

[4]

SECTION 'C' $4 \times 10 = 40$

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

UNIT-I

Q. 1. Write note on Bio remediation.

OR

Write note on mechanism of heavy metal resistance in microbes.

UNIT-II

Q. 2. Diseases cycle of roots and control method.

OR

Write note on bacterial blite of rice.

UNIT-III

Q. 3. Describe any four human disease caused by bacteria.

OR

What do you know about Giardiasis and Amoebiasis.

UNIT-IV

Q. 4. Write note on electron microscope.

OR

Write note on Laminar air flow.

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[1]

ROLL NO.....

BOT. 404(A)/21

IV SEMESTER EXAMINATION, 2021

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' $2 \times 8 = 16$

MCQ (Multiple Choice Questions)

1. The magnification power of electron microscope developed by Knell and Ruska is -

(a) 10,000_x

(b) 12,000_x

(c) 15,000_x

(d) 20,000_x

2. Limit of resolution of compound microscope is -

(a) 0.018A⁰

(b) 0.1 mm

(c) 5 im

(d) 1 mm

[2]

3. The thin rectangular plates found in host's cell (Mosaic of legumes) is called -

- (a) Intra nuclear inclusion (b) Extra nuclear inclusion
(c) Palisade cell (d) Infected Part

4. Hyphal ramification in the host tissue found in -

- (a) Downy mildew (b) Powdery mildew
(c) Smut (d) Rust

5. Amoebiasis disease caused by -

- (a) Bacteria (b) Virus
(c) Protozoan (d) Fungus

6. Which of following process helps in the uptake of heavy metals in bacteria -

- (a) Bio accumulation (b) Bio augmentation
(c) Bioleaching (d) Vermi composting

7. Heavy metal resistance elements are found in gram negative bacteria-

- (a) True (b) False

8. A bio control agent against plant diseases -

- (a) Trichoderma (b) Glomus
(c) Bacillus thuringiensis (d) Baculo virus

[3]

SECTION 'B' 4 × 6 = 24

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

UNIT-I

Q. 1. Bio pesticides

OR

Bio fertilizer

UNIT-II

Q. 2. Scab of potato

OR

Grassy shoot of sugarcane

UNIT-III

Q. 3. Typhoid

OR

Giardiasis

UNIT-IV

Q. 4. Electrophoresis

OR

Colorimeter