

Reg. No.

--	--	--	--	--	--	--	--	--	--

B.E. / B.TECH. DEGREE EXAMINATIONS, DEC 2019

Fifth Semester

BT16003 – PRINCIPLES OF FOOD PROCESSING*(Biotechnology)***(Regulation 2016)****Time: Three Hours****Maximum : 100 Marks**Answer **ALL** questions**PART A - (10 X 2 = 20 Marks)**

	CO	RBT
1. Define water activity and relate the term with relative humidity.	1	U
2. State the importance of micronutrients in diet.	1	U
3. Write about the development of flavours naturally in food.	1	AN
4. Give few examples of incidental additives.	1	AP
5. Mention the primary sources of microorganisms that are commonly associated with food.	2	R
6. Name any four useful bacteria in food industry.	2	AP
7. Distinguish between food infection and food intoxication.	2	AN
8. Write about on biological toxins found in food.	2	R
9. Define D value and Z value.	3	U
10. Differentiate between refrigeration and freezing.	3	AP

PART B - (5 X16 = 80 Marks)

11. (a) Elaborate the functional characteristics of carbohydrates in food. (16) 1 R
- (OR)**
- (b) Write briefly the different classification, biological requirement and the functional characteristics of proteins and fats in food. (16) 1 R
12. (a) Define food additive. Classify the different types of food additives used during processing and preservation of food. (16) 1 U

(OR)

- (b) Describe the role of enzymes in food industry. (16) 1 U
13. (a) Explain the factors influencing microbial activity in food. (16) 2 AN
- (OR)**
- (b) (i) Write an elaborate note on fermented food products. (8) 2 AP
(ii) Describe the production of single cell protein on industrial scale. (8) 2 AP
14. (a) (i) Give a detailed account of fungal and bacterial toxins found in food. (8) 2 AN
(ii) Describe any four food borne diseases. (8) 2 AN
- (OR)**
- (b) Explain the causes of food spoilage and its preventive measures. (16) 2 AN
15. (a) Discuss in detail low temperature processing methods used in food industry. (16) 3 AP
- (OR)**
- (b) Explain the commercial heat preservation methods used in food industry. (16) 3 AP