Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

BE - SEMESTER–V EXAMINATION – WINTER 2015

Subject Code: 2151401 **Date:17/12/2015**

Subject Name: Design and Formulation of Foods

Time: 10:30am to 1:00pm **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)**	Describe the principles of menu planning process.	**07**
	(b)	Give the nutritional significance of legumes and pulses.	**07**
Q.2	**(a)**	Describe types of diabetes and a therapeutic diet for a diabetic person.	**07**
	(b)	Describe significance of following in diet during pregnancy. Also enlist the sources of each i) Calcium ii) Iron iii) Folate iv) Teratogens	**07**
		OR	
	(b)	Explain how a balanced diet can be planned using food pyramid	**07**
Q.3	**(a)**	Describe the following types of formula milk. Also describe the parameters for fortification of formula milk. Write full form of DHA and ARA. i) Cow milk ii) Soy based iii) Protein hydrolysate	**07**
	(b)	Describe any three nutrition related concerns in elderly people	**07**
		OR	
Q.3	**(a)**	Describe weaning foods using a recipe example	**07**
	(b)	Explain the health benefits of probiotics and prebiotics with examples of each.	**07**
Q.4	**(a)**	Write in detail about milling of corn.	**07**
	(b)	Describe the nutritional value of Wheat and Rice	**07**
		OR	
Q.4	**(a)**	Describe the significance of food exchange list in menu planning process	**07**
	(b)	State various process induced toxins in food and explain any one in detail.	**07**
Q.5	**(a)**	Write a short note on significance of nutrition for athletes before, during and after rigorous physical exercise.	**07**
	(b)	Describe the following: i) Gestational diabetes ii) Preeclampsia iii) Role of oxytocin and prolactin in lactation iv) Sarcopenia	**07**

OR

Q.5 **(a)** Describe the following nutrition related disorders and remedies in infants: **07**

i) Colic

ii) Pyloric stenosis

(b) Escribe the nutritional significance of fermented foods. Enlist any 5 fermented products along with the starter organism/s used. **07**

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