

2/16

2903N1174

Candidate's Seat No : _____

**B.Sc. Sem.-5 Examination
CC-304**

**Biochemistry (Old & New)
March-2025**

Time : 2-30 Hours]

[Max. Marks : 70

INSTRUCTIONS:

Q.1 Write a brief note on:

- a. Archeabacteria 7
- b. Stages of Bacterial sporulation 7

OR

- Q.1 a Difference between Gram positive and Gram negative bacteria 7
- b Explain structure and function of flagella 7

- Q.2 a. Discuss Primary and Tertiary treatment of Sewage 07
- b Define Acidic stain, and explain Acid fast staining in detail 07

OR

- Q.2 a. Describe Single cell protein with advantage and disadvantage 7
- b.Explain Spore staining 7
- Q.3 a. Discuss on Dietary Fibers and their therapeutic role 7
- b. Explain Nitrogen balance and factors affecting it 7

OR

- Q.3 a Define Reference protein, complete protein and Carbohydrate loading 6
- b. Write a note on Lactose intolerance or Dental caries 8

- Q.4 A. How Bomb calorimeter and Rosa respirometer used in finding of energy intake 7
- B . Discuss nutritive value of food of plant origin 7

OR

- Q.4 a. Write a note on BMR and factor affecting it 10
- b. Explain the term RQ, SDA and RDA and unit of Energy 4

(P.T.O)

Q.5 ANSWER THE FOLLOWING [ANY SEVEN]

1. What are bacilli and give two examples
2. What is the function of capsule in bacteria
3. What are L form of bacteria
4. What are the role of Mesosomes in bacteria
5. Define the term Chromogen and Amphoteric stain
6. Define Mordant and give example of it
7. Why bacteria need to stain
8. Name the dyes used as pH indicators
9. Define Ketosis
10. What is Chylomicron and its role in fat mobilization
11. Which is more nutritious egg or milk . Justify
12. What are two role of lipid in body