

Reg. No.:



Name:

University of Kerala

W6557

Third Semester FYUGP Degree Examination, November 2025

Value Addition Courses

BOTANY

UK3VACBOT201 - Green initiatives for Sustainability

Academic Level: 200-299

2024 Admission

Time: 1 Hour 30 Minutes(90 Mins.)

Max. Marks: 42

Part A. 6 Marks.Time:6 Minutes.(Cognitive Level:Remember(RE)/Understand(UN)) Objective Type. 1 Mark Each.Answer all questions

Qn No.	Question	CL	CO
1	Name one Botanical Garden in Kerala.	RE	1
2	Name any two common plants can be used in Afforestation	RE	1
3	The concept of 3Rs (Reduce, Reuse, Recycle) mainly focuses on: Options : A) Waste minimization B)Industrial productivity C)Urban development D)Carbon sequestration	UN	1
4	Name the main active compound present in Neem oil with pesticidal properties	UN	1
5	Define agroforestry.	UN	1
6	What is the significance of Botanic Gardens in biodiversity conservation?	UN	2

Part B.8 Marks.Time:24 Minutes.(Cognitive Level:Understand(UN)/Apply(AP))Short Answer. 2 marks each.Answer all questions

Qn No.	Question	CL	CO
7	7.Differentiate between biofertilizers and biopesticides	UN	4
8	How does vermiculture differ from traditional composting?	UN	1
9	Describe the various types of energy audit.	AP	4
10	Discuss the role of Miyawaki forest in conservation.	AP	4

Part C. 28 Marks.Time:60 Minutes (Cognitive Level:Apply(AP)/Analyse(AN)/Evaluate(EV)/Create(CR)) Long Answer.7 marks each.Answer all 4 Questions choosing among options * within each question

Qn No.	Question	CL	CO
11	A) Apply the principles of sustainable agriculture to improve productivity in a small-scale farm	AP	3, 6

Qn No.	Question	CL	CO
	OR B) How can social forestry contribute to the reduction of deforestation and biodiversity loss?		
12	A) Compare and analyze the energy consumption patterns in residential and commercial buildings. Which sector has greater potential for energy conservation, and why? OR B) Analyze the advantages and limitations of biofertilizers and biopesticides in modern agriculture.	AN	4, 2
13	A) Evaluate the importance of energy conservation measures in reducing global warming OR B) Critically evaluate the role of non- conventional energy resources in achieving sustainable energy security	EV	3, 3
14	A) Develop an innovative plan for integrating solar and wind energy into existing thermal power grids to reduce carbon emissions. OR B) Suggest a plan for solid waste management in your institution	CR	4, 3