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Question Paper Code: UA406

B.E./B.Tech. DEGREE EXAMINATION, NOV 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. Which of the following is NOT a principle of landscaping? CO1- U
(a) Open Center (b) Overcrowding (c) Balance (d) Rhythm
2. Which method of lawn making provides quick and instant establishment? CO1- U
(a) Seeding (b) Dibbling (c) Sprigging (d) Turfing
3. Which feature is commonly associated with Mughal Garden designs? CO1- U
(a) Minimalism (b) Symmetry and axial layouts
(c) Vertical gardens (d) Botanical research
4. Which of the following is suitable for "foundation planting" in a home landscape? CO1- U
(a) Tall evergreen trees (b) Low-growing shrubs and evergreens
(c) Fruit-bearing trees (d) Tall flowering plants
5. What is the primary purpose of hanging containers in a garden or indoor setting? CO1- U
(a) To grow vegetables
(b) To conserve space and provide aesthetic displays
(c) To improve soil drainage
(d) To increase plant productivity

6. What type of potting compost is recommended for hanging baskets to avoid excess weight? CO1- U
 (a) Soil-based (b) Sand-based (c) Peat-based (d) Clay-based
7. Which plant species is commonly used as a low-growing succulent in roof gardens? CO1- U
 (a) Marigold (b) Sedum (c) Thyme (d) Zoysia grass
8. What is the ideal pH range for lawn soil? CO1- U
 (a) 4.0 to 4.5 (b) 5.0 to 5.6 (c) 6.0 to 6.5 (d) 7.0 to 7.5
9. Which of the following is not a benefit of green roofs? CO1- U
 (a) Reduction of urban heat island effect (b) Decreased oxygen levels
 (c) Improved air quality (d) Enhanced thermal insulation
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. Describe two key features of Mughal garden designs and their philosophical significance. CO1- U
12. Discuss the importance of road and pathway planting in school landscaping. CO1- U
13. Explain the importance of selecting a suitable container for hanging baskets indoors. CO1- U
14. List the main components of the growing medium used in roof gardens. CO1- U
15. What are the symptoms and control measures for chlorosis in lawns? CO1- U

PART – C (5 x 16= 80 Marks)

16. (a) Elaborate on the latest trends in landscape design, including their purposes and real-world applications. Highlight their relevance in modern urban planning and environmental sustainability. CO1- U (16)
- Or
- (b) Elaborate on the basic principles of landscaping and explain how they contribute to effective garden design. Include relevant examples to illustrate each principle. CO1- U (16)

17. (a) Discover the various benefits of roof gardening and how can it be effectively implemented in urban areas to address the challenges of space and nutritional deficiencies? Discuss the different types of containers and methods of cultivation used in roof gardening. CO3-App (16)
- Or
- (b) Develop a nursery plan for a specific ornamental plant. Describe the steps you would take to prepare the nursery bed, select the propagation medium, and choose appropriate containers CO3-App (16)
18. (a) Imagine you are tasked with installing a vertical garden. Apply your understanding to recommend a suitable design, plants, and irrigation techniques CO2-App (16)
- Or
- (b) Apply the concept of using hanging containers in garden design to create a functional and aesthetically pleasing small urban garden. Consider factors like plant selection, space utilization and maintenance when planning your design CO2-App (16)
19. (a) Discuss the environmental, economic and aesthetic benefits of green roofs. 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) Apply the practices of aerating, rolling and top dressing to improve the quality of a turf field that has been experiencing poor drainage and uneven grass growth. Justify your choice of methods and explain how they would address the specific issues faced by the turf. CO3-App (16)
- Or
- (b) Apply 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. CO3-App (16)

