A (Printed Pages 3)

(20622) Roll No. .....

B.Sc.(Micro)-I Year

3485

B.Sc. (Micro.) Examination, June-2022

BACTERIOLOGY

(B-102)

[B.Sc. (Micro)]

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. Describe the structure and importance of Cyano bacterium.
2. Describe the morphology and structure of typical Bacterium.
3. Describe the process of Conjugation in Bacterium.

P.T.O.

4. Describe the general characters and structure of Archae bacterium.

5. Give a detailed account of nutrition in Bacteria.

6. Write an essay on classification of Bacteria according to Bergey's manual of systematic Bacteriology.

7. Describe the structure and economic importance of Actino mycetes.

8. Write notes on:

   (a) Mycoplasma

   (b) Endospore

9. Describe in detail the cell wall of gram positive bacteria and compare it with gram negative bacteria.

10. Write notes on:

(a) Rickettsiae

(b) Asexual reproduction in Bacteria

D (Printed Pages 3)

(21223) Roll No. .....

B.Sc. (Micro)- I Year

3485

B.Sc. (Micro.) Back Paper Examination, Dec.-2023

Bacteriology

(B-102)

[B.Sc. (Micro)]

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. Describe the structure and position of bacterial flagella and axial filaments, and their attachment patterns.

2. Contrast the major structure of gram-positive and gram-negative cell walls.

P.T.O.

3. Explain why an endospore is not considered a reproductive body? Why are spores so difficult to destroy?

4. Explain the characteristics of archaea that indicate that they constitute a unique domain of living things that is neither bacterial nor eukaryotic.

5. Write an assay on classification of bacteria according to Bergey's manual of systematic bacteriology.

6. Write short notes on:

   (a) Actinomycetes

   (b) Chlamydia

7. What is meant by the term extremophile? Describe some archaeal adaptations to extreme habitats.

8. Define nutrition and nutrients and their subcategories based on need and quantity.

9. Write short notes on:

   (a) Bacterial transformation

   (b) Conjugation

10. What is meant by the term extremophile? Describe some archaeal adaptations to extreme habitats.

A (Printed Pages 3)

(20622) Roll No. .....

B.Sc.(Micro)-I Year

3485

B.Sc. (Micro.) Examination, June-2022

BACTERIOLOGY

(B-102)

[B.Sc. (Micro)]

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. Describe the structure and importance of Cyano bacterium.
2. Describe the morphology and structure of typical Bacterium.
3. Describe the process of Conjugation in Bacterium.

P.T.O.

4. Describe the general characters and structure of Archae bacterium.

5. Give a detailed account of nutrition in Bacteria.

6. Write an essay on classification of Bacteria according to Bergey's manual of systematic Bacteriology.

7. Describe the structure and economic importance of Actino mycetes.

8. Write notes on:

   (a) Mycoplasma

   (b) Endospore

9. Describe in detail the cell wall of gram positive bacteria and compare it with gram negative bacteria.

10. Write notes on:

(a) Rickettsiae

(b) Asexual reproduction in Bacteria

...terns.

... the major structure of gram-positive and gram-negative cell walls.

N (Printed Pages 3)

(20517) Roll No. 16979681 4

B.Sc.(Micro.)-I Yr.

3485

B.Sc. (Micro.) Examination, May 2017

BACTERIOLOGY

(B-102)

Time : Three Hours] *[Maximum Marks : 50*

Note : Answer **any five** questions. **All** questions carry equal marks.

1. Give a general comparison between Archaeobacteria and Cyanobacteria. 10

2. Classify bacteria on the basis of morphology. 10

3. Explain in detail the structure of a bacterial cell. 10

P.T.O.

4. Compare structural organisation of Gram positive and Gram negative bacteria. What is flagellar staining technique. 10

5. Write notes on the following: 5+5

   (a) Capsular staining

   (b) Endospore

6. Write notes on the following : 5+5

   (a) Mycoplasma

   (b) Asexual reproduction in bacteria

7. Write note on the following: 5+5

   (a) Transduction

   (b) Conjugation

8. Give a brief outline of Bergey's Manual of Systematic Bacteriology. 10

9. Differentiate bacteria on the basis of nutrition. 10

10. Give general characteristics of Actinomycetes and Rickettsial. 10

P.T.O.

D (Printed Pages 2)

(20524) Roll No. .....

B.Sc. (Micro)-I Year

3485

B.Sc. (Micro.) Examination, May-2024

BACTERIOLOGY

(B-102)

B.Sc. (Micro)

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. Name four divisions ending in-cutes and describe their characteristics?
2. Describe the life cycle of endospore-forming bacteria, including the formation and germination of endospores.
3. Define nutrition and nutrients and their subcategories based on need and quantity.

P.T.O.

4. Explain how the bacterial glycocalyx and certain surface appendages contribute to biofilm formation.

5. Write short notes on:

   (a) Mycoplasma

   (b) Transduction

6. Explain how flagella influence motility and motile behaviour.

7. Explain archaeal adaptations that place them in the category of extremophiles.

8. Describe the structure and importance of cyanobacterium

9. Write short notes on:

   (a) Rickettsiae

   (b) Conjugation

10. Describe features of the bacterial chromosome and plasmids.