

GUJARAT TECHNOLOGICAL UNIVERSITY**BE - SEMESTER-V (NEW) EXAMINATION – SUMMER 2019****Subject Code: 2151401****Date: 20/06/2019****Subject Name: Design & Formulation of Foods****Time: 02:30 PM TO 05:00 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) 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 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 value of rice **07**

OR

- (c) Explain the concept, characteristics of a food pyramid. Give an example of balanced diet (Lunch) prepared using food pyramid **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**

OR

- Q.3** (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.4** (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**

OR

- Q.4** (a) What do you understand by food exchange list? Give three examples **03**
(b) How is diabetes caused? Draw diagram of anatomy of the organ concerned with diabetes. Differentiate between type I and type II diabetes **04**
(c) What are the antinutritional factors in foods. How such factors can be inactivated/ removed? **07**

- Q.5** (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**

OR

- Q.5** (a) Explain colic and suggest few foods which can act as remedies for colic **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**
