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| **University of Kerala** | | |
| Discipline: **BOTANY** |  | Time: 1 Hour 30 Minutes (90 Mins.) |
| Course Code: **UK1DSCBOT105** |  | Total Marks: 42 |
| Course Title: **MORPHOLOGY OF FLOWERING PLANT** |  |  |
| Type of Course: DSC (with Practical) |  |  |
| Semester: 1 |  |  |
| Academic Level: 100-199 |  |  |
| Total Credit: 3, Theory: 3 Credit  (Applicable for 4 Credit Course with 1 Credit Practical Also) |  |  |

Part A. 6 Marks. Time: 6 Minutes

Objective Type. 1 Mark Each. Answer All Questions

(Cognitive Level: Remember/Understand)

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **Course**  **Outcome (CO)** |
| 1. | What are prop roots? | Remember | CO-1 |
| 2. | Name the four main parts of a typical flower. | Remember | CO-2 |
| 3. | What is the function of petals? | Understand | CO-1 |
| 4. | Which type of venation do you observe in the monocot? | Understand | CO-1 |
| 5. | Which type of placentation is seen in cucumber? | Understand | CO-2 |
| 6. | What are annual plants? | Understand | CO-3 |

Part B. 8 Marks. Time: 24 Minutes

Short Answer. 2 Marks Each. Answer All Questions

(Cognitive Level: Understand/Apply)

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **Course**  **Outcome (CO)** |
| 7. | Why do the various plants have different types of phyllotaxy? | Understand | CO-1 |
| 8. | What are underground stems? Provide an example. | Understand | CO-1 |
| 9. | Which type of inflorescence is seen in Euphorbia? | Apply | CO-4 |
| 10. | Differentiate zygomorphic and actinomorphic flower | Apply | CO-2 |

Part C. 28 Marks. Time: 60 Minutes

Long Answer. 7 marks each. Answer all 4 Questions, choosing among options within each question.

(Cognitive Level: Apply/Analyse/Evaluate/Create)

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| **Qn.**  **No.** | **Question** | **Cognitive**  **Level** | **Course**  **Outcome (CO)** |
| 11. | a) How do various leaf modifications help plants?  or  b) “Flower is a modified shoot.” justify the statement with a diagram | Apply | CO-1  CO-3 |
| 12. | a) Explain special types of inflorescence with suitable examples.  Or  b) Compare and illustrate the various types of placentation found in flowering plants. | Analyze | CO-2  CO-3 |
| 13. | a) comment on the structure and parts of a typical angiosperm flower with the help of a diagram.  or  b) Explain aestivation. What are its different types and give examples. | Evaluate | CO-3  CO-2 |
| 14. | a) Describe various stem modifications associated with food storage.  or  b) Design a fruit classification chart that categorizes different types of fruits with examples. | Create | CO-2  CO-2 |

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| **Cognitive Level** | **Marks** | **Percentage** |  | **Course Outcomes** | **Marks** | **Percentage** |
| Remember | 2 | 4.8 |  |  |  |  |
| Understand | 8 | 19.0 |  |  |  |  |
| Apply | 11 | 26.2 |  |  |  |  |
| Analyse | 7 | 16.7 |  |  |  |  |
| Evaluate | 7 | 16.7 |  |  |  |  |
| Create | 7 | 16.7 |  |  |  |  |
| **TOTAL** | **42** | **100** |  | **TOTAL** |  | **100** |