

UG-356

BBOT-11

**B.Sc. DEGREE EXAMINATION —
DECEMBER, 2019.**

First Year

Botany

PLANT DIVERSITY-I

Time : 3 hours

Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Bring out the characteristic features of rhodophyta and phaeophyta.
2. Write the habitat and structure of *Volvox*.
3. Narrate the general characters of fungi.
4. Give the systematic position, habitat and distribution of *Mucor*.
5. Explain the classification of Bryophytes
6. Describe the structure of virus.

7. What are the types of plant diseases? Discuss.
8. Explain budding.

SECTION B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Explain the life cycle patterns in Algae.
10. Discuss the asexual and special types of reproductions in fungi.
11. Give the economic importance of
 - (a) Fungi as food and medicine
 - (b) Algae in Agriculture.
12. Enumerate the general characteristic features of Bryophytes.
13. Explain the sexual reproduction in Anthoceros.
14. Discuss the lytic life cycle of virus.
15. Explain economic importance of bacteria.
16. With suitable example explain the bacterial and fungal diseases in plants.

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BBOT-12

B.Sc. DEGREE EXAMINATION —
DECEMBER, 2019.

First Year

Botany

PLANT DIVERSITY II

Time : 3 hours

Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. List out the salient features of pteridophytes.
2. Give the outline classification of pteridophytes by Smith 1955.
3. Explain the external morphology of *Selaginella*.
4. Describe the anatomical structure of *Marsilea* leaf.
5. Bring out the xerophytic features of gymnosperms.
6. Explain the structure of *Pinus* male cone.
7. Give a brief account on *Rhinea*.
8. Comment on mesozoic era in geological time scale.

SECTION B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Write the gametophytic and sporophytic life cycle of pteridophytes.
10. Explain the sexual reproduction in *Lycopodium*.
11. Discuss the morphological characters and evolutionary trends in *Psilotum*.
12. Enumerate the general characteristic features of gymnosperms.
13. Describe the sexual reproduction in *Cycas*.
14. Describe the structure and of reproduction of *Gnetum*.
15. Describe the process of fossilization.
16. Write an essay about origin and diversification of land plants.

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BBOTA-11

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First Year

Botany

GENERAL CHEMISTRY

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Give brief note on covalent and hydrogen bonds.
2. Differentiate between nucleophils and electrophiles.
3. Enumerate the applications of chromatography.
4. Write the technique of vulcanization of rubber.
5. Give the structure and properties of polysaccharides.

6. Write short account on antiseptics and disinfectants.
7. Explain about green house effect.
8. Give brief note on sources and preventive methods of radioactive pollution.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. With suitable examples explain the following
 - (a) molarity,
 - (b) molality and
 - (c) normality.
10. With neat diagrammatic representation describe the purification of organic compounds by crystallization method.
11. What are the types of catalysts? Describe its properties and applications.
12. Differentiate between addition polymerization and condensation polymerization.
13. With suitable examples classify vitamins and write their sources and deficiency diseases.

14. Write short account on the following:
- (a) Chloroquine
 - (b) Tetracycline
 - (c) Antipyritics.
15. Define pollutants. Write the types of water pollutants and their control measures.
16. List out the hygiene and safety rules of laboratory.
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