

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

**January – June Semester Final, 2019**

**Course: Advanced Macronutrient**

**Course Code: ADN-501**

**Full Marks: 40      Time: 2 hours**

**Answer any four from the followings**

1. a) Describe how antioxidants protect cells from the oxidative damage caused by free radicals. 5
- b) Define Antioxidant and ORS. Differentiate between ions and free radicals. 2+3
2. a) Give an account of cholesterol biosynthesis. 5
- b) What do you mean by Ketone bodies? Write about the types of lipoproteins. 5
3. a) Give some example of functional food with their uses. How dietary fiber reduces the risk of heart diseases? 5
- b) Write a short note on glycogen storage disease. 5
4. a) Sketch the overview of the integration of metabolic pathways. 4
- b) Describe the regulation of metabolic flow from pyruvate through the citric acid cycle. 6
5. a) Give the examples of enzymes used in food processing. 5
- b) Write a short note on metallo-enzyme and membrane-associated enzyme. 5

**MS in Applied Human Nutrition and Dietetics**  
**January-June Semester Final Examination-2019**  
**Course Title: Active Health and Fitness Nutrition**  
**Course Code: AHF -501**

**Full Marks: 40**

**Time: 2 hours**

**Answer any four questions. Figures in the right margin indicate full marks**

1. a) What do you mean by health, fitness and well-being? 3  
b) Discuss the Factors that contribute to a person's current state of health. 3  
c) How is good nutrition related to health promotion and disease prevention? 4
  
2. a) Why is obesity an increasing problem in Bangladesh? 3  
b) Discuss the major causes and complications of obesity. 4  
c) Illustrate the Effects of LCD and VLCD energy diets in obese patient. 3
  
3. a) What are the four main types of physical activity? 2  
b) Explain the physical and mental benefits of exercise. 5  
c) What are some factors that can affect physical fitness levels? 3
  
4. a) How can nutrition affect sports performance? 3  
b) Why is high protein low carbohydrate diets considered dangerous for athletes? 3  
c) What should athletes eat before and after an event? 4
  
5. a) Why is physical activity important in early childhood services for infants and young children? 5  
b) Judge the technological advances impacts on physical fitness 5

**MS in Applied Human Nutrition and Dietetics**

**January-June Semester Final Examination-2019**

**Course Title: Human Growth and Development**

**Course Code: HGD -501**

**Full Marks: 40**

**Time: 2 hours**

**Answer any four questions. Figures in the right margin indicate full marks**

1. a. What is pediatric nutrition? 2  
b. Explain most used anthropometric measurement for growth and development. 4  
c. Illustrate some Growth problem in Infancy. 4
2. a. Define Human development. 2  
b. List twelve stages of normal human life cycle. 2  
c. Explain “the Behavioral model” and “the Cognitive developmental model” of human development. 6
3. a. Why cognitive development is important for children? 4  
b. How socio emotional development occurred in early age of life? 6
4. a. Justify the Importants of prenatal and intranatal care during pregnancy. 5  
b. Interpret the major complication faced by a pregnant women. 5
5. a. Define care. Identify the risk factor for special care. 2+2  
b. Elaborate the extended model of care by UNICEF. 6

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**January – June Semester Final, 2019**

**Course: Community Nutrition**

**Course Code: CMN-501**

**Full Marks: 40**

**Time: 2 hours**

**Answer any four from the followings**

1. a) Define community. Write down the role of the community nutritionist in nutrition education? 2+3
- b) What is nutrition education? Summarize the process of behavioral learning in nutrition education? 5
2. a) Describe the process of testing nutritional message. 5
- b) What are the tools for nutrition communication? Differentiate between media and method. 3+2
3. a) Define nutrition communication. How do you identify target groups? 1+3
- b) What do you mean by health promotion? Write the general strategies for health promotion? 1+5
4. a) How do you formulate a nutritional message? 4
- b) Explain the methods of nutrition communication with examples. 6
5. a) Write a short note on the Bangladesh Integrated Nutrition Project (BINP). 4
- b) Briefly describe nutrition projects and programs in Bangladesh. 6

**MS in Applied Human Nutrition and Dietetics**

**January-June Semester Final Examination-2019**

**Course Title: Primary Health Care and Contemporary Health Issues**

**Course Code: PHC-501**

**Full Marks: 40**

**Time: 2 hours**

**Answer any four questions. Figures in the right margin indicate full marks**

1. a) What is primary health care according to Alma Ata? 3  
b) What are the principles of primary health care? 4  
c) Enlist the elements of primary health care. 3
2. a) How can you promote PHC in population based services? 4  
b) Write the objectives of Alma Ata conference. 3  
c) Explain the personal services included in primary healthcare. 3
3. a) Outline the access to public health facilities in Bangladesh. 5  
b) "Community clinics become pillars of healthcare system"-justify it. 5
4. a) Shortly describe the essential service delivery and urban primary healthcare of public health facilities in Bangladesh. 2  
b) How universal health coverage is achievable in Bangladesh? 3  
c) Briefly describe the challenges for the health system in Bangladesh. 5
5. a) Illustrate Bangladesh policy on prevention and control of non-communicable diseases. 5  
b) Explain recent outbreaks of a few communicable diseases including Chikungunya, Dengue, and Viral hepatitis. 5

**MS in Applied Human Nutrition and Dietetics**

**January-June Semester Final Examination-2019**

**Course Title: Global Food Issues, Food Policy and International Health**

**Course Code: GFI -501**

**Full Marks: 40**

**Time: 2 hours**

**Answer any four questions. Figures in the right margin indicate full marks**

1. a. Define Food Safety and Food Security. 2+2  
b. Elaborate the major food safety concerns in Bangladesh and their impact on public health. 6
2. a. Discuss the concept of food hazard, risk and crisis. 6  
b. Write down the prerequisite program to established HACCP 4
3. a. Define Health Environment. What are the components of health? 2+3  
b. Evaluate the challenges of Urban health in Bangladesh. 5
4. a. List most common indicator of nutritional status. 2  
b. Assess the effects of agricultural advances in nutrition. 4  
c. How nutritional security improved in Bangladesh? 4
5. a. What is Global health initiative (GHI)? 2  
b. How global environmental sustainability achieved explain? 5  
c. Show the challenges faced by NGO's in Bangladesh. 3