

**2025**

**( FYUGP )**

**( 5th Semester )**

**BOTANY**

**( MINOR )**

Paper Code : BCC-M-5

**( Plant Ecology and Phytogeography )**

Full Marks : 75

Pass Marks : 40%

Time : 3 hours

**( PART : B—DESCRIPTIVE )**

**( Marks : 50 )**

*The figures in the margin indicate full marks  
for the questions*

1. Explain the components and dynamism of ecosystem. 10

Or

Write short notes on the following : 5+5=10

- (a) Types of precipitation  
(b) Soil profile

**26L/144a**

**( Turn Over )**

2. Write a note on adaptation of plants to their variations. 10

Or

Discuss the ecological importance of biotic interaction in community structure. 10

3. Explain the concept of ecological pyramids and food chains. 10

Or

Discuss the principles and models of energy flow. 10

4. Explain the significance of continental drift theory in phytogeography. 10

Or

Discuss the phytogeographical divisions in India. 10

5. Write short notes on the following : 5+5=10

(a) Theory of tolerance

(b) Phosphorus cycle

Or

Write short notes on the following : 5+5=10

(a) Water table

(b) Habitat and niche

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**Subject Code : Bs/BCC-M-5**

**To be filled in by the Candidate**

BA / BSc / BCom / BBA / BCA  
5th Semester End Term  
Examination, 2025 (FYUGP)

Subject .....

Paper .....

**INSTRUCTIONS TO CANDIDATES**

1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.
2. This paper should be **ANSWERED FIRST** and submitted within 1 (one) Hour of the commencement of the Examination.
3. While answering the questions of this booklet, any cutting, erasing, overwriting or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.

Signature of  
Scrutiniser(s)

Signature of  
Examiner(s)



**Booklet No. A**

169

Date Stamp .....

**To be filled in by the Candidate**

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5th Semester End Term  
Examination, 2025 (FYUGP)

Roll No. ....

Regn. No. ....

Subject .....

Paper .....

DESCRIPTIVE TYPE

Booklet No. B .....

Signature of  
Invigilator(s)

**2 0 2 5**

( FYUGP )

( 5th Semester )

**BOTANY**

( MINOR )

Paper Code : BCC-M-5

**( Plant Ecology and Phytogeography )**

( PART : A—OBJECTIVE )

( Marks : 25 )

*The figures in the margin indicate full marks for the questions*

Put a Tick (✓) mark against the correct answer in the  
brackets provided : 1×15=15

**1. Which water form is most available to plants?**

(a) Hygroscopic water ( )

(b) Gravitational water ( )

(c) Capillary water ( )

(d) Atmospheric water ( )



**2. Photoperiodism controls**

- (a) root elongation ( )
- (b) photosynthesis ( )
- (c) flowering time ( )
- (d) leaf orientation ( )

**3. The critical temperature above which plants die is called**

- (a) lethal point ( )
- (b) thermal death point ( )
- (c) melting point ( )
- (d) heat saturation point ( )

**4. Standing crop refers to**

- (a) biomass at a specific time ( )
- (b) population density ( )
- (c) soil fertility ( )
- (d) seedling growth ( )

**5. Endemism refers to**

- (a) species found everywhere ( )
- (b) species confined to a region ( )
- (c) species with wide range ( )
- (d) None of the above ( )

6. Population pyramid with broad base indicates

- (a) stable population ( )
- (b) declining population ( )
- (c) exponential growth ( )
- (d) stationary growth ( )

7. Ecotone refers to

- (a) transitional zone ( )
- (b) niche ( )
- (c) biome ( )
- (d) habitat ( )

8. A stable and final community is called

- (a) successional stage ( )
- (b) ecotone ( )
- (c) food chain ( )
- (d) climax community ( )

9. Energy transfer between trophic levels is about

- (a) 5% ( )
- (b) 10% ( )
- (c) 25% ( )
- (d) 50% ( )

**10.** Theory of tolerance was proposed by

- (a) Shelford ( )
- (b) Darwin ( )
- (c) Odum ( )
- (d) Wallace ( )

**11.** The biome found in very cold region is

- (a) tropical ( )
- (b) temperate ( )
- (c) desert ( )
- (d) tundra ( )

**12.** Ecological niche refers to

- (a) habitat only ( )
- (b) role and position of species ( )
- (c) food habits only ( )
- (d) competition between species ( )



**13.** Negative feedback loops in ecosystem help in

- (a) soil erosion ( )
- (b) homeostasis ( )
- (c) succession only ( )
- (d) pollution control ( )

**14.** The amount of energy captured by autotrophs is called

- (a) gross primary productivity ( )
- (b) net productivity ( )
- (c) secondary productivity ( )
- (d) efficiency ( )

**15.** The most realistic representation of feeding interaction is

- (a) food chain ( )
- (b) food web ( )
- (c) energy pyramid ( )
- (d) biomass pyramid ( )



Answer any *five* of the following questions :  $2 \times 5 = 10$

1. Define hygroscopic water.

2. Write on precipitation and infiltration.



3. Define population density.

4. What is thermoperiodism?



5. What is edge effect?

6. Define climax community.



7. Define biome with an example.

8. Define phytogeography.

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