

MAHATMA GANDHI UNIVERSITY, KOTTAYAM
MGU-UGP (HONOURS)
FIFTH SEMESTER EXAMINATION
(2024 Admission onwards)
PRACTICAL

Course Code: **MG5DSCBOT300, MG5DSCBBT300**
Course Title: **Angiosperm Systematics and Economic Botany**

Time: 2 Hrs

Maximum Marks: 35

Student should attempt at least one question from each course outcome to enhance their overall outcome attainability

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C),
Skill (S), Interest (I) and Appreciation (Ap)

Sl.No.	Questions	Taxonomy	CO
1.	Identify the specimen A to their respective family giving key characters. (Identification of the family -1 mark; Systematic position – 1 mark; Distinguishing characters - 3 marks; Total = 5 marks)	U	[4]
2	Describe the flower B in technical terms. Draw the V S, construct the floral diagram and write the floral formula (Description- 2 marks; V.S of the Flower- 2 marks; F.D of the Flower – 1 mark; F.F of the Flower – 1 mark; Total = 6 marks)	A	[4]
3	Identify the product/part by binomial, family and morphology of the useful part of C & D (Binomial – 1 X 2 = 2 marks; Family – 1 X 2 = 2 marks; Morphology- ½ X 2 = 1 mark; Total = 5 marks)	U	[4]
4	Identify the herbarium specimens E1 & E2 (Binomial – 1 X 2 = 2 marks; Family-1 X 2 = 2 marks; Total = 4 marks)	U	[4]
5	Submit 15 Herbarium and duly certified field book (Herbarium – 3 marks; Field Book – 2 marks; Total = 5 marks)	S	[4]
6	Field Report/ Study Tour Report (Report – 5 marks)	An	[4]
7	Practical Record (5 marks)	S	[4]

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MGU-UGP (HONOURS)

FIFTH SEMESTER EXAMINATION

(2024 Admission onwards)

PRACTICAL

Course Code: **MG5DSCBOT301**

Course Title: **Plant Cell and Molecular Biology**

Time: 2 Hrs

Maximum Marks: 35

Student should attempt at least one question from each course outcome to enhance their overall outcome attainability

Remember (K), Understand (U), Apply (A), Analyse (An), Evaluate (E), Create (C), Skill (S),
Interest (I) and Appreciation (Ap)

Sl.No.	Questions	Taxonomy	CO
1	Make an acetocarmine squash preparation of root tip (specimen A) supplied and identify any two stages of mitosis. Preparation -2; Labeled diagram -1x2; identification -2x2; Total - 8marks	An	5
2	Calculate mitotic index of the given root tip (specimen A) by squash preparation Tabulation-3 Result -1; Total - 4marks	An	5
3	Identify any two stages of meiosis shown in the figure/ photograph B . Write a brief note on each stage. Identification- 1x2; Note – 1x2; Total - 4 marks	U	3
4	Extract DNA from the given plant material C using a suitable method. Requirement-1; Procedure-2; Working -3; Total - 6 marks	A	2
5	Identify and comment on E & F Identification – 1x2 ; Comment - 1x2 ; Total - 4marks	An	5
6	Identify and comment on the given experimental setup G Identification-1; Comment-3; Total - 4marks	A	2
7	Practical Record Total-5marks	A,U,An	2,3,5