



Progressive Education Society's
Modern College of Arts, Science & Commerce Ganeshkhind, Pune – 16
End Semester Examination: Jan.2022
Faculty: Science and Technology

Program: B.Sc.

Semester: I

SET: A

Program (Specific): General B.Sc

Course Type: Core

Class: FY B.Sc.

Max. Marks: 35

Name of the Course: Plant Morphology and Anatomy

Course Code: 22 - BO - 112

Time: 2Hr

Paper: II

Instructions to the candidate:

- 1) *There are 4 sections in the question paper. Write each section on separate page.*
- 2) *All Sections are compulsory.*
- 3) *Figures to the right indicate full marks.*
- 4) *Draw a well labelled diagram wherever necessary.*

SECTION: A

Q1) Answer the following

5

- a) Which region of pistil form fruits and seeds?
- b) Define Cyme
- c) What is epidermal tissue? Give its component
- d) Differentiate between fleshy and dry fruit.
- e) What is descriptive morphology?

Q2) Answer any four of the following

4

- a) Write a note on parenchyma.
- b) What is anatomy?
- c) Dendrochronology
- d) Papilionaceous corolla
- e) Name any two element of xylem.
- f) What is perianth? Give one example.

SECTION: B

Q3) Write short note on any four of the following. **8**

- i) Explain importance of morphology in wood identification.
- ii) Define flower. Describe the parts of typical flower.
- iii) Explain role of anatomy in ecological interpretation.
- iv) Explain the characteristics fruit developed from hypanthodium type of inflorescence.
- v) What are vascular tissues? Describe elements of phloem.
- vi) Explain the inflorescence in sunflower plant.

SECTION: C

Q4) Answer any four of the following **8**

- 1) What is fruit? Describe Etario of follicle in detail.
- 2) Write the characteristics of sclerenchymatous tissue.
- 3) Comment on cruciform corolla. Draw a well labeled diagram.
- 4) What is tissue? Explain the epidermal tissue responsible for gaseous exchange.
- 5) Define aestivation? Describe aestivation in papilionaceous flower.
- 6) How you differentiate between simple and compound leaf?

SECTION: D

Q5) Attempt any two of the following **10**

- a) Describe the internal structure of Dicot stem and Monocot stem.
- b) Describe the arrangement of floral members in relation to their insertion on thalamus.
- c) Explain the different type of vascular bundle and comment on its functions.
- d) Describe internal structure of monocot leaf and write the difference than dicot leaf anatomy.

Examination and Evaluation Pattern for Undergraduate courses (Autonomous)

**Progressive Education Society's
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(Autonomous)**

Chapter wise Distribution of Marks
End Semester Examination: Jan. 2022

Chapter wise Distribution of Marks				
Unit	Chapter no.	Chapter	Marks	Marks with Option
1	1	Morphology	3	5
2	2	Inflorescence	1	3
	3	Flower	11	14
	4	Fruit	5	6
3	5	Anatomy	2	4
4	6	Types of Tissue	8	13
5	7	Internal organization of primary plant body	5	10
		Total:	35	55

WEIGHTAGE ACCORDING TO LEARNING OBJECTIVES

Objectives	Total weightage	Percentage
Knowledge	8	42%
Understanding	20	42%
Application and Skill	7	16 %

Examination and Evaluation Pattern for Undergraduate courses (Autonomous)

BLUEPRINT OF QUESTION PAPER

DOMAIN WISE DISTRIBUTION OF MARKS

(Based on Blooms Taxonomy)

Question Number	Knowledge 42%	Understanding 42%	Application and Skill 16%
Q1)	2	3	
Q2)	2	3	
Q3)	3	4	2
Q4)	1	5	
Q5)		5	5
TOTAL	8	20	7

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