



Daffodil International University

Department of Agricultural Science

Faculty of Health & Life Sciences

Final Examination, Fall 2025

Course Code: 0811-1101

Section: All

Full Marks: 40

Course Title: Agronomy-I (Principles of Agronomy)

Level-Term: L-1, T-1

Teacher's Initial: MTA, SB

Time: 2 Hours

"Split answering is strictly prohibited"

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| ✓ 1. | a) Define bio-fertilizer and List down the bio-fertilizer with examples | PLO4 CLO6 C1 | 2 |
| | b) Discuss the benefits of bio-fertilizers | PLO3 CLO6 C6 | 2 |
| | c) Explain INM and write down the principles of INM | PLO4 CLO6 C2 | 4 |
| ✓ 2. | a) Identify of different field preparation techniques, such as conventional tillage and no-tillage, impact on long-term soil health, crop yield, and environmental sustainability? . | PLO1 CLO5 C3 | 5 |
| | b) Define soil fertility and product. A soil may be fertile but may not be productive - explain. | PLO4 CLO6 C1 | 3 |
| ✓ 3. | a) Compare between broadcasting and transplanting methods of seed sowing. | PLO5 CLO4 C5 | 3 |
| | b) Identify the tillage practices affect the physical, chemical, and biological properties of soil, and what implications do these changes have for long-term soil health and crop productivity? . | PLO1 CLO5 C3 | 5 |
| ✓ 4. | a) Define fertilizer and make a list of nitrogenous fertilizers with chemical formula. | PLO4 CLO6 C6 | 3 |
| | b) Distinguish between broadcasting and deep placement of fertilizer. | PLO4 CLO6 C4 | 5 |
| ✓ 5. | a) Outline the criteria did ^{Arendon} <u>Amon</u> (1954) lay down for the essentiality of elements in plants? | PLO3 CLO6 C2 | 1 |
| | b) Assess the work of Liebig and other nineteenth-century scientists contribute to the understanding of essential elements for plant growth? | PLO4 CLO6 C5 | 2 |
| | c) List down the primary nutrient elements and explain their deficiency symptoms. | PLO4 CLO6 C4 | 5 |