

**MS in Applied Human Nutrition and Dietetics
July-December Semester Final Examination-2020**

Course Title: Medical Nutrition Therapy

Course Code: MNT-502

Full Marks: 40

Time: 2 hours

Answer any 4 (four) questions. Figures in the right margin indicate full marks

1. a). Differentiate between rheumatoid arthritis and gout 02
b) Design the pathophysiology of rheumatoid arthritis 04
c) Does exercise aggravate arthritis? Describe the dietary management and exercise for arthritic patient 04
2. a) How does hyperlipidemia lead to atherosclerosis? 03
b) Illustrate the Fredrickson classification of hyperlipidemias 07
3. a) How does helicobacter pylori cause gastric ulcers in human? 03
b) Differentiate between gastritis and ulcer. Enlist the diagnosis examination of ulceration 03
c) Construct the mode of action pathway of proton pump inhibitors and bismuth subsalicylate 04
4. a) Define diabetes mellitus. Classify it with general characteristics and symptoms 05
b) Briefly describe the natural history of type-2 diabetes mellitus 05
5. a) Briefly discuss the pathophysiology of food allergy and its dietary management 05
b) Why is autism considered a spectrum disorder? Shortly describe the causes and therapies of autism spectrum disorder. 05

MS in Applied Human Nutrition and Dietetics

July-December Semester Final Examination-2020

Course Title: Nutritional Problems, Survey and Surveillance

Course Code: NPS -502

Full Marks: 40

Time: 2 hours

Answer any **four (4)** questions. Figures in the right margin indicate full marks. **Split answer is strictly discouraged.**

1. a) Define Malnutrition. Illustrate the world scenario of Malnutrition. 1+3
b) What is Obesity and Overweight? how you identify overweight and obesity at different age group? 1.5+1.5
c) Write down some key broad strategy for Salt Reduction 3
2. a) Define nutrition transition. Elaborate the factors that influencing Nutrition Transition. 1+4
b) How Gender equality influences nutrition through food security? 4
c) Name the five patterns of nutrition transition 1
3. a) Define Nutritional Anthropometry. 1
b) What are the indices of Anthropometry and how you identify the nutritional condition by using the anthropometric indices? 4
c) Define Z score. Explain some feature of Z score. 1+4
4. a) Define Survey and Surveillance. 2
b) Illustrate the different types of Dietary assessment method with example 5
c) Write down the types of nutritional surveillance 3
5. a) Define sample and population. Which criteria must be considered during sampling design? Explain. 2+4
b) Write a short note on Simple Random Sampling and Clustered Sampling 2.5+2.5

MS in Applied Human Nutrition and Dietetics
July-December Semester Final Examination-2020
Course Title: Nutrition in Emergencies
Course Code: NUE -502
Full Marks: 40 **Time: 2 hours**

Answer any 4 (four) questions. Figures in the right margin indicate full marks

1. a) Define Nutritional Emergency. What are the causes of nutritional emergency in our country 2+2=04
b) Draw and elaborately discuss the conceptual framework of malnutrition according to UNICEF 06
2. a) List out the name of hazard and their impact in Bangladesh 04
b) Explain CPP and the management sequence of a sudden -onset disaster 06
3. a) What types of nutrient deficiencies may be occurred during emergency? Enlist the name of different types of emergencies feeding program 2+2=04
b) Explain in details about the General Food Distribution and Vulnerable Group Feeding program to prevent malnutrition among refugees 06
4. a) Define nutritional relief. What is the importance of relief? 04
b) How do you manage relief camp during emergency situation 06
5. a) Define nutritional survey. Explain the steps involved in a nutritional survey 05
b) Describe the role of government and non-government organization in mitigating nutrient deficiency in a disaster-prone area 05

Chattogram Veterinary and Animal Sciences University
MS in Applied Human Nutrition and Dietetics

July-December Semester Final, 2020

Course: Advanced Dietetics

Course Code: ADD-502

Full Marks: 40 Time: 2 hours

Answer any four (4) questions. Figures in the right margin indicate full marks. Split answer is strictly discouraged.

- | | | | |
|----|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 1. | a) | What are the qualities of a well-planned meal? | 5 |
| | b) | Briefly explain your idea on “Natural Foods”, “Health Foods” and “Organic Foods”. | 5 |
| 2. | a) | Define Food-drug interaction. List any five examples of drug-food interactions that delay the absorption of drug. | 1+5 |
| | b) | What do you mean by drug? Write down the effects of food on drug intake? | 1+3 |
| 3. | a) | Discuss on Binge-eating disorders and side effects of eating disorders. | 2+3 |
| | b) | Summarize the treatment of eating disorders. | 5 |
| 4. | a) | Define food exchange. List out the characteristics of a balanced diet. | 4 |
| | b) | Write a short note on any three- I. Rate and delivery method of enteral feeding II. Qualitative modification of diet III. PPN vs. TPN IV. Normal diet and therapeutic diet | 3×2 |
| 5. | a) | Define the term enteral nutrition. What factors should be considered while choosing an enteral formula? | 5 |
| | b) | Tabulate the positive and negative aspects of enteral nutrition. | 5 |

Chattogram Veterinary and Animal Sciences University
MS in Applied Human Nutrition and Dietetics

July-December Semester Final, 2020

Course: Advanced Micronutrient

Course Code: ADN-502

Full Marks: 40 Time: 2 hours

Answer any four (4) questions. Figures in the right margin indicate full marks. Split answer is strictly discouraged.

- | | | | |
|----|----|-------------------------------------------------------------------------------------------------|-----|
| 1. | a) | Write an account of dark adaptation mechanism of vitamin A. | 4 |
| | b) | Describe biochemical role, daily requirement, source and deficiency manifestation of vitamin E. | 6 |
| 2. | a) | Write down cholecalciferol synthesis pathway. | 3 |
| | b) | Discuss the relation between absorption of vitamin D and Ca. | 3 |
| | c) | Explain the function of Vitamin K as co-factor in GCG synthesis. | 4 |
| 3. | a) | Illustrate Calcium homeostasis. What Factors causes decreased absorption of Ca? | 3+3 |
| | b) | Describe absorption and storage of vitamin B ₁₂ . | 4 |
| 4. | a) | Briefly explain physiological role of Thiamine. | 4 |
| | b) | Write a short note on any three- | 3×2 |
| | | I. Calcitonin | |
| | | II. Biotin Antagonists | |
| | | III. NAD ⁺ dependent enzyme | |
| | | IV. Causes of Hypocalcemia | |
| 5. | a) | What are the mechanisms of regulation of Fe absorption? | 6 |
| | b) | Describe the role of copper on Wilson's Disease and Melanin. | 4 |

Chattogram Veterinary and Animal Sciences University
Department of Applied Chemistry and Chemical Technology
M.S. in Food Chemistry & Quality Assurance (July-December, 2020)
Course Title: Food Quality Control
Course Code: FQC- 502

Full Marks: 40

Time: 02 hours

[Figures in the right margin indicate full marks. Answer four (4) questions. Split answers are discouraged.]

- 1 a) What is quality? Write down principles of quality control. 05
b) Define Total Quality Management. Mention its principles and application. 05
- 2 a) Define Spectroscopy. State the principles of spectroscopic analysis. 05
b) Design the working principle of UV-spectrophotometer. 05
- 3 a) Design the working principle of Atomic Absorption Spectrophotometer (AAS). 05
b) Discuss different types of atomization technique in AAS 05
- 4 a) What is Deming Cycle? Write down in brief Deming Management Program. 05
b) Discuss about general awareness and role of management practices in quality control. 05
- 5 Write a Short note on the following: 2.5X4=10
Good Hygienic Practices, National Food Safety Laboratory, BSTI, ISO: 22000