

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
BE - SEMESTER-V • EXAMINATION – WINTER 2013

Subject Code: 151401

Date: 02-12-2013

Subject Name: Design and Formulation of Food

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)** Scientifically justify following statements. **08**
a) Milk is considered as almost complete food.
b) The animal source proteins are superior in quality than plant source proteins.
c) The aflatoxins are major cause of concern in processed products like peanut butter.
d) The intact soya beans do not give characteristic 'beany flavor'
- (b)** Define following terms **06**
1. A.D.I. 2. LD₅₀ 3.G.I.
- Q.2 (a)** Explain how physical and psychological factors affect food choices. **07**
(b) What is a food pyramid? How does it help in planning a balanced diet? **07**
- OR**
- (b)** What do you mean by functional food? Explain with suitable examples **07**
- Q.3 (a)** Justify the statement "Probiotics consumption is good for human health". Give any two examples of probiotic bacteria (give complete genus and species name) **07**
(b) Describe significance of folate, iron and calcium as nutrients during pregnancy **07**
- OR**
- Q.3 (a)** What is meant by formula foods for infants? Describe various categories of infant formula foods. **06**
(b) Briefly describe the following eating disorders among infants: **08**
i. Colic
ii. Pyloric stenosis
- Q.4 (a)** Write a detailed note on processed products from rice **07**
(b) Describe the nutritional value of legumes/pulses **07**
- OR**
- Q.4 (a)** Write short notes on following **08**
i. Glycemic index of foods
ii. Acrylamide in food
(b) Explain the principles of menu planning process **06**
- Q.5 (a)** Enlist various inherent anti nutritional factors found in food and describe any two in detail **08**
(b) Describe various quality parameters used to evaluate egg quality with methods of evaluation. **06**
- OR**
- Q.5 (a)** Describe the nutritional value of milk with respect to protein, fat, carbohydrates and enzymes **08**
(b) Write in detail about the food exchange list given by NIN **06**
