

2103000202030065
EXAMINATION FEBRUARY-MARCH 2024
BACHELOR OF SCIENCE (SECOND SEMESTER)
MICROBIOLOGY PAPER-IV
(MB-202-NUTRITION AND GROWTH OF BACTERIA)

[Time: As Per Schedule]

[Max. Marks: 50]

Instructions:

1. Fill up strictly the following details on your answer book

a. Name of the Examination : **BACHELOR OF SCIENCE
(SECOND SEMESTER)**

b. Name of the Subject : **MICROBIOLOGY PAPER-IV (MB-202-
NUTRITION AND GROWTH OF BACTERIA)**

c. Subject Code No : **2103000202030065**

2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.
5. Draw neat and labelled diagram wherever necessary.

Seat No:

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Student's Signature

Q.1 Give specific answers:

12

1. Define autotrophs
2. What are macronutrients? Give two examples
3. What is a synchronous culture? How can it be obtained?
4. Define plasmoptysis.
5. What is a selective media? Give one example.
6. What is generation time?

Q.2 Explain /comment on any two of the following.

12

1. Chemostat and its working
2. Methods to determine bacterial growth.
3. Difference between a selective and differential media.

Q.3 Discuss any two of the following

16

1. Mechanisms of bacterial cell division.
2. Grouping of bacteria based on optimal temperature for growth.
3. Classification of bacteria based on different carbon, energy and electron source utilization.

Q.4 Write short note on any two

10

1. Importance of stationary phase in bacterial growth curve.
2. Osmolytes
3. Enrichment culture technique
