

### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

### **First Semester**

### **Home Science**

## ADVANCED FOOD SCIENCE

#### (CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. Briefly explain aleurone cell layer of cereals.
- 2. What is dextrination?
- 3. Write short notes on texturized vegetable protein.
- 4. Discuss shortly on nutritive value of roots and tubers.
- 5. List the type of fats present in egg yolk.
- 6. Write shorts on organ meat.
- 7. Give the nutritional importance of whey protein.
- 8. What is gelatin?
- 9. Define hydrogenation of fats.
- 10. Give the types of sugar.

**Part B** (5 × 5 = 25)

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

11. (a) List the factors affecting gelatinization.

Or

- (b) Mention the different types of wheat flour used in cake preparation.
- 12. (a) Write short notes on pigments present in fruits and vegetables with example.

Or

- (b) Explain the role of pectin in jam and jelly preparation.
- 13. (a) Draw and explain the structure of egg.

Or

- (b) Discuss the methods of cooking of tough cuts of meat.
- 14. (a) Explain four milk products available in the market.

Or

- (b) Give the tests used for the determination of rancidity.
- 15. (a) Mention any two preparation of milk based beverages.

Or

(b) Classify and list the health benefits of beverages.

 $\mathbf{2}$ 

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

Answer any **three** questions.

- 16. Discuss preparation of gluten and list the factors affecting gluten formation.
- 17. How do you enhance cooking quality of pulses?
- 18. List the water soluble pigments. Explain the effect of cooking carrot and beet root in acid alkaline and in high cooking temperature.
- 19. Discuss the points to be remembered while cooking tender and tough cuts of meat and fish.
- 20. Explain beverages with reference to
  - (a) First based beverages and
  - (b) Malted beverages.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## **First Semester**

## **Home Science**

### ADVANCED NUTRITION

### (CBCS - 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. Briefly explain the term gross fuel value.
- 2. In which four conditions energy requirement is increased?
- 3. Give the nutritional classification of starch.
- 4. What is glycemic index of foods?
- 5. List four essential amino acids.
- 6. Write short notes on PDCAAS.
- 7. Briefly explain the chemical composition of lipids.
- 8. What is meant by brown adipose tissue?
- 9. What is meant by space mission?
- 10. Explain briefly about polar environment.

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

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

11. (a) Give the relationship between oxygen required and calorific value.

 $\mathbf{Or}$ 

- (b) Give the ICMR-RDA for energy for pregnant and lactaling woman.
- 12. (a) Discuss the role of hormones in maintaining normal blood sugar level.

Or

- (b) Classify dietary fibre and give examples.
- 13. (a) List four factors affecting protein requirement.

Or

- (b) Discuss complementary value of proteins with suitable examples.
- 14. (a) Differentiate the characteristics of Omega-6 and Omega-3 fatty acids.

Or

- (b) Write short notes on (i) Ketone bodies and (ii) Isoprenoids.
- 15. (a) Discuss the factors to be considered in planning diet for high attitude.

Or

(b) Discuss space nutritional management.

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

Answer any **three** questions.

- 16. Discuss the steps involved in calculating total energy requirement by factorial method.
- 17. Describe the clinical effects of dietary fibre in chronic diseases.
- 18. Explain the term 'protein quality' and discuss four methods used to assess the protein quality.
- 19. Discuss the functions and deficiency symptoms of EFA.
- 20. Enumerate nutritional requirements for the special conditions with reference to hot environment.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## **First Semester**

## **Home Science**

## **TEXTILES AND CLOTHING**

### (CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. Enlist the secondary properties of cotton fiber.
- 2. Define recycled wool.
- 3. What do you mean Z-twist?
- 4. What is slab yarn?
- 5. What is reed?
- 6. List the methods of dyeing?
- 7. What is singeing?
- 8. Mention the types of Laundries.
- 9. What is care label?
- 10. Write the principles of vat dyeing.

**Part B** (5 × 5 = 25)

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

11. (a) Write short notes on manmade fibers.

Or

- (b) Explain the physical and chemical properties of viscose rayon.
- 12. (a) Give a note on the ply yarns and its uses.

Or

- (b) Describe the secondary weaving operations.
- 13. (a) Explain the classification of synthetic dyes.

Or

- (b) Brief on silk degumming.
- 14. (a) What are the laundries procedure for silks and synthetics?

Or

- (b) Explain the importance of care labels.
- 15. (a) Distinguish between dyes and printing.

Or

(b) Explain in detail about stencil printing.

## Part C

 $(3 \times 10 = 30)$ 

Answer any three questions.

- 16. Classify natural fibers with examples.
- 17. Write a detailed note on basic weaves.

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- 18. Explain in detail about any two special finishes.
- 19. Elaborate on dry-cleaning process in laundering.
- 20. Discuss in detail about roller printing techniques.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

## Second Semester

## **Home Science**

### **ADVANCED DIETETICS**

### (CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. What is therapeutic nutrition?
- 2. Briefly explain hepatitis.
- 3. Give WHO classification of diabetes mellitus.
- 4. List the factors for the occurrence of obesity.
- 5. Write the short notes on gout.
- 6. Give the meaning of acute glomerulo nephritis.
- 7. Define hyper cholesterolemia.
- 8. How do you present renal calculi?
- 9. Define thrombosis and nephrosis.
- 10. Mention four foods causes cancer.

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

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

11. (a) Discuss the current concepts in dietary modification for prevention of peptic ulcer.

Or

- (b) Briefly explain cholelithiasis.
- 12. (a) Bring out the relationship between alcohol and cirrhosis of liver.

Or

- (b) List the metabolic changes in fever.
- 13. (a) Discuss the role of fats in the formation of atherosclerosis.

Or

- (b) Give the reasons to restrict sodium in prevention of hypertension.
- 14. (a) What is urinary calculi? List four foods to be included and four foods to be excused in renal calculi.

 $\mathbf{Or}$ 

- (b) Write short notes on dialysis.
- 15. (a) "Phyto chemicals as anticancer agents" Justify.

Or

(b) Discuss the risk factors of cancer.

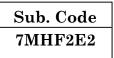
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**Part C**  $(3 \times 10 = 30)$ 

Answer any **three** questions.

- 16. Explain diet modifications for peptic ulcer and list their clinical features.
- 17. Discuss the mode of treatment of diabetes mellitus and give suitable explains.
- 18. Write an essay on Renal failure and explain acute and chronic renal features.
- 19. Enumerate the role of functional foods in prevention of atherosclerosis.
- 20. Discuss the nutritional requirements for cancer adult patients.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

## 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. Mention the three major types of birth.
- 3. Define growth.
- 4. Define 'developmental tasks'.
- 5. List any four types of communicable diseases.
- 6. State the major types of parenting approaches.
- 7. Define habit.
- 8. What is meant by behaviour problems?
- 9. Who is said to be visually impaired?
- 10. Define preschool education.

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

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

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

Or

- (b) Elicit the stages of birth.
- 12. (a) Differentiate the concept of growth and development with suitable example.

Or

- (b) Trace the physical development of infants.
- 13. (a) Elicit the development tasks of early childhood.

Or

- (b) Explain any two deficiency diseases pertaining to the causes, symptoms, nutrient sources and treatment.
- 14. (a) Elaborate on the psychological needs of the children.

Or

- (b) Explain any two methods of getting rid of an unwanted habit.
- 15. (a) State the significance of preschool education.

Or

(b) Enunciate the importance of audio-visual aids in early learning.

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

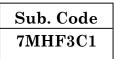
Answer any three questions.

- 16. Explain the three stages of prenatal development.
- 17. Elicit the principles underlying the process of growth and development of a human being.

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- 18. Trace the changes in physical, motor, emotional and social development of an infant through early childhood period.
- 19. Discuss the do's and dont's of any five behaviour problems.
- 20. Explain the causes, types, remedial measures and treatment for the following handicappedness.
  - (a) Mental retardation
  - (b) Hearing impaired.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## 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.
- 2. List any four types of research.
- 3. What is ordinal scale?
- 4. Define sampling.
- 5. What is secondary data?
- 6. What is the difference between questionnaire and interview schedule?
- 7. Define hypothesis.
- 8. List any two characteristics of hypothesis.
- 9. What are the types of Report?
- 10. Define report.

## **Part B** (5 × 5 = 25)

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

11. (a) Write the objectives of research.

Or

- (b) Enlist the Criteria of good research.
- 12. (a) Describe the steps involved in research process.

Or

- (b) Explain any one method of research design.
- 13. (a) What are the points to be considered while constructing a questionnaire?

Or

- (b) Write a short note on observation method of data collection.
- 14. (a) Explain any one of the types of hypothesis.

Or

- (b) Where Chi square test can be used? Explain.
- 15. (a) Describe the layout of the research report.

Or

(b) What are the points to be considered while writing a report?

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**Part C** (3 × 10 = 30)

Answer any **three** questions.

- 16. Enumerate the problems faced by researchers in India.
- 17. Explain the various types of sampling design.
- 18. Explain the various methods of data collection.
- 19. Describe on testing of hypothesis.
- 20. What are the points to be considered while writing a proposal for funding agencies?

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

### **Third Semester**

### **Home Science**

### **COMMUNITY NUTRITION**

#### (CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. List the basic four factors to be considered for RDA.
- 2. Define the term balanced diet.
- 3. What is meant by Nutritional assessment?
- 4. Mention the major micro nutrient deficiencies existing in the community.
- 5. Give three complications of obesity.
- 6. Name two functional tests used for assessing nutritional status.
- 7. Expand VAD, IDA and IDD.
- 8. Write short notes on dietary guidelines.
- 9. Name two national programs to combat malnutrition.
- 10. Mention two major nutritional contribution of WHO.

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

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

11. (a) Explain the factors to be considered for suggesting RDA for different ages.

 $\mathbf{Or}$ 

- (b) Discuss the basic principles of meal planning.
- 12. (a) List the objectives of assessing nutritional status.

 $\mathbf{Or}$ 

- (b) Explain three samples used for biochemical estimation.
- 13. (a) Discuss the importance of good national nutrition.

Or

- (b) List the nutritional causes of IDA.
- 14. (a) Write short notes on national nutrition policy.

Or

- (b) Give the functions of FAO.
- 15. (a) Mention the needs of nutrition education to promote the health status of community.

Or

(b) Explain e-media used in nutrition Education.

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

Answer any three questions.

- 16. Discuss the inter relationship between food, nutrition and health.
- 17. Explain five dietary methods used to assess the nutritional status of the community.

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- 18. Enumerate etiology and measures to overcome malnutrition in the community.
- 19. Discuss Midday Meal Programme with reference to
  - (a) objectives
  - (b) beneficiaries and
  - (c) plan of action.
- 20. Enumerate the various A.V tools methods used in nutrition education.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## 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. What do you mean by safe food?
- 2. What is environmental toxin?
- 3. Define TQM.
- 4. List any four concepts of food quality.
- 5. What is Consumer Protection Act?
- 6. List any four functions of FSSAI.
- 7. Give any four food quality indices for milk and its products.
- 8. Classify food additives with example.
- 9. Brief on central food laboratories.
- 10. What is the required qualifications to become a food inspector?

**Part B** (5 × 5 = 25)

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

11. (a) Discuss the types of packaging materials.

Or

- (b) Give an account on the importance of food safety.
- 12. (a) Explain about stages of quality control in food industry.

Or

- (b) Describe on the guidelines for application of HACCP.
- 13. (a) Give an account on Consumer Protection Act and Commodities Act.

Or

- (b) Highlight the functions of ISO 22000.
- 14. (a) Describe on the food quality indices of pulses and oil seeds.

 $\mathbf{Or}$ 

- (b) Detail on food additives.
- 15. (a) Discuss the role of Central Government in food quality control.

Or

(b) Enumerate on the essential qualification and duties of Public analyst.

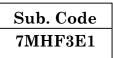
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# **Part C** (3 × 10 = 30)

Answer any **three** questions.

- 16. Enumerate on the current challenges to food safety.
- 17. Explain about quality control.
- 18. Give detail account on FSSAI.
- 19. Discuss on food adulteration in detailed manner.
- 20. Describe on food laboratories in quality control.

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#### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022.

## **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. What is glycemic index?
- 2. List any four causes of diabetes mellitus.
- 3. What is meant by diabetic neuropathy?
- 4. List the investigations to diagnosis of monitor diabetes mellitus.
- 5. What is lactic acidosis?
- 6. Define hyperglycemia.
- 7. What do you mean by acute MI?
- 8. Define ESRD.
- 9. Give any four consequences of diabetic neuropathy.
- 10. How will you diagnose diabetic neuropathic foot ulceration?

**Part B** (5 × 5 = 25)

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

11. (a) Discuss on diabetic food pyramid.

Or

- (b) Enumerate on the modifiable risk factors of diabetes mellitus.
- 12. (a) Give an account on the consequences of changes in the metabolism in diabetes mellitus.

Or

- (b) Discuss on pathological changes in cardiovascular system in diabetics.
- 13. (a) Highlight the long term complications of diabetes mellitus.

Or

- (b) Enumerate on the management of diabetic retinopathy.
- 14. (a) Give an account on the prevalence of diabetic nephropathy.

Or

- (b) Explain about ESRD.
- 15. (a) Differentiate between peripheral and automatic neuropathy.

Or

(b) Discuss on the complications of diabetic neuropathy.

 $\mathbf{2}$ 

**Part C** (3 × 10 = 30)

Answer any **three** questions.

- 16. Highlight on the prevalence of diabetes mellitus.
- 17. Enumerate on the diagnosis and routine monitoring of diabetes mellitus.
- 18. Explain on the diabetic retinopathy under the following heads : (3+3+4)
  - (a) Classification
  - (b) Feature
  - (c) Diagnosis and control of blood glucose
- 19. Detail on the prevention of CVD in diabetes.
- 20. Write about the following:
  - (a) Diagnosis and screening of diabetic neuropathy.
  - (b) Glycemic management in diabetic neuropathy.

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### M.Sc. DEGREE EXAMINATION, NOVEMBER 2022

## **Third Semester**

## **Home Science**

## **Elective : GUIDANCE AND COUNSELLING**

### (CBCS – 2017 onwards)

Time : 3 Hours

Maximum : 75 Marks

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

- 1. State the objectives of personal guidance.
- 2. Define counselling.
- 3. List the uses of anecdotal record in counselling.
- 4. Mention the stages of non-directive counselling.
- 5. Enlist any four situations that lend for group counselling.
- 6. Define motivation.
- 7. Differentiate between Self-concept and self-esteem.
- 8. What is meant by substance abuse?
- 9. Define Rational-emotive approach of counselling.
- 10. Define procrastination.

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

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

11. (a) Elicit the relationship between guidance and counselling.

Or

- (b) Enumerate the main functions of educational guidance.
- 12. (a) Discuss the skills and competencies needed for a counsellor.

 $\mathbf{Or}$ 

- (b) How can the audio-visual aids be used in educational guidance?
- 13. (a) State the assumptions of directive counselling.

Or

- (b) What is effective counselling? Provide tips for becoming effective counsellors.
- 14. (a) State the assumption of Carl Roger's approach to counselling.

 $\mathbf{Or}$ 

- (b) State the need and areas of marital counselling.
- 15. (a) Put forth the tips needed for adolescents towards time management.

 $\mathbf{Or}$ 

(b) How would you improve your communication skill?

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

Answer any **three** questions.

- 16. Indicate the need and importance of vocational guidance. Enumerate its principles.
- 17. Describe the role, functions, qualification and training of a counsellor.
- 18. Describe the procedure of counsellor-centered counselling. Enumerate its assumptions and limitations.
- 19. Elicit the assumptions of psycho-analytic approach of counselling. Explain the process.
- 20. As a counsellor, suggest training tips for an adolescent to improve his
  - (a) Assertiveness
  - (b) Problem-solving ability.

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