

GUJARAT TECHNOLOGICAL UNIVERSITY**B.E. Sem-Vth Examination December 2010****Subject code: 151405****Subject Name: Food Nutrition and Health****Date: 21 /12 /2010****Time: 03.00 pm - 05.30 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Answer the followings: **07**
i) What is diet therapy?
ii) Give the negative effect of mercury on human body?
iii) Differentiate between Goiter and Thyroid.
iv) Enlist any two examples of essential amino acids for infants.
v) Write the function of iron in human body
vi) Define: Macronutrients
vii) Write any one physiological function of food.
- (b) What are the causes of malnutrition in pre-school age and write dietary guidelines for them. **04**
- (c) List out the various functions of proteins as a food nutrient. **03**

- Q.2** (a) Write the symptoms and treatment of osteoporosis. **04**
- (b) Give the classification of minerals based on requirement by human body with suitable examples **03**
- (c) Explain in detail with source, detection, mode of action and control for each food poisoning micro-organism **07**

OR

- (c) Enlist the important polysaccharides and discuss their properties. **07**

- Q.3** (a) Define: i) Crazy pavement dermatosis ii) Adulterant iii) Aflatoxin **05**
iv) Net protein utilization v) Essential amino acids
- (b) Write and explain at least five chemical tests for detection of food adulteration in any food sample. **05**
- (c) Discuss Vitamin D with respect to its function and deficiency disorder. **04**

OR

- Q.3** (a) Define: i) Protein efficiency ratio ii) Malnutrition iii) Food poisoning **05**
iv) Neurological dys function v) Kilocalorie
- (b) Write and explain at least five physical tests for detection of food adulteration in any food sample. **05**
- (c) Enlist water soluble vitamins and discuss any one of them with respect to its function and deficiency disorder. **04**

- Q.4** (a) Write short notes on: i) Intentional contamination ii) Recommended Dietary Allowances (RDA) **06**
- (b) Comments on 'Complications due to imbalanced of diet in pregnant woman' **04**
- (c) As a major component of diet, bring out the nutritive value of 'cereals and millets' **04**

OR

- Q.4 (a)** Write short notes on: i) Fortification and supplementation **06**
ii) Food Guide Pyramid
- (b)** Highlight the nutrition related problems in old age people. **04**
- (c)** What is Basal Metabolism Rate (BMR)? Discuss factors affecting BMR. **04**

- Q.5 (a)** Name the diseases caused by protein and calorie deficiency and explain each disease in detail. **07**
- (b)** Discuss the classification of food based on nutrient present, shelf life, utilization and sources. **07**

OR

- Q.5 (a)** What are the main features of kwashiorkor which can differentiate it with marasmus. Write all treatments for kwashiorkor and marasmus. **07**
- (b)** Explain the classification of proteins with examples. **07**
