

Reg. No.:



Y7714

Name:

University of Kerala

Fourth Semester FYUGP Degree Examination, May 2026

Value Addition Courses

BOTANY

UK4VACBOT202 - Biodegradable waste management.

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	Define composting.	RE	1
2	4.What is leaf litter?	RE	1
3	.Explain the challenges in managing biodegradable waste.	UN	2
4	How do waste level sensors help waste collection?	UN	3
5	2.Explain why food waste is biodegradable	UN	1
6	Explain the role of biodegradable waste in energy generation.	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	9.Explain the role of anaerobic digestion in energy production.	UN	2
8	16.Explain the importance of bioplastics in reducing pollution.	UN	3
9	How can landfill sites be managed to minimize pollution?	AP	3
10	If a community produces large amounts of organic waste, how can vermi composting be implemented?	AP	3

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)	AP	3, 3

Qn No.	Question	CL	CO
	8. Suggest a model to encourage the use of eco-friendly technologies in waste management. OR B) 10. Discuss a method to apply green technologies in educational institutions.		
12	A) 10.Examine the causes behind the underutilization of bio-methanation systems. OR B) 7.Outline the challenges faced in compost production from organic waste.	AN	2, 2
13	A) 16.Appraise the importance of integrating technology with traditional waste practices. OR B) 15.Judge the role of future technologies in achieving zero-waste goals.	EV	3, 3
14	A) 6. Conceptualize a system to reduce organic waste generation at the community level . OR B) 3. Assemble a workable idea to convert kitchen waste into useful products in daily life .	CR	2, 2