

**MASTER OF SCIENCE (DIETETICS AND  
FOOD SERVICE MANAGEMENT)**

**Term-End Examination**

**December, 2012**

**MFN-006 : PUBLIC NUTRITION**

*Time : 3 hours*

*Maximum Marks : 100*

*Note : Answer five questions in all. Question No. 1 is compulsory. All questions carry equal marks.*

1. (a) Define the following : 10
- (i) Kwashiorkor
  - (ii) Kerato malacia
  - (iii) BMI
  - (iv) U5MR
  - (v) Food Balance Sheet
- (b) Fill in the blanks : 5
- (i) Spongy - bleeding gums are a sign of \_\_\_\_\_ deficiency.
  - (ii) Cracking of lips and corners of the mouth is due to \_\_\_\_\_ deficiency.
  - (iii) The Gomez classification for degree of undernutrition is based on \_\_\_\_\_ for age.
  - (iv) Double fortified salt developed at NIN has two nutrients, \_\_\_\_\_ and iodine in its formulation.

- (v) The population is considered to be iodine deficient if more than 20% of subjects have urinary iodine levels less than \_\_\_\_\_.
- (c) Give one word/term for the following : 5
- (i) Spoon shaped nails formed in iron deficiency anemia \_\_\_\_\_.
- (ii) Mottled teeth with chalky white and brownish patches \_\_\_\_\_.
- (iii) In ability to see in dim light due to vitamin A deficiency \_\_\_\_\_.
- (iv) Skin lesions on the neck which appear in pellagra \_\_\_\_\_.
- (v) Pernicious anemia is caused by the deficiency of \_\_\_\_\_.
2. (a) How does a measure of height and weight reflect the nutritional status of an individual ? 4
- (b) Describe the technique for measuring triceps skin fold thickness. 4
- (c) Discuss the objectives and implementation strategy of the National IDD control program. 8
- (d) Comment on how science and technology has helped to improve our food supply. 4

3. (a) Describe the clinical manifestations of thiamin deficiency. 5
- (b) Discuss how the food frequency method is used to obtain qualitative dietary data. Present a sample food frequency questionnaire. 4+4
- (c) What are genetically modified foods ? Discuss giving examples how food biotechnology can help us to enhance the nutritional quality of our foods. 7
4. (a) Discuss the economic consequences of malnutrition. 10
- (b) What are the objectives of nutrition surveillance ? Why is it important to maintain an efficient nutrition surveillance system in our country ? 10
5. (a) What is meant by "dietary diversification" ? Explain giving examples, how relatively small modifications in food behaviour can have a significant impact on nutritional status. 10
- (b) Describe the National Anaemia Control Programme, highlighting the components and the problems encountered in the implementation of the programme. Can you suggest some actions that should be taken for improvement of the program ? 10

6. (a) Discuss the advantages and disadvantages of the Public Forum Approach in eliciting information from the community. **10**
- (b) What are the different types of evaluation which can be conducted in a programme ? **6**
- (c) Describe the clinical manifestations of fluorosis. **4**
7. (a) Enumerate the benefits of community participation in public health programs. **5**
- (b) List giving examples of the different channels/media which one can make use of for nutrition communication. Discuss the criteria we can use for selecting the method for communicating our messages. **10**
- (c) What steps can be taken to prevent and control PEM ? **5**
8. Write short notes on *any four* of the following : **5+5+5+5**
- (a) Levels of Health Care
- (b) Consequences of zinc deficiency
- (c) NSSO
- (d) Clinical manifestations of vitamin D deficiency
- (e) Role of Agriculture in Nutrition