

MIC 201

Reg. No.

**CREDIT BASED SECOND SEMESTER B.Sc. DEGREE EXAMINATION
APRIL 2012**

**MICROBIOLOGY
ADVANCED MICROBIOLOGY**

Time: 3 Hrs

Max. Marks: 80

Note: Draw diagrams wherever necessary.

PART – A

- I. Answer any TEN of the following. **2x10=20**
- a) Protoplast
 - b) Peritrichous Flagella
 - c) Bacteriophage
 - d) Basidiospores
 - e) Filariasis
 - f) Eubacteria
 - g) Rabies Virus
 - h) Heterocyst
 - i) Elementary Body
 - j) Cell Membrane
 - k) Budding
 - l) Actinomycetes

PART – B

Answer any TWO complete questions from each unit.

UNIT – I

- II. a) With a neat labelled diagram explain the ultrastructure of Flagella. **06**
b) Write a note on cell wall structure in Gram Negative Bacteria. **04**
- III. a) Discuss the different shapes and arrangements of Bacteria. **06**

- b) Write a brief note on capsule and slime layer in Bacteria. **04**
- IV a) Write a note on surface appendages in Bacteria. **06**
 b) Write a note on Bacterial Endospore. **04**

UNIT – II

- V. a) With a neat labelled diagram explain the general structure of Mycoplasma. **06**
 b) Write a note on TMV. **04**
- VI. a) Discuss the general characters of Chlamydiae. **06**
 b) Write a note on properties of viruses. **04**
- VII. a) Explain the lytic cycle in viruses. **06**
 b) Mention any four diseases caused by Rickettsiae. **04**

UNIT – III

- VIII. a) Explain the sexual cycle of Plasmodium vivax. **06**
 b) Write a note on Aspergillus. **04**
- IX. a) Discuss the general characters of Protozoa. **06**
 b) Write a note on Nostoc. **04**
- X. a) With a neat labelled diagram explain the structure of yeast cell. **06**
 b) Write a note on Rhizopus. **04**

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**CREDIT BASED SECOND SEMESTER B.Sc. DEGREE EXAMINATION APRIL
 2013**

MICROBIOLOGY
Advanced Microbiology

Time: 3 Hrs
80

Max. Marks:

Note: Draw diagrams wherever necessary.

PART – A

I. Answer any Ten of the following.
2x10=20

- a) Ascospores
 b) Pili
 c) Prophage

- d) *Wuchereria bancroftii*
- e) Archaeobacteria
- f) LGV
- g) Ribosome
- h) TMV
- i) Spirulina
- j) Capsomere
- k) Mesosome
- l) Aspergillus

PART – B

Answer any two complete questions from each unit

UNIT – I

- II.** a) Discuss the different shapes and arrangements of bacteria.
06
- b) Discuss the different types of arrangement of flagella.
04
- III.** a) With a neat labelled diagram discuss the ultra structure of bacterial endospore.
06
- b) Discuss the composition and functions of cell membrane.
04
- IV.** a) Explain the surface layers of bacteria.
06
- b) Write a note on cell wall structure of Gram positive bacteria.
04

UNIT – II

- V.** a) Discuss the general characters of Chlamydiae.
06
- b) Write a note on animal virus.
04
- VI.** a) With a neat labelled diagram explain the general structure of Mycoplasma.
06
- b) Write a brief note on Actinomycetes.
04
- VII.** a) Discuss the classification of viruses.
06
- b) Mention any four diseases caused by Rickettsiae.
04

UNIT – III

VIII.a) With a neat labelled diagram explain the structure of *Balantidium coli*.

06

b) Write a note on *Saccharomyces*.

04

IX. a) Discuss the sexual cycle of *Plasmodium vivax*.

06

b) Write a note on *Scytonema*.

04

X. a) Discuss the general characters of Protozoa.

06

b) Write a note on *Penicillium*.

04

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CREDIT BASED SECOND SEMESTER B.Sc. DEGREE EXAMINATION - APRIL 2014

MICROBIOLOGY

ADVANCED MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

I. Answer any TEN of the following:

2x10=20

- a) Spheroplast
- b) Malarial Parasite
- c) PPLO
- d) Ascospores
- e) Eubacteria
- f) Prophage
- g) TMV
- h) Amphitrichous Flagella
- i) Spirulina
- j) Mesosomes
- k) Q Fever
- l) Rhizopus

PART-B

Answer any TWO complete questions from each unit

UNIT-I

- | | | | |
|------|----|--|----|
| II. | a) | Describe in detail the structure of bacterial endospore. | 06 |
| | b) | Write a note on Cell Membrane. | 04 |
| III. | a) | Discuss the surface appendages in bacteria. | 06 |
| | b) | Explain the cell wall structure in Gram positive bacteria. | 04 |
| IV. | a) | Discuss Cytoplasm and Cytoplasmic inclusions in Prokaryotes. | 06 |
| | b) | Write a brief note on capsule and slime layer. | 04 |

UNIT-II

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|------|----|---|----|
| V. | a) | With a neat labelled diagram explain the general structure of Mycoplasma. | 06 |
| | b) | Write a note on general characters of Actinomycetes. | 04 |
| VI. | a) | Explain the Lytic cycle in viruses. | 06 |
| | b) | Write a note on economic importance of Rickettsia. | 04 |
| VII. | a) | Discuss the general characters and life cycle of Chlamydia. | 06 |
| | b) | Write a note on Bacteriophage. | 04 |

UNIT-III

- | | | | |
|-------|----|--|----|
| VIII. | a) | Discuss the general characters of Fungi. | 06 |
| | b) | Write a brief note on <i>Balantidium coli</i> . | 04 |
| IX. | a) | Discuss the life cycle in <i>Entamoeba histolytica</i> . | 06 |
| | b) | Write a note on Scytonema. | 04 |
| X. | a) | Discuss the general characters of Protozoa. | 06 |
| | b) | Write a note on <i>Saccharomyces cerevisiae</i> . | 04 |

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CREDIT BASED SECOND SEMESTER B.Sc. DEGREE EXAMINATION APRIL 2015

MICROBIOLOGY – II **GENERAL MICROBIOLOGY**

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

I. Answer any TEN of the following:

10×2=20

m) Archaeobacteria

- n) Protoplast
- o) Rhabdovirus
- p) Basidiospores
- q) Bacteriophage
- r) Sporozoite
- s) Peptidoglycan
- t) Filarial Worm
- u) PPLO
- v) Elementary Body
- w) Actinomycetes
- x) Saccharomyces cerevisiae

PART-B

Answer TWO complete questions from each unit:

UNIT-I

- | | | | |
|-------------|----|--|-----------|
| II. | a) | Discuss the cell wall structure in bacteria. | 06 |
| | b) | Write a brief note on capsule and slime layer. | 04 |
| III. | a) | Explain cytoplasm and its inclusions in prokaryotes. | 06 |
| | c) | Write a brief note on bacterial endospore. | 04 |
| IV. | a) | Discuss the ultrastructure of flagella in bacteria. | 06 |
| | b) | Write a note on cell membrane. | 04 |

UNIT-II

- | | | | |
|-------------|----|--|-----------|
| V. | a) | Explain the lysogenic cycle in viruses. | 06 |
| | b) | Write a note on economic importance of Chlamydiae. | 04 |
| VI. | a) | Discuss the economic importance of Rickettsiae. | 06 |
| | b) | Write a note on plant viruses. | 04 |
| VII. | a) | Explain the classification of viruses. | 06 |
| | c) | Write a note on economic importance of Mycoplasma. | 04 |

UNIT-III

- | | | | |
|--------------|----|---|-----------|
| VIII. | a) | Discuss the life cycle in Entamoeba histolytica. | 06 |
| | c) | Write a note on Oscillatoria. | 04 |
| IX. | a) | Discuss the general characters of algae. | 06 |
| | b) | Write a note on Penicillium. | 04 |
| X. | a) | With a neat labelled diagram discuss the morphology Balantidium coli. | 06 |
| | b) | Write a note on hyphal modifications in fungi. | 04 |

MICROBIOLOGY
GENERAL MICROBIOLOGY

Duration: 3 Hours

Max Marks: 80

Note: Draw diagrams wherever necessary.

PART A

- I. Answer any TEN of the following: 2x10=20
- a) Archaeobacteria
 - b) Rabies
 - c) Prosthecae
 - d) Q Fever
 - e) Capsid
 - f) Cell Membrane
 - g) Microfilaria
 - h) Mucor
 - i) Pili
 - j) Basidiospores
 - k) PPLO
 - l) Baker's Yeast

PART-B

Answer any TWO complete questions from each unit

UNIT-I

- II. a) Describe the ultra structure of Flagella with a neat labelled diagram. 06
b) Explain capsule and slime layer in bacteria. 04
- III. a) Describe the cytoplasmic inclusions in bacteria. Add a note on shapes of bacteria. 06
b) Write a note on arrangement of Flagella. 04
- IV. a) Discuss the general structure and composition of bacterial endospore. 06
b) Explain the cell wall structure in Gram positive bacteria. 04

UNIT-II

- V. a) Discuss the general characters of Actinomycetes. Add a note on their economic importance. 06
b) Write a note on Morphology of bacteriophage. 04
- VI. a) Discuss lysogenic cycle in viruses. 06
b) Write a note on economic importance of Mycoplasma. 04
- VII. a) Discuss the general characters and life cycle of Chlamydia. 06
b) Write a note on Plant Viruses. 04

UNIT-III

- VIII. a) Discuss the life cycle in *Entamoeba histolytica*. 06
b) Write a note on Penicillium. 04
- IX. a) Discuss the general characters of Algae. 06
b) Write a note on structure of *Balantidium coli*. 04
- X. a) Discuss the life cycle of *Plasmodium vivax* in human. 06
b) Write a note Scytonema. 04
