Sub. Code 7MHF2E2

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Second Semester

Home Science

Elective: HUMAN DEVELOPMENT

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define implantation.
- 2. List the types of birth.
- 3. Define growth.
- 4. What is weaning?
- 5. Define play.
- 6. Why is early childhood period called the toy age?
- 7. State any four common behaviour problems.
- 8. List any four physical needs of children.
- 9. Who are 'children with special needs'?
- 10. Classify mental handicap.

 $(5 \times 5 = 25)$

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

11. (a) Elicit the signs and symptoms of pregnancy.

Or

- (b) Explain the stages in the process of birth.
- 12. (a) Differentiate growth and development with relevant examples.

Or

- (b) Enumerate the developmental tasks to be accomplished during 0-2 years.
- 13. (a) Discuss any four play patterns found among children.

Or

- (b) State the factors and home remedial measures for any two communicable diseases.
- 14. (a) Trace the social development of children in their late childhood period with their peers.

Or

- (b) Define 'Habit'. Explain any two methods of habit formation.
- 15. (a) Enlist the importance of early childhood education.

Or

(b) Audio-visual aids can be used for effective learning. Justify.

2

Answer any **three** questions.

- 16. Discuss the factors influencing or debilitating the prenatal development.
- 17. Briefly the aspects of care during babyhood.
- 18. Enumerate the developmental tasks to be accomplished during early childhood period.
- 19. Explain the stages of cognitive development as proposed by piaget for early childhood and late childhood period.
- 20. Classify visual impairment. State its remedial measures and rehabilitation procedures.

Sub. Code 7MHF1C2

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

First Semester

Home Science

ADVANCED NUTRITION

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is thermal effect of food?
- 2. Explain the term basal metabolism.
- 3. What is meant by resistant starch?
- 4. Define glycemic index.
- 5. Briefly explain biological value of protein.
- 6. Give ICMR-RDA for protein at adolescence and pregnancy.
- 7. Give the name of three essential fatty acids.
- 8. Classify lipo proteins.
- 9. What is sports nutrition?
- 10. Mention any two special conditions, where nutritional care and support to be considered.

 $(5 \times 5 = 25)$

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

11. (a) List the three major components of total energy expenditure.

Or

- (b) How do you estimate energy expenditure during physical activities?
- 12. (a) List five hormones involved in regulation of blood glucose concentration.

Or

- (b) Give the physiological effects of dietary fibre.
- 13. (a) Mention the functions of protein.

Or

- (b) How do you improve the quality of protein in the diet?
- 14. (a) Briefly explain the role of omega 3 fatty acids in human nutrition.

Or

- (b) Write short notes on trans fatty acids.
- 15. (a) Write a note on nutritional requirement in high attitude.

Or

(b) Explain in detail on nutritional requirement for cold environment.

2

Answer any **three** questions.

- 16. Enumerate the factors affecting total energy requirement and highlight energy requirement for adult people recommended by ICMR.
- 17. Explain metabolic utilization and functions of carbohydrates.
- 18. Discuss the methods used to estimate and assess protein requirements at the stage of preschool childhood and adolescence.
- 19. Classify lipids with suitable examples and mention their nutritional importance.
- 20. Enumerate nutritional requirement in space missions.

Sub. Code 7MHF1C3

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

First Semester

Home Science

APPLIED PHYSIOLOGY

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define homeostasis.
- 2. What are the various stages involved in menstrual?
- 3. Enlist the physiological factors affecting food intake.
- 4. What are the various components of blood?
- 5. Define diuretics.
- 6. Mention the hormones produced by thyroid gland.
- 7. Differentiate between asexual and sexual reproduction.
- 8. What do you mean by intercellular communication.
- 9. Give an account on Characteristics of urine.
- 10. What do you mean by auto immune disorder?

 $(5 \times 5 = 25)$

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

11. (a) Give an account on chemical composition of muscle tissue.

Or

- (b) Elaborate the mode of action performed by hormones.
- 12. (a) Explain the anatomy of gastro intestinal tract.

Or

- (b) Write a note on ECG interpretation.
- 13. (a) What are normal and abnormal constituents of urine?

Or

- (b) Differentiate between natural and acquired immunity.
- 14. (a) Give an account on role of lypothalamus in our body.

Or

- (b) Explain the physiology of sense organs.
- 15. (a) What are afferent and efferent nerves?

Or

(b) Elaborate on cardiovascular mechanism.

2

Answer any **three** questions.

- 16. Bring out the structure and chemical composition of muscle tissue.
- 17. Write a detailed note on the stages of fetus development.
- 18. Give an account on latest development in cardiac conditions.
- 19. Write a note on antigen and antibodies under following leads
 - (a) Types
 - (b) Properties
 - (c) Interactions.
- 20. Elaborate on the structure and functions of brain.

Sub. Code 7MHF1E1

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

First Semester

Home Science

Elective: SOFT SKILLS

(CBCS – 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define 'research aptitude'.
- 2. State any four factors affecting teaching.
- 3. What is meant by communication barrier?
- 4. Define reasoning ability.
- 5. What is meant by deductive reasoning?
- 6. Give an example of verbal analogy.
- 7. Define 'ICT'.
- 8. Define environment.
- 9. What is meant by pollution? State its types.
- 10. Define value education.

Part B $(5 \times 5 = 25)$

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

11. (a) Briefly state the advantages and disadvantages of any two methods of traditional teaching.

Or

- (b) Discuss the steps to be followed in a research.
- 12. (a) Elicit the Characteristics of communication.

Or

- (b) Provide strategies to make an effective classroom communication.
- 13. (a) Differentiate between deductive and inductive reasoning with a suitable example.

Or

- (b) How can Venn diagram used in reasoning?
- 14. (a) Enumerate the advantage of ICT in today's life.

Or

- (b) Write a note on mapping of data.
- 15. (a) What is meant by air pollution? List the control measures.

Or

2

(b) Elicit the advantages of formal education over distance education.

Answer any **three** questions.

- 16. Enumerate the steps to be followed in writing a thesis.
- 17. Write short notes on
 - (a) Effective communication
 - (b) Barriers to communication.
- 18. Explain
 - (a) Research ethics
 - (b) Usage of analogy in reasoning.
- 19. Illustrate a roadmap for better higher education system in India.
- 20. Brief the role of youth in combating the environmental challenges and hazards.

Sub. Code 7MHF3C1

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Third Semester

Home Science

RESEARCH METHODOLOGY AND STATISTICS

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define research Characteristics.
- 2. List any criteria for good research.
- 3. What are the types of sampling methods?
- 4. Write a note on snowball sampling.
- 5. List the different types of data.
- 6. What is meant by questionnaire?
- 7. Define hypothesis.
- 8. Give the formula for regression equation for X on Y and Y on X.
- 9. Write down the contents that comes under preliminary section of a report.
- 10. Write an example for APA format of reference.

 $(5 \times 5 = 25)$

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

11. (a) Distinguish between pure and applied research.

Or

- (b) Explain the role and significance of research.
- 12. (a) Write in detail about any two non-probability sampling method.

Or

- (b) What are the steps to be taken to make the sample useful and reliable?
- 13. (a) What are the major steps involved in the construction of an interview schedule.

Or

- (b) What is pilot study? Explain the purpose of a pilot study.
- 14. (a) Explain the steps to be followed in the process of testing the significance.

Or

- (b) Distinguish between null hypothesis and alternate hypothesis.
- 15. (a) What are the purpose and essentials of a good report?

Or

(b) Give the specimen of bibliography.

Answer any **three** questions.

- 16. Discuss the various methods of research.
- 17. What are the basic steps in the selection and formulation of a research problem?
- 18. Write the definition, merits and demerits of different methods of collection of primary data.
- 19. With the help of regression equation for the below data, calculate the value of X when Y=20 and calculate Y when X=22

20. Explain the various sources of data that are available in the library for research purpose.

Sub. Code 7MHF3C2

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Home Science

COMMUNITY NUTRITION

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is community nutrition?
- 2. List two course objectives of community nutrition.
- 3. Give ICMR-RDA for man for energy and protein, doing different activities.
- 4. List the formula used for BMI.
- 5. "Measuring height and weight are simple universal methods" Justify the statement.
- 6. List two causes for PEM/IDA.
- 7. Write short notes on "underweight".
- 8. Give the complication of zinc deficiency.
- 9. Expand ICDS and ORTS.
- 10. Define nutrition education.

 $(5 \times 5 = 25)$

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

11. (a) Give ICMR-RDA for protein for adult man and woman.

Or

- (b) List the factors affecting community health.
- 12. (a) Mention the goals and objectives of assessing nutritional status.

Or

- (b) Briefly explain clinical examination.
- 13. (a) List out the consequences of malnutrition.

Or

- (b) Write short notes on dual nutritional problems of malnutrition.
- 14. (a) Enumerate the functions of NIN and CFTRI.

Or

- (b) List out the role of FAO/WHO to promote the health status of the community.
- 15. (a) Explain importance of nutrition education.

Or

(b) Give the principles of conducting nutrition education.

2

Answer any **three** questions.

- 16. Explain concept of interrelating food, health and nutrition. Give suitable examples.
- 17. Discuss nutritional anthropometric measurement with reference to
 - (a) importances and applications and
 - (b) equipments and techniques of weight measurements with standard values.
- 18. Enumerate and discuss National nutrition intervention programmes to combat malnutrition.
- 19. How do you educate the adolescent population for the presentation of nutritional anemia?
- 20. List and discuss the steps for planning, implementing and evaluation of nutrition education programme.

Sub. Code 7MHF3C3

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Third Semester

Home Science

FOOD SAFETY AND QUALITY CONTROL

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. List any four safe packaging materials.
- 2. What is meant by food toxicants?
- 3. Define food quality.
- 4. Define HACCP.
- 5. CODEX alimentarius brief.
- 6. What is meant by food adulteration?
- 7. Define HALAL.
- 8. List the types of food additives.
- 9. Give any four role of government in quality control.
- 10. Write shortly on food inspector.

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

11. (a) Brief on the importance of safe food.

Or

- (b) Write on the food toxins.
- 12. (a) Explain on the stages of quality control in industries.

Or

- (b) Discuss on the total quality management.
- 13. (a) Brief on the following
 - (i) CODEX
 - (ii) BIS
 - (iii) FAO.

Or

- (b) Detail on any three food laws.
- 14. (a) Describe on the food quality indices for vegetables, fruits and its products.

Or

- (b) Discuss on the methods of evaluation of toxic constituents.
- 15. (a) Brief on the WHO assisted activities.

Or

(b) Explain on the duties of food inspector.

2

Answer any three questions.

- 16. Packaging material as a threat Enumerate.
- 17. Discuss in detail about HACCP.
- 18. Describe the role of FSSAI.
- 19. Detail on the food additives.
- 20. Enumerate on the food laboratories.

Sub. Code 7MHF3E2

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021.

Third Semester

Home Science

Elective: GUIDANCE AND COUNSELLING

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is group counselling?
- 2. List any two characters of counselors.
- 3. What is socio-personal guidance?
- 4. What is client centered counseling?
- 5. List any two merits of group counseling.
- 6. Who is a school counselor?
- 7. List any two issues related to academic achievement.
- 8. Define skill training.
- 9. Write any one situation that need group counseling.
- 10. What is time management?

 $(5 \times 5 = 25)$

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

11. (a) Write the scope and principles of guidance and counseling.

Or

- (b) Explain the role of audio visual aids in guidance.
- 12. (a) Describe the Characteristics and qualities of a counselor.

Or

- (b) Write a note on ethics do's and don'ts.
- 13. (a) Write a short note on Carl Roger's approach.

Or

- (b) Describe the situations that need guidance and counseling.
- 14. (a) Explain the counseling techniques for child abuse and sexual abuse.

Or

- (b) Write a note on premarital and marital counseling.
- 15. (a) Describe on remedies on procrastination.

Or

(b) Write any two time management techniques.

2

Answer any **three** questions.

- 16. Explain the role of audio visual aids in guidance and counseling.
- 17. Describe on tips for becoming an effective counselors.
- 18. Explain merits and demerits of individual and group counseling.
- 19. Write a note on the following
 - (a) Adolescent counseling
 - (b) Counseling for family.
- 20. Explain on mental and physical methods of relaxation.

Sub. Code 7MHF1C1

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Home Science

ADVANCED FOOD SCIENCE

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. What is meant by leavening of bread?
- 2. Explain the role of butter in cake preparation.
- 3. Briefly explain Textured vegetable proteins.
- 4. Mention four ripening changes of fruits.
- 5. Give two grading methods to evaluate egg quality.
- 6. List the egg proteins.
- 7. What is marbling of meat.
- 8. Give example of four frozen desserts.
- 9. Write the types of rancidity of fats and oils.
- 10. List four uses of spices and condiments.

Part B $(5 \times 5 = 25)$

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

11. (a) Enumerate the nutritive values of wheat.

Or

- (b) List the types and properties of flour used in cake preparation.
- 12. (a) What is germination? Highlight the advantages of germination.

Or

- (b) Explain the role of pectic substances in Indian food industry.
- 13. (a) Discuss the classes and grades of meat cuts.

Or

- (b) How do you select fresh fishes in the markets.
- 14. (a) Explain constituents and properties of milk.

Or

- (b) What is pasteurization? List the advantages it.
- 15. (a) List the types of Ice cream.

Or

(b) Mention Five factors affecting fat absorption.

2

Answer any **three** questions.

- 16. Enumerate the ingredients used in the preparation of cake and mention three problem encountered in cake preparation.
- 17. Discuss 'classification of vegetables' and highlight the techniques/methods used to minimize nutrient losses during cooking method.
- 18. Explain cooking and factors effecting quality of fish.
- 19. Explain "Rancidity" with reference to
 - (a) meaning
 - (b) tests for rancidity and
 - (c) changes in fat during heating.
- 20. Discuss the role of fats and oils in Indian cookery.

Sub. Code 7MHF1C4

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

First Semester

Home Science

TEXTILES AND CLOTHING

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define fibres.
- 2. What are the types of synthetic fibres?
- 3. Differentiate blends and mixtures.
- 4. What is braiding?
- 5. What do you know about special finishes?
- 6. Give the importance of fabric preparation.
- 7. List the traditional embroideries of India.
- 8. What is clothing budget?
- 9. What is tie and dye?
- 10. Define dyes.

 $(5 \times 5 = 25)$

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

11. (a) Classify natural fibres.

Or

- (b) Give the manufacturing process of nylon.
- 12. (a) Give the parts and functions of loom.

Or

- (b) Give an account needle punched non wovens.
- 13. (a) Write a note on mercerizing.

Or

- (b) What are the finishes suitable for manmade fibres?
- 14. (a) What do you know about traditional textiles of North India?

Or

- (b) Explain the laundry finishing of different fabrics.
- 15. (a) Give a detail note on block printing styles.

Or

(b) Elaborate on Batik style of printing.

Part C
$$(3 \times 10 = 30)$$

Answer any three questions.

- 16. Enumerate on the manufacturing process, properties and applications of acrylic and orlon fabrics.
- 17. Elaborate on various types of weaves with suitable diagrams.

2

- 18. Give an account on basic finishes.
- 19. What are the factors to be considered to garment selection?
- 20. Write a detail note on the methods of dyeing.

Sub. Code 7MHF3E1

M.Sc. DEGREE EXAMINATION, NOVEMBER 2021

Third Semester

Home Science

Elective - DIABETES CARE AND EDUCATION

(CBCS - 2017 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

- 1. Define diabetes mellitus.
- 2. What is meant by diabetic food pyramid.
- 3. Define nephropathy.
- 4. Brief on HbAIC.
- 5. Define diabetic keto acidosis.
- 6. What is meant by angina?
- 7. Brief on diabetic retinopathy.
- 8. Define ESRD.
- 9. What is meant by automatic neuropathy?
- 10. How does diabetic foot ulceration occurs?

Part B $(5 \times 5 = 25)$

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

11. (a) Brief on the classification of diabetes mellitus.

Or

- (b) Discuss on the prevalence of diabetics mellitus in India.
- 12. (a) Describe on the pathophysiology of diabetes mellitus.

Or

- (b) Brief on the micro vascular change in diabetes mellitus.
- 13. (a) Explain about the consequences of DKA.

Or

- (b) Write on the complication of diabetic eye.
- 14. (a) Briefly discuss on Myocardial Infraction in diabetes mellitus.

Or

- (b) Discuss on the treatment of ESRD.
- 15. (a) Brief on the classification of neuropathy.

Or

(b) Explain about the diagnosis and the management of diabetic foot ulcer.

2

Answer any **three** questions.

- 16. Discuss on the risk factors of diabetes mellitus.
- 17. Explain about the diagnosis of diabetes mellitus using routine investigation.
- 18. Brief on the screening and classification of diabetic retinopathy.
- 19. Discuss about the relationship between hyperglycemia and kidney function.
- 20. Describe on the consequences of diabetic neuropathy.