

UG-359

BBOT-21

**B.Sc. DEGREE EXAMINATION –
DECEMBER 2019.**

Second Year

BOTANY

PLANT TAXONOMY AND ECONOMIC BOTANY

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Underground stem – Discuss.
2. Write notes on Taxon, Genus and species.
3. Discuss the types of root modification.
4. Explain briefly cymose inflorescence.
5. Give the general features of family Liliaceae.
6. Explain the diagnostic characters of family Annonaceae.

7. Write an essay on origin, botany, cultivation and its economic uses of cotton.
8. Bring out the ecological importance of plants.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Describe the Bentham and Hooker's system of classification.
10. Write notes on phylloclades and cladodes.
11. Describe the diagnostic features of Asclepidiaceae.
12. Write the economic importance of Rutaceae.
13. Discuss the cultivation practices and its economic importance of sugarcane.
14. Describe the salient features and economic importance of Poaceae.
15. Describe the vegetative floral characters and its economic importance of Fabaceae.
16. Discuss about the herbarium preparation techniques.

UG-360

BBOT-22

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

Second Year

Botany

PLANT ANATOMY AND EMBRYOLOGY

Time : 3 hours

Maximum marks : 75

SECTION A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. What are tissues? Add note on epidermal tissues.
2. Give an account on histogen theory.
3. Explain the structure and functions of roots.
4. Describe nodal anatomy of monocot.
5. Differentiate between dicot and monocot leaf anatomical features.
6. Write note on embryosac with sketches and example.

7. What are the methods of pollination?
8. With neat diagram explain development of embryo.

SECTION B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Classify meristems based on shape of cell wall.
10. Explain meristematic tissues.
11. With suitable example and sketches explain the secondary thickening of roots.
12. Describe the primary anatomical structure of a monocot root.
13. With neat diagram explain internal structure of leaf.
14. Explain development of megasporangium.
15. Describe double fertilization and triple fusion in angiosperms.
16. Write short notes on :
 - (a) Fertilization
 - (b) Apomixis
 - (c) Endosperm.

UG-361

BBOTA-21

**B.Sc. DEGREE EXAMINATION –
DECEMBER 2019.**

Second Year

Botany

ANIMAL DIVERSITY

Time : 3 hours

Maximum marks : 75

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions.

1. Enlist the characters of invertebrate.
2. Differentiate between class Reptilia and Amphibia.
3. Illustrate the structure of Earthworm.
4. Describe the structure of *Obelia*.
5. Give external features of Prawn.
6. Give detail account on respiratory system of frog.
7. Explain digestive system of shark.
8. Write external features of rabbit.

PART B — (5 × 10 = 50 marks)

Answer any FIVE questions.

9. Narrate the characters and diversity of chordata.
 10. Write structure and reproduction of *Paramoecium*.
 11. Explain the life cycle of sea star
 12. Give the biology of Lamellidens
 13. Describe the urogenital system of Calotes
 14. Explain the respiratory system of Pigeon
 15. Compare the brain structure of rabbit and pigeon
 16. Give notes on (a) *Fasciola hepatica* (b) frog.
-

UG-046

CCE

B.Com./B.B.A. DEGREE EXAMINATION —
DECEMBER, 2019.

ENVIRONMENTAL STUDIES

Time : 3 hours

Maximum marks : 75

PART A — (3 × 5 = 15 marks)

Answer any THREE questions.

All questions carry equal marks.

1. Write about the importance of environmental studies.

சுற்றுச்சூழலியலின் முக்கியத்துவத்தைப் பற்றி எழுதுக.

2. Discuss the over-exploitation of natural resources.

இயற்கை வளங்களை அதிகமாக சுரண்டுவதைப் பற்றி விவாதி.

3. Write about the eco system.

சுற்றுச்சூழல் பற்றி எழுதுக.

4. Give an account on conservation of biodiversity.

பல்லுயிர் பாதுகாப்பு பற்றி எழுதுக.

5. Write about the land resources.

நில வளங்களை பற்றி எழுதுக.

PART B — (4 × 15 = 60 marks)

Answer any FOUR questions.

All questions carry equal marks.

6. Describe the food resources.

உணவு வளங்களை பற்றி எழுதுக.

7. Describe the structure and function of ecosystem.

சுற்றுச்சூழலின் கட்டமைப்பு மற்றும் செயல்பாட்டை பற்றி விவரி.

8. Explain the energy flow in the ecosystem.

சுற்றுச்சூழலில் ஆற்றல் ஓட்டத்தைப் பற்றி விளக்குக.

9. Give brief account on India as a mega diversity nation.

இந்தியாவைப் பொறுத்தவரையில் ஒரு மிகப்பெரிய பன்முகத் தன்மை கொண்ட நாடு எனக் குறிப்பிடுக.

10. Discuss the types and effects of air pollution.

காற்று மாசுபாட்டின் வகைகள் மற்றும் விளைவுகளை பற்றி விவாதி.

11. Discuss any five legal provisions to protect the environment.

சுற்றுச்சூழலைப் பாதுகாப்பதற்கான ஏதேனும் ஐந்து சட்ட விதிகளைப் பற்றி விவாதி.

12. Discuss the role of information technology in environment and human health.

சுற்றுச்சூழலுக்கும் மனித ஆரோக்கியத்திற்கும் உள்ள தகவல் தொழில் நுட்ப பங்கு பற்றி விவாதி.
