

[BS – HS 2146]

B.Sc. (Honours) DEGREE EXAMINATION.

Third Semester

(Major)

Botany

**Course-6 : PLANT PATHOLOGY AND PLANT
DISEASES**

(Effective from the admitted batch of 2023–2024)

Time : Three hours

Maximum : 70 marks

SECTION A — (5 × 4 = 20 marks)

Answer any FIVE from the following Eight questions.

1. Bengal famine.
2. Effect of toxins on host tissue.
3. Different types of diseases cycles.
4. Phytoalexins.
5. Host plant resistance.
6. Remote sensing.

7. Diseases management of pigeon pea.

8. Anthracnose.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

UNIT – I

9. (a) Give an account on dispersal of plant pathogens.

Or

(b) Write an essay on survival of plant-pathogens.

UNIT – II

10. (a) Describe the role of toxins in plant pathogenesis.

Or

(b) What are biochemical defence mechanism? Describe pre-existing chemical defenses.

2

[BS – HS 2146]

UNIT – III

11. (a) Write an essay on plant disease forecasting.

Or

(b) Give a brief account on integrated plant disease management.

UNIT – IV

12. (a) Explain the symptoms, etiology, disease cycle and management of downy mildew disease of bajra millet?

Or

(b) Explain the symptoms, etiology, disease cycle and management of Tikka disease in ground nut.

UNIT – V

13. (a) Explain the symptoms, etiology, disease cycle and management of yellow vein mosaic disease in Okra.

Or

(b) Explain the symptoms, etiology, disease cycle and management of coconut bud-rot disease?

3

[BS – HS 2146]



785122508034

(C) (H) (M)

[BS – HS 5111]

B.Sc. (Honours) DEGREE EXAMINATION

First Semester

(Major)

Zoology

**Course 1 — ANIMAL DIVERSITY — I BIOLOGY OF
NON-CHORDATES**

(Effective from the admitted batch of 2025–2026)

Time : Three hours

Maximum : 70 marks

SECTION A — (5 × 4 = 20 marks)

Answer any FIVE questions.

Each question carries 4 marks.

1. Locomotion in protozoa.
2. ✓ Coral reefs.
3. Cestoda classification.
4. Annelida General Characters.
5. Balanoglossus – structure.

- 6✓ Pearl formation.
7. Peripatus.
8✓ Nematelminthes – General Characters.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

- 9/ (a) Explain the mode of reproduction in protozoa.

Or

- (b) What are the general characters of protozoa? Add a note on the classification upto classes.

10. (a) Explain in detail the canal system in sponges with suitable diagrammatic presentation.

Or

- (b) Write about the general characters and classification upto classes of phylum porifera.

- 11/ (a) What are the general characters of the phylum platyhelminthes? Add a note on the classification with examples.

Or

- (b) Write an account on the life cycle and pathogenicity of *Ascaris lumbricoides*.

2

[BS - HS 5111]

12. (a) Write a detailed account on scope, significance species involved, processing of vermiculture.

Or

- (b) General characters and classification upto classes of phylum annelida.

- 13/ (a) Explain water vascular system in starfish with suitable diagrams.

Or

- (b) Write an account on the general characters and classification upto classes of "Hemichordata".

3

[BS - HS 5111]



[BS – HS 2148]

B.Sc. (Honours) DEGREE EXAMINATION.

Third Semester

(Major)

Botany

Course – 8 : PLANT BIOTECHNOLOGY

(Effective from the admitted batch of 2023–2024)

Time : Three hours

Maximum : 70 marks

SECTION A — (5 × 4 = 20 marks)

Answer any FIVE from the following Eight questions.

1. Scope of plant tissue culture.
2. MS-media.
3. Applications of ovule culture.
4. Importance of embryo culture.
5. Somatic cybrids.
6. Secondary metabolites.
7. Golden rice.
8. Biofortification food.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

UNIT I

9. (a) Describe the various sterilization techniques used in plant tissue culture.

Or

- (b) What are synthetic seeds? Explain types of synthetic seeds. Add a note on advantages and disadvantages of synthetic seeds.

UNIT II

10. (a) Write an essay on embryo culture.

Or

- (b) Describe the production of haploids through anther culture.

UNIT III

11. (a) Give an account on mass cultivation of plant cells using bioreactors.

Or

- (b) Explain the various aspects of somatic-hybridization.

2

[BS - HS 2148]

UNIT IV

12. (a) Describe biosafety and ethical issues associated with transgenic plants.

Or

- (b) Give a brief account on introduction to virus resistance nucleocapsid genes.

UNIT V

13. (a) Write an essay on genetically modified foods.

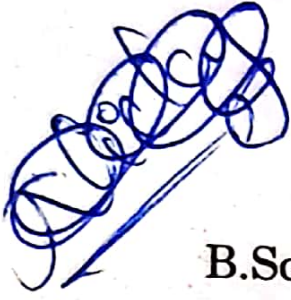
Or

- (b) Give an account on biodegradable plastic.

3

[BS - HS 2148]





[BS – HS 2147]

B.Sc. (Honours) DEGREE EXAMINATION.

Third Semester

(Major)

Botany

Course 7 – PLANT BREEDING

(Effective from the admitted batch of 2023–2024)

Time : Three hours

Maximum : 70 marks

SECTION A — (5 × 4 = 20 marks)

Answer any FIVE of the following Eight questions.

1. Apomixis.
2. Genetic variation.
3. Male sterility.
4. Self-incompatibility.
5. Genetic erosion.

6. NBPGR.

7. Epistasis.

8. SSR.

SECTION B — (5 × 10 = 50 marks)

Answer ALL questions.

UNIT I

9. (a) Describe the scope and objectives of plant breeding.

Or

(b) Write the advantages and disadvantages of sexual reproduction.

UNIT II

10. (a) Write an essay on cytoplasmic-male sterility.

Or

(b) Explain the heteromorphic and homomorphic system.

2

[BS - HS 2147]

UNIT III

11. (a) Write about the procedure, merits and demerits of plant introduction.

Or

(b) Give a brief account on clonal selection add a note on advantages and disadvantages of clonal selection.

UNIT IV

12. (a) Describe the procedure, advantages and disadvantages, achievements of hybridization.

Or

(b) Give a brief account on heterosis.

UNIT V

13. (a) Explain the procedure of mutation breeding.

Or

(b) Describe the restriction fragment length polymorphism.

3

[BS - HS 2147]

