

GUJARAT TECHNOLOGICAL UNIVERSITY**BE- SEMESTER-V (NEW) EXAMINATION – WINTER 2020****Subject Code:3151401****Date:01/02/2021****Subject Name:Design and Formulation of Foods****Time:10:30 AM TO 12:30 PM****Total Marks: 56****Instructions:**

1. Attempt any FOUR questions out of EIGHT questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) What are the types of formula milk based on preparation **03**
(b) Write short note on a) Preeclampsia b) pyloric stenosis c) sarcopenia d) hyponatraemia **04**
(c) Explain the concept, characteristics of probiotics & prebiotics using examples. **07**
- Q.2** (a) What is glycemic index? **03**
(b) Explain how gestational diabetes is dangerous for both mother and foetus **04**
(c) Describe the nutritional and antinutritional factors of soyabean **07**
- Q.3** (a) Write the formulation of banana based weaning food containing jaggery **03**
(b) Describe the a) pica foods b) protein/ day RDA for elderly person **04**
(c) Explain the disorders a) anorexia nervosa and b) bulimia nervosa **07**
- Q.4** (a) What is the refueling window and its significance for athletes? **03**
(b) Write the difference between human and cattle milk. Explain the role of hormones involved in lactation **04**
(c) Explain the nutrition related disorders in infants **07**
- Q.5** (a) Calculate the weight gain during pregnancy for a female of height 170 cm and weight 176 lbs. **03**
(b) Explain the protein energy malnutrition **04**
(c) Suggest a therapeutic diet plan for diabetic person. Which are the foods which should be avoided by such patients. **07**
- Q.6** (a) What do you understand by food exchange list? Give three examples **03**
(b) Explain colic and enlist remedies for colic. **04**
(c) How is diabetes caused? Draw diagram of anatomy of the organ concerned with diabetes. Differentiate between type I and type II diabetes **07**
- Q.7** (a) Comment on a) DHA b) colostrum c) swallowing problem in elderly people **03**
(b) Comment on nutrigenomics and designer foods **04**
(c) What are the factors affecting food choices? **07**
- Q.8** (a) Describe a formulation for pregnant women and briefly enlist the significance of each component. **03**
(b) Explain the significance of fermented foods using examples? **04**
(c) Suggest a menu plan for preschool children. Also calculate the energy and tentative cost of the meal. **07**
