

**B.E. FOOD TECHNOLOGY AND BIO-CHEMICAL ENGINEERING SECOND YEAR FIRST SEMESTER
SUPPLEMENTARY EXAM - 2018**

Subject: Biochemistry & Nutrition-II

Time: 3 hours

Full Marks: 100

Part I (40 marks)

Use Separate Answer scripts for each Group

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1. Answer any five questions: (3×5=15)

- a. What is glycemic load?
- b. Define 'Braising – a cooking method'.
- c. What is nutraceutical?
- d. Give the definition of nutrition.
- e. What do you mean by protein sparing action?
- f. Draw the food pyramid.
- g. What is the difference between enrichment and fortification?

2. Write short notes on any three of the following: (5×3=15)

- a. Pediatric food
- b. Positive health
- c. Health problems of over nutrition
- d. Glycemic index
- e. RDA

3. Calculate the daily carbohydrate, protein and fat requirement of the following subject: (10)

Gender: Male, Age: 25 years, Height: 5'5", Weight: 65 kgs, Activity: Moderate.

Or

Write the dietary pattern of diabetic patient.

(10)

B.E. FTBE 2nd YEAR 1st SEMESTER SUPPLEMENTARY EXAM 2018

Biochemistry & Nutrition- II

Time: 3 hrs.

Full Marks: 100

Part-II (Full Marks 60)

Group A : (Answer any five)

- 1 a. Define enzyme.
b. What is active site of an enzyme? (3+3)
2. Name any three enzymes involved in digestion process. (6)
- 3 a. What is enzyme inhibitor?
b. Discuss competitive inhibition of enzyme action. (3+3)
4. What do you understand by optimum temperature and pH of an enzyme? (6)
- 5 a. Define isoenzyme.
b. What is turnover number? (3+3)
- 6 a. Discuss the lock and key model of enzyme.
b. Write down the Michaelis Menten equation. (3+3)
7. Classify enzymes according to the type of reaction they catalyze. (6)

Group B : (Answer any five)

8. Describe the role of vitamin A in vision. (6)
9. What are the functions of iron? (6)
10. What are the deficiency symptoms of vitamin C? (6)
11. Describe the role of copper in mitochondrial oxidation. (6)
12. Name and give structures of the two coenzyme forms of riboflavin. (3+3)
13. What are the functions of calcium? (6)
14. Name three enzymes that require biotin as coenzyme. (6)