

(MCB10112)

UNIT III

M.Sc. DEGREE EXAMINATION,
OCTOBER/NOVEMBER 2018.

5. Write an account on morphology and Ultra-structure of bacterial cell.

First Semester

Or

Bacteriology

6. Discuss the essential micro and macro nutrients required for the better growth of Bacteria.

Paper I — BACTERIOLOGY

(Regulation 2012)

UNIT IV

Time : Three hours

Maximum :70 marks

7. Describe the growth characteristics of bacteria on solid medium and kinetics of growth.

Answer ONE question from each unit.

Or

All questions carry equal marks.

8. Enumerate synchronous and continuous cultures of Bacteria.

UNIT I

UNIT V

1. Describe the principles of Bacterial Taxonomy and classification of Bacteria.

9. Describe the general characters of Cyanobacteria and Actinomycetes.

Or

Or

2. Describe the contributions of Anton Von Leeweunhoek to the development of Bacteriology.

UNIT II

10. Enumerate the characters of Mycoplasma and Rickettsia.

3. Describe the methods of isolation of Bacteria from water.

Or

4. Describe the various methods to preserve and maintain Bacterial cultures.

(MCB10212)

M.Sc. DEGREE EXAMINATION,
OCTOBER/NOVEMBER 2018.

First Semester

Microbiology

Paper II — VIROLOGY

(Regulation 2012)

Time : Three hours

Maximum : 70 marks

Answer ONE question from each Unit.

All questions carry equal marks.

UNIT I

1. Describe the Viral genome structure and types.

Or

2. Explain the diseases caused by Viroids and Prions.

UNIT II

3. Describe the general methods of purification of Viruses.

Or

4. Describe the serological methods for detection of Viruses.

UNIT III

5. Write an account on algae and Fungi.

Or

6. Describe the ultra-structure and life-cycle of TMV.

UNIT IV

7. Describe the Ultra-structure and brief account on life cycles of Rota Viruses.

Or

8. Enumerate the structure and life cycle of SV-40.

UNIT V

9. Describe the general properties of antiviral drugs.

Or

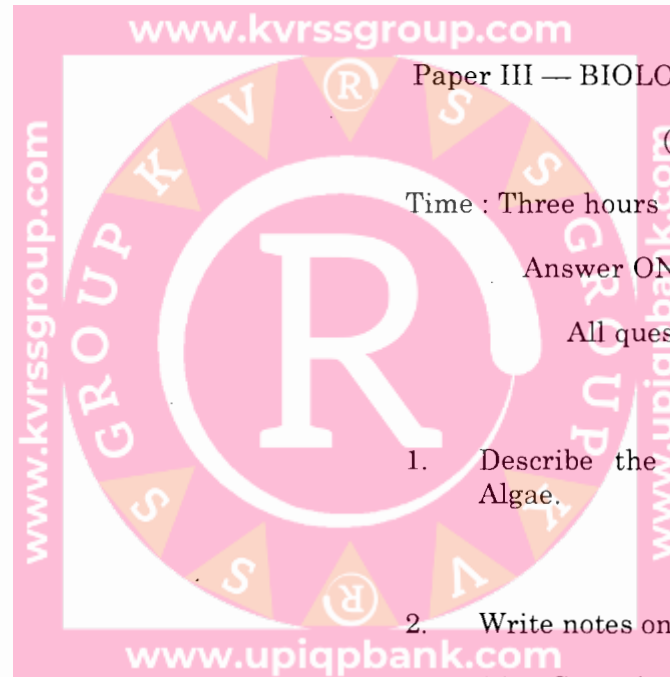
10. Enumerate the new generation Vaccines including DNA Vaccines.

(MCB10312)

M.Sc. DEGREE EXAMINATION,
OCTOBER/NOVEMBER 2018.

First Semester

Microbiology



Paper III — BIOLOGY OF EUKARYOTIC MICROBES

(Regulation 2012)

Time : Three hours

Maximum : 70 marks

Answer ONE question from each Unit.

All questions carry equal marks

UNIT I

1. Describe the reproduction and classification of Algae.

Or

2. Write notes on

(a) Scenedesmus

(b) Cyclotella.

UNIT II

3. Describe the reproduction and parasexuality in Fungi.

Or

4. Write notes on
(a) Classification of Fungi
(b) Actinomycotina

UNIT III

5. Write an account on VA Mycorrhizae.

Or

6. Write notes on
(a) Fungi as SCP
(b) Mycotoxins and public health.

UNIT IV

7. Describe the general characters of Protozoa.

Or

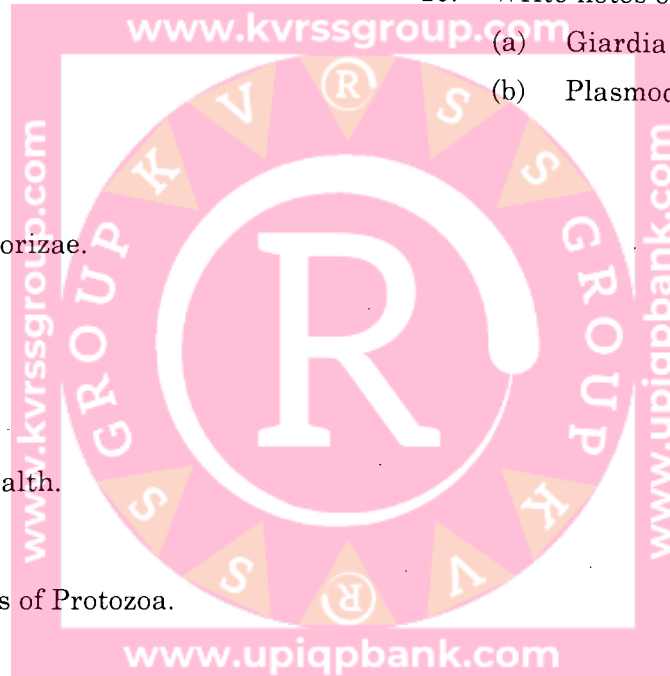
8. Write notes on
(a) Nutrition in Sporozoa
(b) Morphology of sarcomastigophora

UNIT V

9. Write an account on Entamoeba.

Or

10. Write notes on
(a) Giardia
(b) Plasmodium.



(MCB10412)

M.Sc. DEGREE EXAMINATION,
OCTOBER/NOVEMBER 2018.

First Semester

Microbiology

Paper IV — MICROBIAL BIOCHEMISTRY

(Regulation 2012)

Time : Three hours

Maximum : 70 marks

Answer ONE questions from each unit.

All questions carry equal marks.

UNIT I

1. Describe the structure and functions of disaccharides.

Or

2. Explain the nature and occurrence of bacterial cell wall polysaccharides.

UNIT II

3. Describe the three dimensional structure of tertiary and quaternary proteins.

Or

4. Describe the properties of allosteric and isoenzymes.

UNIT III

5. Write an account on the structure of DNA.

Or

6. Describe the structure and functions of Triglycerides.

UNIT IV

7. Describe the principle, methodology and applications of Visible Spectrophotometer.

Or

8. Enumerate the principle, working methodology and applications of Analytical centrifugation.

UNIT V

9. Describe the principle, methodology and applications of TLC.

Or

10. Enumerate the principle, methodology and applications of Gel Electrophoresis.