

Reg. No.: .....



Name: .....

**University of Kerala**

U9280

Second Semester FYUGP Degree Examination, April 2025

Multi-Disciplinary course

**BOTANY**

**UK2MDCBOT101 - Plants and Human welfare.**

Academic Level: 100-199

**Time: 1 Hour**

**Max. Marks: 28**

**Part A ,4 Marks ,Time 5 Minutes (Cognitive Level :Remember(RE)/Understand(UN))Objective Type 1 mark each, Answer all questions**

| Qn No. | Question                                                                       | CL | CO |
|--------|--------------------------------------------------------------------------------|----|----|
| 1      | Write the physiological process in plants that helps to purify the atmosphere. | RE | 1  |
| 2      | Name one biofuel source obtained from starchy crops.                           | RE | 4  |
| 3      | Discuss how lichens contribute to environmental monitoring.                    | UN | 1  |
| 4      | What are biofuels?                                                             | UN | 2  |

**Part B ,8 Marks ,Time 15 Minutes (Cognitive Level :Understand(UN)/Apply(AP))Short Answer 2 marks each, Answer all questions**

| Qn No. | Question                                                                                   | CL | CO |
|--------|--------------------------------------------------------------------------------------------|----|----|
| 5      | Summarise the uses of tobacco                                                              | UN | 3  |
| 6      | Explain the significance of Vavilov's concept of centers of origin in plant domestication. | UN | 1  |
| 7      | If you were to set up a biofuel plant, which starchy crop would you choose and why?        | AP | 4  |
| 8      | Explain the nutritional uses of Ulva, Codium, and Chondrus algae.                          | AP | 4  |

**Part C ,16 Marks ,Time 40 Minutes (Cognitive Level :Apply(AP)/Analyse(AN)/Evaluate(EV)/Long Answer 4 marks each, Answer all questions choosing among options\* within each question**

| Qn No. | Question                                                                                                                                                                                                                                   | CL | CO   |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|------|
| 9      | A) If a new rice plant species is found in a region, how would you develop a new variety from it ?<br>OR<br>B) a) Briefly describe the process of producing biofuels from a starchy crop                                                   | AP | 1, 4 |
| 10     | A) Analyse the contribution of Cinchona in the treatment of malaria and compare it with the role of Vinca in cancer therapy. OR<br>B) Analyze the the different steps involved in biofuel production from starchy crops like sweet potato. | AN | 3, 4 |
| 11     | A) Evaluate the process of plant domestication in relation to human agricultural practices. OR<br>B) Is biofuel a viable long-term energy solution? Justify your answer.                                                                   | EV | 1, 4 |
| 12     | A) Compose a report on the environmental benefits of using sweet potato as a biofuel crop. OR<br>B)<br>Design a study on different types of phytoremediation.                                                                              | CR | 2, 4 |