

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

FIFTH SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

Course Code: **MG5DSEBOTA08** Course Title: **Forensic botany**

Time: 2 Hrs

Maximum Marks: 70

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

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

Part A:

Short answers

Answer 10 questions

Each question carries 2 mark

	Questions	Taxonomy	CO
1	What is ergotism?	Remember	4
2	What is forensic toxicology?	Remember	1
3	What is genetic risk assessment?	Understand	4
4	Name the toxic constituents of <i>Nerium oleander</i>	Understand	1
5	Pollen is considered as useful trace evidence. Justify?	Analyse	2
6	Define forensic limnology	Understand	3
7	What is the principle of TLC?	Remember	4
8	State any two applications of forensic botany	Apply	1
9	Define crime-scene photography	Understand	5
10	Name two tissues from which diatoms can be isolated	Understand	3
11	Define forensic palynology	Understand	2
12	What is a cosmopolitan species?	Remember	3

Part B:

Short Essay Type Questions

Answer 8 Questions

Each question carries 5 marks

13	Explain the structure and function of the diatom frustule	Understand	3
14	Explain the importance of chain of custody	Remember	1
15	Explain TLC and its application in the identification of plant poisons	Apply	4
16	Define forensic ethics and explain its importance	Understand	1
17	Describe the different types of botanical evidence encountered at crime scenes	Understand	2
18	What is acetolysis? Explain its purpose in pollen preparation	Analyse	2

19	Describe the various types of forensic photography with suitable examples	Remember	5
20	Describe the methods used for isolating diatoms from biological tissues	Analyse	3
21	Explain the applications of UV-Visible spectrophotometry in forensic toxicology	Apply	4
22	Write a short note on plants yielding drugs of abuse	Understand	4

Part C:

Essay Type Questions

Answer any one question

Question carries 10 marks

23	Discuss the forensic applications of pollen, seeds, leaves, wood, roots, fruits, and plant fragments	Understand	1
24	Describe the common poisonous plants and their toxic constituents: <i>Abrus precatorius</i> , <i>Cannabis sativa</i> , <i>Claviceps purpurea</i> , <i>Croton tiglium</i> , <i>Atropa belladonna</i> and <i>Gloriosa superba</i>	Understand	4