
8. What are additives? Give examples.
9. Who is a food inspector?
10. What is HALAL?

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) What are the factors affecting food spoilage and food safety?

Or

- (b) Write a note on GMP.

12. (a) Enumerate the functions of codex alimentarius in relation to maintaining food quality.

Or

- (b) Summarise the importance of food packaging in processed food products.

13. (a) How to determine the quality of meat products?

Or

- (b) What are the indices of food quality?

14. (a) Discuss about the objectives and functions of FSSAI.

Or

- (b) Differentiate food additives from food adulterants with suitable examples.

15. (a) Write about the duties and functions of food authority officer of FSSAI.

Or

- (b) Justify the role of food inspectors in maintaining food safety.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain in detail about the different types of toxins present in food.
 17. Food quality indices are related to the total yield of a product. Justify.
 18. State the principles of HACCP and discuss the steps to be followed in HACCP process.
 19. Elaborate on the activities of BIS, AGMARK and FPO and its role in maintaining the quality of products.
 20. State the role of central and state food laboratories in maintaining food quality.
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S-6748

Sub. Code

23MHF2S2

M.Sc. DEGREE EXAMINATION, APRIL 2025

Second Semester

Home Science

MATERNAL NUTRITION

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. How early do pregnancy symptoms start?
2. List the problems with undernutrition.
3. Define the embryo period.
4. Mention the main problem of teenage pregnancy.
5. What is latching in pregnancy?
6. Define the lactogenic foods.
7. Brief about the period of infancy.
8. Which is the best food to start weaning a baby?
9. List the signs and symptoms of severe malnutrition.
10. What are the main causes of tuberculosis?

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Why should women be healthy before pregnancy?

Or

- (b) Discuss the most common complications of pregnancy in India.

12. (a) What are the long term health risks of Foetal intrauterine growth restriction?

Or

- (b) Mention the physiological changes during pregnancy.

13. (a) Explain the composition of milk during lactation.

Or

- (b) Discuss the benefits and disadvantages of extended breastfeeding.

14. (a) Why are the nutritional requirements high for infancy?

Or

- (b) Detail the factors to be considered while introducing weaning foods.

15. (a) Give a short note on risk of poor nutrition during pregnancy.

Or

- (b) Elaborate the ways of managing stress to control high blood pressure.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Discuss the relationship between maternal dietary intake and fetal growth and development.
17. Illustrate how does the nutrition of the mother impact the developing fetus during pregnancy.
18. Summarize the factors affecting the breast milk secretion and its management.
19. Write a short note on the following :
 - (a) Supplementary foods
 - (b) Infancy
20. Elaborate on the anaemia – causes, symptoms, treatment and prevention.

S-6757

Sub. Code

23MHF4C1

M.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Home Science

PUBLIC HEALTH NUTRITION

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. What foods help during infection?
2. Identify the role of a public nutritionists.
3. Define Broka's index.
4. What is MUST nutrition assessment?
5. List the components of food security.
6. What is special nutrition programme?
7. What is the purpose of World Bank?
8. How long is chicken pox contagious?
9. What is meant by conventional approach of nutrition education?
10. Give the classification of AV aids.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Enumerate the etiological factors leading to VADD.

Or

- (b) Write a note on morbidity indicators.

12. (a) How are biochemical methods used in assessing nutrition? Explain.

Or

- (b) What is food balance sheet? Explain its advantages and limitations.

13. (a) Why is immunization important? Give the schedule.

Or

- (b) Compare food fortification and food enrichment.

14. (a) List the functions of ICMR.

Or

- (b) Discuss the nutritional needs are sea voyage.

15. (a) Explain how a nutrition education programme is evaluated.

Or

- (b) Poster act as a teaching aid. Explain.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Brief on the health care delivery systems at State level.
 17. Why is malnutrition a vicious cycle? Explain.
 18. Describe National Vitamin A Prophylaxis Programme.
 19. Discuss swine flu — causes, mode of transmission and prevention.
 20. Plan a nutrition education programme to highlight the importance of iron rich foods in a rural community.
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S-6758

Sub. Code

23MHF4C2

M.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Home Science

NUTRITION THROUGH LIFE CYCLE

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Define low birth weight.
2. What is growth chart?
3. Write a formula for complementary feeding.
4. State any three reasons for stunting growth in school age children.
5. What is xerophthalmia?
6. Write on any one eating disorders among adolescents.
7. Write any two causes of PCOD.
8. What is PIH?
9. Name the hormones involved in lactation.
10. Write any two reasons for osteoporosis in oldage.

Part B

(5 × 5 = 25)

Answer **all** questions choosing either (a) or (b).

11. (a) Discuss about feeding of low birth weight infants.

Or

- (b) How will you assess the nutritional status of an infant less than one year age?

12. (a) Give the nutritional requirement of children aged five years.

Or

- (b) Write the immunization schedule for children upto 10 years of age.

13. (a) Outline the growth pattern during adolescence.

Or

- (b) Discuss about the nutritional deficiency disorders during adolescence.

14. (a) Give in detail about the components of weight gain during pregnancy.

Or

- (b) Write about breast milk composition.

15. (a) What are the symptoms of menopause and why do they occur?

Or

- (b) Discuss about the protocols to be adhered by pregnant women during COVID period.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. What are supplementary foods? Write about five low cost supplementary foods.
17. Write the dietary guidelines to be followed while planning menu for ADHD disorder and autism children.
18. Discuss in detail about hormonal imbalance and PCOD among adolescents.
19. Outline the physiological changes that occur during pregnancy.
20. Explain about the food and nutritional requirement during old age. _____

S-6759

Sub. Code

23MHF4E1

M.Sc. DEGREE EXAMINATION, APRIL 2025

Fourth Semester

Home Science

Elective – NUTRITION FOR HEALTH AND FITNESS

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer **all** questions.

1. Balanced diet is important for maintaining health during regular exercise? Give two reasons.
2. List any two significance of hydration during physical activity.
3. What is Respiratory Quotient (RQ)?
4. Write on one method used to estimate daily energy expenditure in athletes.
5. Name two essential micronutrients important for athletic performance and its uses.
6. What is the purpose of a pre-game meal?
7. What is calorie deficit diet?
8. How does physical activity contribute to weight loss? Write any two points.

9. List the primary function of caffeine as an ergogenic aid.
10. Give any two advantages of commercial supplements used by strength athletes.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Discuss the role of micronutrients in supporting exercise and overall physical fitness.

Or

- (b) Analyze the role of physical fitness in maintaining overall health.

12. (a) How is fat converted into usable energy for physical activity?

Or

- (b) Discuss the role of carbohydrates and fats as source of fuel during prolonged exercise.

13. (a) Give the importance of iron and calcium for an athlete.

Or

- (b) Outline the key components of a pre-game meal.

14. (a) Discuss on the type of exercise effective for fat reduction.

Or

- (b) Enumerate the potential benefits and drawbacks of ketogenic diet.

15. (a) Explain the role of sports drinks in athletic performance.

Or

- (b) Discuss the different types of ergogenic aids Quoting examples.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Explain the role of nutrition in supporting mental well-being.
17. Discuss about the methods used for calculating energy expenditure.
18. Assess the role of meal timing in sports nutrition. How do pre-game and post game meals contribute to performance and overall athletic success?
19. What are the key factors that influence plant based diets in the management of long-term obesity?
20. How do commercial supplements contribute to performance and what are the potential drawbacks of their use?
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S-6761

Sub. Code

23MHF4S1

M.Sc. DEGREE EXAMINATION, APRIL 2025.

Fourth Semester

Home Science

HOME SCIENCE FOR COMPETITIVE EXAMINATIONS

(CBCS – 2023 onwards)

Time : 3 Hours

Maximum : 75 Marks

Part A

(10 × 2 = 20)

Answer all questions.

1. What is balanced diet?
2. Write any Two Nutrition intervention programmes.
3. What is renewable energy?
4. Specify any two flower arrangement types.
5. What are manmade fibers?
6. Write any two importance of pattern making.
7. What do you mean by neonatal development?
8. Who are all called as Special children?
9. What is a NGO? Write any two functions of NGO's?
10. Write down the importance of community development programme.

Part B

(5 × 5 = 25)

Answer **all** questions, choosing either (a) or (b).

11. (a) Describe how nutrition deficiencies affect children in growth and development?

Or

- (b) Explain the importance of diet counselling in clinical setup.

12. (a) Write down the concept of management and its functions.

Or

- (b) Explain the types of sampling.

13. (a) Detail the different types of fabric with example.

Or

- (b) List out the importance of testing in textile study.

14. (a) Elaborate the principles of growth and development.

Or

- (b) Describe the problems of adolescents with suitable example.

15. (a) Explain the objectives of extension education.

Or

- (b) Elaborate the importance of leadership in implanting community based programs.

Part C

(3 × 10 = 30)

Answer any **three** questions.

16. Analyse the usage of nano technology in food service industry.
 17. Elaborate the concept of Entrepreneurship and its process.
 18. Describe the principles of design and its application to apparel.
 19. Discuss the Human rights issues faced by the children and suggest the remedial measures to overcome the problems.
 20. Explain the types of communication with examples in detail.
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