## M.SC DEGREE EXAMINATIONS, Model QP FOOD AND NUTRITION SCIENCE - First Semester

#### NUTRITION THROUGH LIFE CYCLE

Time: Three hours Maximum: 70 marks

# Answer ONE question from each unit each question carries 14 marks

#### **UNIT-I**

1. Classify food groups and explain common symptoms and nutrition requirements during pregnancy?

(Or)

2. What is a balanced diet? Discuss the importance of breastfeeding and nutrition requirements during lactation?

#### **UNIT-II**

3. Write a detailed note on the need, types, and importance of infant formulae and weaning foods?

(Or)

4. Explain any two macronutrient deficiencies and their impact on health and the nutritional status of school-going children?

#### **UNIT-III**

- 5. Explain the following:
  - (a) Adolescent pregnancy
  - (b) Food habits in adolescence
  - (c) Obesity

(Or)

6. Write in detail about the nutritional requirements of adults and explain the impact of stress on nutritional status?

#### **UNIT-IV**

7. Discuss the process, physiological, biochemical, and body compositional changes during ageing?

(Or)

8. Enumerate special problems of women during elderly? Explain.

#### **UNIT-V**

9. Explain in detail about nutritional requirements and special needs of sports persons during pre and post-sport event?

(Or)

10. Give a detailed note on assessment strategies and the role of national agencies to improve the performance of sports persons?

#### M.SC DEGREE EXAMINATIONS, Model QP FOOD AND NUTRITION SCIENCE - First Semester

#### FOOD CHEMISTRY AND ANALYSIS

Time: Three hours Maximum: 70 marks

Answer ONE questions form each unit. Each question carries 14 marks. (5×14=70)

#### **UNIT I**

1. Write about measurement, factors affecting water activity.

Or

2. Explain the characteristics, Emulsions and forms of colloids.

#### **UNIT II**

3. Write the different methods of extraction of starch.

Or

4. Discuss about the physical properties of lipids.

#### **UNIT III**

5. Write the nature and types of proteins in mile and fleshy foods.

Or

6. Discuss about Micro-Kjel dahl methods.

#### UNIT IV

7. Explain about plant tissues and relationship with texture.

Or

8. Write about the vitamins. Discuss in detail about it.

#### **UNIT V**

9. Discuss about the UV and AAS.

Or

- 10. Write about the following.
- (a)HPLC
- (b) GC/MS.

#### M.SC DEGREE EXAMINATIONS, Model QP FOOD AND NUTRITION SCIENCE - First Semester

#### **CLINICAL NUTRITION AND DIETETICS**

**Time: Three hours** Maximum: 70 marks

### Answer ONE question from each unit Each question carries 14 marks

#### **UNIT-I**

1. Explain the interrelationship between food, nutrition, and health. Support your answer with relevant examples.

#### (Or)

2. What are the basic principles of planning a healthy diet? Discuss the significance of balance in diet planning.

#### UNIT-II

3. Define diet counselling. Explain the different theories of diet counselling and their practical applications.

#### (Or)

4. Explain the functions of a therapeutic, administrative, and consultant dietitian. How does a team approach benefit patient care?

#### **UNIT-III**

5. Discuss the types of progressive diets, including routine hospital diets, liquid diets, and soft diets.

#### (Or)

6. What are enteral and parenteral nutrition methods? Explain their types, methods, and formulation of feedings.

#### UNIT-IV

7. Explain the general dietary principles for musculoskeletal and rheumatic disorders such as osteoporosis, osteoarthritis, rheumatoid arthritis, and gout.

#### (Or)

8. Write in details about the dietary management of AIDS patients.

#### **UNIT-V**

9. Describe the impact of food on drug therapy. What dietary modifications can be made to optimize drug efficacy?

10. Discuss strategies for managing food and drug interactions in clinical dietetics practice.

#### M.SC DEGREE EXAMINATIONS, Model QP FOOD AND NUTRITION SCIENCE - First Semester

#### FOOD SCIENCE AND EXPERIMENTAL FOODS

Time: Three hours Maximum: 70 marks

# Answer ONE question from each unit Each question caries 14 marks $(5 \times 14 = 70)$

#### UNIT 1

1. How to preserve nutrient losses during cooking? Explain.

Or

2. Write about advantages and disadvantages of microwave and solar cooking methods.

#### UNIT 2

3. Define gelatinization? Describe factors effecting gelatinization.

Or

4. Discuss about baking process.

#### UNIT 3

5. What are different kinds of milk? Write about its functional properties.

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6. Write in detail about methods of meat tenderization.

UNIT 4

7. Give about crystallization of sugars and confections.

Or

8. Discuss about sources and functions of fats and oils.

#### UNIT 5

9. Explain about important requirement to conduct sensory evaluation.

Or

10. Write about advantages and disadvantages of sensory evaluation of food.