

[4]

SECTION 'C'

4 × 10 = 40

Long Answer questions (Word limit 400-450 words.)

UNIT-I

Q. 1. Write notes on Biogas production.

OR

Write notes on Sewage Treatments.

UNIT-II

Q. 2. Describe symptoms, causal organism, disease cycle and control measures of any two crop diseases caused by 'Powdery mildews'.

OR

Describe symptoms, causal organisms, disease cycle any control measures of any two crop diseases caused by virus.

UNIT-III

Q. 3. Describe any two human disease caused by virus.

OR

Write notes on 'Condidiasis' and 'Dermatophytosis'.

UNIT-IV

Q. 4. Write notes on 'Paper chromatography'.

OR

Write notes on 'Transmission electron microscope'.

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[1]

ROLL NO.....

BOT. 404(A)/22

IV SEMESTER EXAMINATION, 2022

M.Sc. (BOTANY)

PAPER-IV

ELECTIVE PAPER-MICROBIAL ECOLOGY

TIME: 3 HOURS

MAX.- 80

MIN.- 16

Note: The question paper consists of three sections A, B & C. All questions are compulsory.

Section A- Attempt all multiple choice questions.

Section B- Attempt one question from each unit.

Section C- Attempt one question from each unit.

SECTION 'A'

2 × 8 = 16

MCQ (Multiple Choice Questions)

- At the stage of waste water treatment, methanogene microbes are the most significant for -
 - Sludge digestion
 - Primary treatment
 - Secondary treatment
 - Biological oxidation
- Bioremediation is -
 - Usage of microbes to create new organisms
 - Usage of anaerobic bacteria to create new antibiotics
 - Usage of microbes to destroy environmental pollution.
 - Usage of aerobic bacteria to create new vaccine.

[2]

3. The mycoplasma are organisms that completely lack cell wall, these are -

- (a) Obligate Aerobic (b) Facultative Anaerobic
(c) Obligate Anaerobic (d) Facultative Aerobic

4. 'Citrus greening' caused by the -

- (a) Fastidious bacteria (b) Fungi
(c) Virus (d) Mycoplasma

5. Hot water treatment of seed is useful for control of -

- (a) Loose smut (b) Rust
(c) Covered smut (d) Powdery mildew

6. Powdery mildew include in -

- (a) Deuteromycotina (b) Basidiomycotina
(c) Ascomycotina (d) Oomycetes

7. 'Beer Lambert's Law' gives the relation between which of the following -

- (a) Reflected radiation and concentration
(b) Scattered radiation and concentration
(c) Energy absorption and concentration
(d) Energy absorption and reflected radiation

8. Infection with Hemophilus influenza, especially in children, can cause -

- (a) Diphtheria (b) SARS
(c) Pneumonia (d) Dysentery

[3]

SECTION 'B'

4 × 6 = 24

Short Answer Type Questions (Word limit 200-250 words.)

UNIT-I

Q. 1. Biodegradation and Biodeterioration.

OR

Waste as a resource.

UNIT-II

Q. 2. 'Ear cockle of Wheat'.

OR

'Little leaf of Brinjal'

UNIT-III

Q. 3. Aspergillosis

OR

Typhoid

UNIT-IV

Q. 4. Laminar Air Flow

OR

Light microscope