

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

## GUJARAT TECHNOLOGICAL UNIVERSITY

B. E. Sem. - V - Examination – June- 2011

Subject code: 151405

Subject Name: Food Nutrition and Health

Date:30/06/2011

Time: 10:30 am – 01:00 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. **08**
- (i) “Glucose is called as current carbohydrate coin of the body”. Justify the statement.
  - (ii) Give the important properties of starch.
  - (iii) Enlist the diseases caused due to deficiency of vitamin Niacin in the body.
  - (iv) Define Essential amino acids
  - (v) Give any two examples of disaccharide sugars.
  - (vi) Enlist the different parts of egg.
  - (vii) Write the importance of RDA.
  - (viii) Why Fats and oils should be consumed in less quantity?
- (b)** Justify the following statements. **06**
- (i) Nutritional requirement of child is different from the adult.
  - (ii) Dietary fiber is an important constituent of human diet.
  - (iii) Anti nutritional factors should be reduced or eliminated before consumption of food items.
- Q.2 (a)** What do you understand by Food Poisoning? Explain Botulism in detail. **07**
- (b)** Define Adulteration. Enlist any six common food adulterants along with respective adulterated food items. **07**
- OR**
- (b)** Explain diet requirement of adolescence and old aged persons. **07**
- Q.3 (a)** What are proteins? Explain the various properties and functions of proteins. **07**
- (b)** Describe Kwashiorkar and Marasmus with respect to causes, deficiency symptoms and food sources for treatment. **07**
- OR**
- Q.3 (a)** Define macro minerals. Discuss the functions and sources of any two macro minerals. **07**
- (b)** Differentiate between Rickets and Osteomalcia. Explain **07**

Osteoporosis with respect to causes, deficiency symptoms and food sources for treatment.

- Q.4 (a)** Draw a standard Food Guide Pyramid for adult and describe the various food groups placed in it. **06**
- (b)** Discuss vitamin C with respect to its sources, functions and deficiency disorders. **04**
- (c)** Write short note on Food fortification. **04**
- OR**
- Q.4 (a)** Classify foods on the basis of shelf life and nutrient present with examples **06**
- (b)** Classify vitamins and describe any one fat soluble vitamin. **04**
- (c)** Comment on Anaemia. **04**
- Q.5 (a)** What is BMR? Explain the various factors affecting BMR. **07**
- (b)** What are the functions of carbohydrate in human body? **04**
- (c)** What are intentional food additives? **03**
- OR**
- Q.5 (a)** Discuss in detail the nutritive value of any two animal based foods. **07**
- (b)** Write the significance of fat or oil as food nutrient. **04**
- (c)** Describe briefly Trypsin Inhibitors. **03**

\*\*\*\*\*