



বিদ্যাসাগর বিশ্ববিদ্যালয়  
**VIDYASAGAR UNIVERSITY**  
**Question Paper**

**B.Sc. Honours Examinations 2022**

(Under CBCS Pattern)

**Semester - IV**

**Subject : NUTRITION**

**Paper : C 9-T**

**Food Microbiology**

**Full Marks : 40**

**Time : 2 Hours**

*Candidates are required to give their answers in their own words as far as practicable.*

*The figures in the margin indicate full marks.*

**Group - A**

Answer any **four** questions out of following :

5×4=20

1. What is generation time ? Discuss the bacterial growth curve with diagram. 1+4
2. Name the two sugar derivatives present in peptidoglycan. Differentiate between Gram positive and Gram negative bacteria. 2+3
3. Define probiotic. State the characteristics of probiotic. 2+3
4. Write short notes on Shigellosis and Listeriosis 2½+2½
5. Define selective media with example. Classify the bacteria based on their oxygen utilization. 2+3

6. Write the differences between fungal spores and bacterial spores.

5

**Group - B**

Answer any *two* questions out of following :

10×2=20

7. Classify the food based on their perishability. How does the canned food spoil ?  
Name three bacteria responsible for spoilage of canned food.

3+4+3

8. What is aflatoxin intoxication ? Discuss the pathophysiology, mode of transmission, and symptoms of 'Salmonellosis'.

2+4+2+2

9. What do you understand by the term GMP. What is tyndallization ? Differentiate between sterilization and pasteurization. State the mode of action of irradiation and phenol in killing microorganisms.

3+1+2+(2+2)

10. Write short notes on (any *four*) :

4×2½=10

(i) Solid waste disposal.

(ii) Bacterial outer membrane

(iii) Spoilage of vegetables and fruits

(iv) Characteristics of virus

(v) Fermented food products

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