

(DMB01)

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M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016

First Year

MICRO BIOLOGY

Introduction Microorganisms

Time : 3 Hours

Maximum Marks : 70

SECTION – A

(5 × 6 = 30)

Answer five of the following

Q1) Louis Pastuer

Q2) Germ cell theory

Q3) Actinomycetes

Q4) Mycoplasmas

Q5) Replication of T4

Q6) Discovery of Viruses

Q7) Classification of Protozoa

Q8) Characters of Microalgae

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SECTION – B
Answer all of the following

(4 × 10 = 40)

Q9) Write an account on development of Vaccines.

OR

Write an account on Carwoese thee domain system of classification.

Q10) Describe the principles of Bacterial taxonomy.

OR

Write an account on Agrobacterium

Q11) Write an account on Morphology and chemistry of Viruses.

OR

Describe Ultra structure and replication of HIV

Q12) Describe reproduction and economic importance of Microalgae.

OR

Write an account on the classification of Fungi based on Ainsworth system.



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M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016

First Year

MICRO BIOLOGY

Microbiological Methods

Time : 3 Hours

Maximum Marks : 70

SECTION – A

(5 × 6 = 30)

Answer any five of the following

Q1) Chemical methods of sterilization

Q2) Applications of SEM

Q3) MPN method

Q4) Baiting technique

Q5) Isolation of Viruses

Q6) Applications of HPLC

Q7) Autoradiography

Q8) Principles of Mass Spectroscopy

SECTION – B

(4 × 10 = 40)

Answer all of the following

Q9) Describe the principle, methodology and applications of Transmission Electron Microscopy.

OR

Describe the preparation and composition of Bacteriological media.

Q10) Describe the methods of Anaerobic culturing.

OR

Describe the methods of isolation of Bacteria.

Q11) Describe the methods of isolation and purification of Viruses.

OR

Describe the principle, methodology and applications of GLC.

Q12) Write an account on Beer Lambert's law.

OR

Describe the principle, methodology and applications of UV-VIS Spectrophotometry.



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M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016

First Year

MICROBIOLOGY

Microbial Physiology and Biochemistry

Time : 3 Hours

Maximum Marks : 70

SECTION – A

(5 × 6 = 30)

Answer any five of the following

Q1) Simple diffusion

Q2) Measurement of cell number

Q3) Hydrogen oxidisers

Q4) Methylotrophs

Q5) Reduction potential

Q6) Ethanol fermentation

Q7) Isoenzymes

Q8) Michaelis – Menton equation

SECTION – B

(4 × 10 = 40)

Answer all of the following

Q9) Describe the Nutritional types of Bacteria.

OR

Enumerate the factors affecting bacterial growth

Q10) Describe photosynthesis in Cyanobacteria.

OR

Write an account on ammonia oxidisers.

Q11) Describe different types of phosphorylations

OR

Describe Glyoxylate pathway.

Q12) Write an account on Regulation of enzyme activity.

OR

Describe the structure and functions of DNA.



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M.Sc. (Previous) DEGREE EXAMINATION, DEC. – 2016

First Year

MICRO BIOLOGY

Environmental and Agricultural Microbiology

Time : 3 Hours

Maximum Marks : 70

SECTION – A

(5 × 6 = 30)

Answer any five of the following

- Q1)** Microbial propagules in air

- Q2)** Aeroallergens

- Q3)** Components of soil

- Q4)** Transformation of Sulphur in soil

- Q5)** Utilization of Azatobacter

- Q6)** Cyanobacteria as bioinoculant

- Q7)** Black stem rust of Wheat

- Q8)** Symptoms caused by Viruses in plants

SECTION – B
Answer all of the following

(4 × 10 = 40)

Q9) Describe the methods of air sampling techniques.

OR

Enumerate the treatment of sewage.

Q10) Describe the methods of isolation of soil microflora.

OR

Write an account on transformation of Nitrogen in soil.

Q11) Describe the structure and functions of legume root nodules.

OR

Write an account on VAM fungi

Q12) Write an account on symptomology, etiology, epidemiology and control of soft root of vegetables

OR

Describe the principles of plant disease control.

