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BRAINWARE UNIVERSITY

Term End Examination 2025-2026

Programme – M.Sc.(AG)-Agronomy-2025

Course Name – Cropping System and Sustainable Agriculture

Course Code - AGRON511E

(Semester II)

Full Marks : 60

Time : 2:30 Hours

[The figure in the margin indicates full marks. Candidates are required to give their answers in their own words as far as practicable.]

Group-A

(Multiple Choice Type Question)

1 x 15=15

1. Choose the correct alternative from the following :

- (i) Explain the process of harnessing solar energy in the form of economic plant and animal product
 - a) Farming
 - b) Farming system
 - c) cropping system
 - d) none of the above
- (ii) Explain the farming type where entire production is used for family consumption
 - a) Subsistence
 - b) Intensive
 - c) Extensive
 - d) mixed farming
- (iii) Identify the correct option: Farming in which linking together of two or more normally separate farming systems which become subsystem of a whole farming system is
 - a) Specialized
 - b) integrated farming
 - c) Diversifies farming
 - d) none of the above
- (iv) Identify the correct option: Sustainable agriculture is derives from word
 - a) Greek
 - b) Latin
 - c) Italic
 - d) none of the above
- (v) Identify the correct option: Use of ex-situ FYM/Composts is used in
 - a) Conservation agriculture
 - b) degraded agriculture
 - c) conventional agriculture
 - d) intensive agriculture
- (vi) Identify the correct option: The practice of growing different crops of varying height, rooting pattern and duration is called as.....
 - a) multi-storied cropping
 - b) multi-tier cropping
 - c) Both of these
 - d) None of these
- (vii) Land equivalent ratio is >1.0%: What does it mean?
 - a) Yield advantage
 - b) No yield advantage or loss
 - c) Yield loss
 - d) All of these
- (viii) Show the correct option: Land equivalent ratio is useful index under

- a) Additive series
c) Both a and b
- b) Replacement series
d) None of these
- (ix) Show the correct option: Judicious mix of one or more enterprises with cropping is called
- a) Cropping system
c) Both a and b
- b) Farming system
d) None of these
- (x) Which is not a practice in SF in India?
- a) Cover crops
c) Crop rotation
- b) Floating farming
d) None of these
- (xi) Which SF practice has the maximum area in India?
- a) Mulching
c) Vermicomposting
- b) Contour farming
d) Crop rotation
- (xii) Show the correct option: Growing two or more crops on the same piece of land simultaneously with definite Row pattern is?
- a) Relay Cropping
c) Intercropping
- b) Sequence Cropping
d) Mix Cropping
- (xiii) What is Farming System?
- a) Atomistic approach
c) Holistic approach
- b) Individual approach
d) Both of these
- (xiv) Which one is the best alternate of soil sterilization?
- a) Burning of crop residues
c) Saline treatment of the land
- b) Soil steaming
d) All of these
- (xv) Which will reduce the need for tillage?
- a) Perennial crops
c) Seasonal crops
- b) Annual crops
d) All of these

Group-B

(Short Answer Type Questions)

2.5 x
6=15

2. Define the term Farming system. (2.5)
3. Explain the definition of Cropping system. (2.5)
4. Define the term multiple cropping. (2.5)
5. Explain the term Mixed cropping system. (2.5)
6. Explain the Advantages of Sustainable Agriculture. (2.5)
7. Simplify the term Ecological footprint. (2.5)

OR

Simplify the term carbon foot print. (2.5)

Group-C

(Long Answer Type Questions)

5 x 6=30

8. Classify the different types of farming system. (5)
9. Discuss the different objectives of farming system. (5)
10. Discuss the basic principles of cropping system. (5)
11. Illustrate the problems of monocropping. (5)
12. Summarize the difference between intercropping system and mixed cropping system. (5)
13. Explain the Fundamental Principles of Sustainable Agriculture. (5)

OR

Explain the main goals of Sustainable Agriculture. (5)
