

**GUJARAT TECHNOLOGICAL UNIVERSITY****BE - SEMESTER-V (NEW) EXAMINATION – SUMMER 2021****Subject Code:3151401****Date:15/09/2021****Subject Name:Design and Formulation of Foods****Time:10:30 AM TO 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.
4. Simple and non-programmable scientific calculators are allowed.

- Q.1** (a) Differentiate between human and cow milk. **03**  
 (b) Give any two examples each of following **04**  
 1.Probiotic 2. Synbiotic 3. Prebiotic 4. Food toxins  
 (c) Explain the principles of menu planning process. **07**
- Q.2** (a) Mention nutritional benefits of fermented foods. **03**  
 (b) What is nutritional significance of dietary fibers towards human health? **04**  
 (c) Explain how physical and psychological factors affect food choices in adults? **07**
- OR**
- (c) Describe the nutritional value of cereals **07**
- Q.3** (a) Define glycemic index? Give classification of food on the basis of glycemic index. **03**  
 (b) Write a note on “balanced diet”. **04**  
 (c) Briefly explain the food considerations in order to address the health concerns of elderly people **07**
- OR**
- Q.3** (a) What do you mean by a weaning food? Explain with suitable example. **03**  
 (b) Describe the concept of food exchange lists? How they are used for planning the diet? **04**  
 (c) Write short notes on the following **07**  
 i. Anorexia nervosa  
 ii. Preeclampsia
- Q.4** (a) Describe any one processed product from Wheat **03**  
 (b) Explain different types of formula milks. **04**  
 (c) What is significance of iron, folate, calcium and teratogens during pregnancy? **07**
- OR**
- Q.4** (a) State the causes and symptoms of protein energy malnutrition among pre-school children. **03**  
 (b) What is significance of oxytocin and prolactin in lactation? **04**  
 (c) Elaborate the concept of therapeutic diet with suitable examples. **07**
- Q.5** (a) Calculate RDA of protein for a person weighing 120 lbs. **03**  
 (b) Explain the food guide pyramid **04**  
 (c) Describe how nutrition affects on performance of athletic person? **07**
- OR**
- Q.5** (a) What do you mean by Preeclampsia? **03**  
 (b) State the dietary sources of following **04**  
 i) Calcium ii) Iron iii) Teratogens iv) Immunoglobulins  
 (c) Describe different types of diabetes **07**

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