A **Reg. No. :** | | | | | | | | | | | | |

Question Paper Code:UA406

B.E./B.Tech. DEGREE EXAMINATION, APRIL 2025

Professional Elective

Agricultural Engineering

21AGV406– LANDSCAPE ARCHITECTURE

(Regulations 2021)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. What plant types were introduced during the British influence in Indian gardens? CO1- U

   (a) Native plants (b) Exotic plant species (c) Bamboo and bonsai (d) Aquatic plants

2. Which of the following is a method of propagating palms? CO1-U

   (a) Only by division of clumps (b) Only by seeds

   (c) Both seeds and division of clumps (d) By cutting branches

3. Which chemical is used for weed management in lawn grass? CO1-U

   (a) Dimethoate (b) Glyphosate (c) Dithane M-45 (d) Acephate

4. Which of the following trees is suitable for peripheral planting in a school campus to reduce noise and dust? CO1-U

   (a) *Erythrinaindica* (b) *Eucalyptus* (c) *Bougainvillea* (d) *Tecomaargentea*

5. Which plant is suitable for a terrarium? CO1-U

   (a) Cactus (b) Maranta species (c) Large shrubs (d) Eucalyptus trees

6. Dry flower industry leader in India is CO1-U

   (a) Kerala (b) Tamil Nadu (c) Karnataka (d) Maharashtra

7. Ideal pH range for the growing medium in a roof garden is CO1-U

   (a) 3.5 – 5.0 (b) 5.5 – 8.0 (c) 6.0 – 7.0 (d) 7.5 – 9.0

8. What type of irrigation system can be used in roof gardens? CO1-U

(a) Drip irrigation (b) Overhead irrigation (c) Sprinkler systems (d) All of the above

9. What is the most expensive method of lawn making? CO1-U

(a) Seeding (b) Turfing (c) Turf plastering (d) Dibbling roots

10. What is the recommended frequency for fertilizing a lawn? CO1-U

(a) Once a year (b) Twice a year (c) Thrice a year (d) Monthly

PART – B (5 x 2= 10 Marks)

11. Name two significant contributions of the British to Indian garden designs. CO1- U

12. Discuss the advantages and disadvantages of the turfing method in lawn making. CO4- App

13. Write a short note on the types of plants suitable for hanging baskets. CO1-U

14. Outline the steps involved in installing a roof garden. CO1-U

15. What are the symptoms and control measures for chlorosis in lawns? CO1-U

PART – C (5 x 16= 80Marks)

16. (a) Discuss the importance, types, and uses of shrubs in gardening. CO1 U (16)

Or

(b) Discuss the role of ornamental palms and bulbous plants in landscaping, their propagation, and maintenance CO1 U (16)

17. (a) A customer wants to establish a rooftop ornamental garden with lightweight materials. Suggest the best container types and propagation media, considering weight and drainage properties CO2- App (16)

Or

(b) Imagine you are setting up a nursery for propagating ornamental plants in a region with limited water availability. Which propagation media and containers would you select, and why? Justify your choices considering water retention, aeration, and ease of handling. CO2- App (16)

18.	(a)	Discuss the functional and aesthetic uses of plant materials in landscaping, highlighting their environmental benefits, utility, and role in creating thematic designs	CO1- U	(16)
		Or		
	(b)	Describe the planting design process and principles, including site analysis, plant selection, and layering techniques. Provide examples to illustrate your answer	CO1- U	(16)
19.	(a)	Explain the key elements and recommendations for landscaping an educational institution. Highlight the roles of trees, shrubs, and lawns in enhancing aesthetics and functionality.	CO1- U	(16)
		Or		
	(b)	Elaborate on the factors to be considered for irrigation in roof gardens, along with the various irrigation methods used.	CO1- U	(16)
20.	(a)	Analyze the various factors influencing the success of lawn making by seeding, including the role of site preparation, soil conditions, seed selection, watering techniques, and ongoing maintenance practices in achieving a healthy and sustainable lawn	CO4- Ana	(16)
		Or		
	(b)	Analyze how practices like aerating, rolling, top dressing, TGRs, micronutrient application, and mowing impact the long-term health and functionality of a sports field. Discuss their contributions to soil quality, grass growth, and turf resilience, along with potential challenges.	CO4- Ana	(16)