

Complite - Paper (3)

(20518)

Roll No. R170979136017

B. Sc. (Micro)-I Year

(8)

3484

B. Sc. (Microbiology) Examination, May 2018

FUNDAMENTAL OF MICROBIOLOGY

(B-101)

Time : Three Hours] [Maximum Marks : 50

Note : Answer any Five questions. All questions carry equal marks.

1. Describe the various culture techniques in Microbiology used for bacterial and fungal cultures. 10
2. How do virus differ from other microorganisms ? Discuss in detail the morphology of viruses. 10

(2)

3. What is the role of Microbiology in industries ? How are microbes beneficial in genetic engineering ? 10
4. Write the general characteristics of the following : 5×2
- (a) Fungi
- (b) Archaea.
5. Who gave the germ theory of fermentation ? Discuss the theory and its significance. 10
6. What is a bioreactor ? How are they classified ?
Discuss the types of bioreactors. 10
7. Discuss the anabolic and catabolic processes in microbes with special reference to bacterial physiology. 10
8. State differences between the following : 2×5
- (a) Innate and Adaptive immunity
- (b) Fungi and Protozoan

(3)

- (c) Ribonucleic acid and Deoxy ribonucleic acid
 - (d) Whittaker's concept and Carl Worse's concept
 - (e) Spread plate culture and Pour plate culture.
9. Discuss in brief the history of Microbiology with special emphasis on the work of the following : 10
- (a) Anton Van Leeuwenhock
 - (b) Francesco Redi
 - (c) Alexander Fleming
 - (d) Paul Ehrlich.
10. Bacterial Genetics studies the mechanisms of their heritable information. Discuss. 10

Complete Set

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Roll No. 169796814

B.Sc. (Micro) - I Yr.

3484

B.Sc. (Micro) Examination, May 2017

FUNDAMENTAL OF MICROBIOLOGY

(B-101) *Asha verma madam*

Time : Three Hours]

[Maximum Marks : 50

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

1. Describe the contribution of Louis Pasteur in development of Microbiology. 10

2. Describe in detail the pure culture technique used in Microbiology. 10

3. How viruses differ from bacteria and other microbes? 10

P.T.O.

4. Explain in detail the scope of microbiologist
in any one profession. 10
5. Describe in detail the five kingdom concept
of Whittakar. 10
6. How nucleic acid sequence and base com-
position are used in microbial taxonomy? 10
7. What is the difference between Innate
Immunity and Acquired immunity? Describe
innate immunity in detail. 10
8. Describe in detail the typical growth curve of
microbial population. 10
9. What do you understand by transduction?
Support your answer with suitable example. 10

10. Name major important groups of micro-
organions. Describe major characteristics of
one of them.

10

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(20519) Roll No.

Total Questions : 10] [Printed Pages : 3

3484

**B.Sc. (Microbiology) Ist Year
Examination, May-2019**

**FUNDAMENTAL OF MICROBIOLOGY
(B-101)**

(B.Sc. Micro.)

Time : 3 Hrs.]

[M.M. : 50

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

1. Give a detailed account on history of Microbiology. 10
 2. Write notes on any two of the following :
 - (a) Louis Pasteur
 - (b) Robert Koch and Alexander Fleming
 - (c) Robert Hooke and Antoni Van Leeuwenhoek
- $5 \times 2 = 10$

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(1)

Turn Over

3. Who developed the pure culture technique ? How
you get a pure culture and what is the purpose of
pure culture ? 10
4. Write notes on the following :
(a) Discovery of viruses
- (b) Innate immunity 5×2=10
5. Describe the various scope of microbiology in
India. 10
6. Describe general characteristics of the viruses and
bacteria. 10
7. State the differences between Prokaryotic and
Eukaryotic cell organisation. 10
8. Describe the importance of microorganisms and
their diversity in nature. 10
9. Give an account on classification of viruses on the
basis of morphology and chemical composition with
example. 10

10. Write notes on the following :

(a) Whittaker's five kingdom concept

(b) Nutrition in bacteria

$$5 \times 2 = 10$$

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(Printed Pages 2)

Roll No.

B.Sc.(Micro.)-I Year

3484

B.Sc. (Microbiology) Examination,

June - 2022

FUNDAMENTAL OF MICROBIOLOGY

(B-101)

(B.Sc. Micro.)

Time : Three Hours]

[Maximum Marks : 50

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

1. What do you mean by Koch's postulates?
Give a detailed note on it. 10
2. What do you mean by Chemotherapy?
Describe in detail. 10
3. Describe the contribution of
Leeuwenhoek, Pasteur and Cohn in the
field of microbiology. 10

P.T.O.

4. Write short notes on followings : $5 \times 2 = 10$
- (a) Bacterial growth curve
 - (b) Yeast and Moulds
5. What do you mean by spontaneous generation? Explain in detail. 10
6. Write short notes on followings: $5 \times 2 = 10$
- (a) Cell mediate immunity
 - (b) Bacterial cell wall
7. What are Viruses? Give a detailed note on the events of their discovery. 10
8. Give a detailed note on scope of microbiology in India. 10
9. What is microbial taxonomy? Write a detailed note on contribution of Carl Woese. 10
10. What is Nutrition? Give a detailed note on bacterial nutrition. 10

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(Printed Pages 2)

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Roll No.

B.Sc.(Micro.)-I Year

3484

**B.Sc. (Microbiology) Examination,
June - 2022**

FUNDAMENTAL OF MICROBIOLOGY

(B-101)

(B.Sc. Micro.)

Time : Three Hours / Maximum Marks : 50

Note : Attempt any **five** questions. **All**

questions carry equal marks.

1. What do you mean by Koch's postulates?
Give a detailed note on it. 10
2. What do you mean by Chemotherapy?
Describe in detail. 10
3. Describe the contribution of
Leeuwenhoek, Pasteur and Cohn in the
field of microbiology. 10

P.T.O.

4. Write short notes on followings : $5 \times 2 = 10$
- (a) Bacterial growth curve
 - (b) Yeast and Moulds
5. What do you mean by spontaneous generation? Explain in detail. 10
6. Write short notes on followings: $5 \times 2 = 10$
- (a) Cell mediate immunity
 - (b) Bacterial cell wall
7. What are Viruses? Give a detailed note on the events of their discovery. 10
8. Give a detailed note on scope of microbiology in India. 10
9. What is microbial taxonomy? Write a detailed note on contribution of Carl Woese. 10
10. What is Nutrition? Give a detailed note on bacterial nutrition. 10

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concept in detail.

P.T.O

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(20524)

Roll No.

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

3484

B.Sc. (Microbiology)

Examination, May-2024

FUNDAMENTAL OF MICROBIOLOGY

(B-101)

(B.Sc. Micro.)

Time : Three Hours] [Maximum Marks : 50

Note : Attempt **all** the Sections as per instructions.

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

1. Write an essay on carrier opportunities for microbiologists. 10
2. Write briefly on the following- $2 \times 5 = 10$
 - (a) Hyper sensitivity
 - (b) Graw negative bacteria
3. Describe Whittaker's five kingdom concept in detail. 10

P.T.O

4. Write about the ecological charters used in microbial taxonomy. 10
5. Write notes on _____ $2 \times 5 = 10$
- (a) Type-IV hypersensitivity reaction.
 - (b) Use of micro-organism in bioremediation.
6. Write an essay on discovery of viruses. 10
7. Describe general characteristics of microorganism. 10
8. What do you know about spontaneous generation controversy with special reference to historical developments of microorganism.
9. Write an essay on different groups of microorganism.
10. Write on- 2 \times 5 = 10
- (a) Bacteria culture techniques.
 - (b) Lag phase of bacteria growth