Reg. No. \_\_\_\_\_\_\_\_\_\_\_\_\_

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**End Semester Examination – Nov / Dec – 2019**

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| **Code :** | **18AG2007** | **Duration :** | **3hrs** |
| **Sub. Name :** | **FARMING SYSTEMS AND SUSTAINABLE AGRICULTURE** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | | **Course Outcome** | | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | | | |
|  | **Fill in the blanks:** | | | | |
| 1. | Set of components that are interacting with each other is called as \_\_\_\_\_\_\_\_\_\_. | | | CO1 | 1 |
| 2. | Cropping intensity index of India is \_\_\_\_\_\_\_\_\_\_ . | | | CO1 | 1 |
| 3. | Growing same crop year after year in the same field is called as \_\_\_\_\_\_\_\_\_\_ . | | | CO2 | 1 |
| 4. | Coimbatore district is located in \_\_\_\_\_\_\_\_\_\_ agroclimatic zone. | | | CO1 | 1 |
| 5. | Converting waste materials into nutrient rich organic manure with earth worm is called as \_\_\_\_\_\_\_\_\_\_ . | | | CO3 | 1 |
|  | **Choose the best answer:** | | |  |  |
| 6. | Short duration crops and varieties should be selected for | | | CO1 | 1 |
|  | 1. Dry farming areas | 1. Monocropping areas | |  |  |
|  | 1. Integrated farming system | 1. Rainfed agriculture | |  |  |
| 7. | Mulching with crop residues is done for | | | CO3 | 1 |
|  | 1. Weed control | 1. Moisture conservation | |  |  |
|  | 1. Reducing Soil erosion | 1. All the above | |  |  |
| 8. | Growing three or more crops in different height in the same field is called | | | CO1 | 1 |
|  | 1. Multiple cropping | 1. Triple cropping | |  |  |
|  | 1. Multitier cropping | 1. All the above | |  |  |
| 9. | Seed treatment with bio fertilizer is the main component of | | | CO3 | 1 |
|  | 1. HEIA | 1. LEIA | |  |  |
|  | 1. No cost technology | 1. None of the above | |  |  |
| 10. | Yearly sequence and special arrangement of crops and fallow in a year is called as | | | CO2 | 1 |
|  | 1. Cropping system | 1. Integrated farming system | |  |  |
|  | 1. Farming system | 1. Cropping pattern | |  |  |
|  | **Ture or False:** | | |  |  |
| 11. | Goat rearing is the main component of dryland integrated Faming System. | | | CO1 | 1 |
| 12. | Growing three crops in a year in sequence in the same field is called as Quadruple cropping. | | | CO1 | 1 |
| 13. | Waste material of one enterprise should not be included as input of other enterprise in IFS. | | | CO3 | 1 |
| 14. | Raising sunhemp and in situ incorporation in the same field is called as green manuring. | | | CO3 | 1 |
| 15. | For efficient intercropping, land equivalent ratio should be more than one. | | | CO2 | 1 |
|  | **Match the following :** | | |  |  |
| 16. | Land Equivalent Ratio - Wet Land IFS | | | CO1 | 1 |
| 17. | Sustainable Agriculture - Garden land IFS | | | CO1 | 1 |
| 18. | Mushroom cultivation - Menegay | | | CO1 | 1 |
| 19. | Silkworm rearing - Willey | | | CO1 | 1 |
| 20. | Cropping Intensity Index - Agro forestry | | | CO1 | 1 |

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| **PART – B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | What are the characteristics of Indian Agriculture? | CO1 | 5 |
| 22. | Differentiate between cropping system and farming system. | CO2 | 5 |
| 23. | List out the indices used for evaluating the cropping systems. | CO2 | 5 |
| 24. | Briefly discuss vermicomposting. | CO3 | 5 |
| 25. | Define sustainable Agriculture. Enumerate the factors that affect sustainable agriculture. | CO3 | 5 |
| 26. | What is the meaning of HEIA? How HEIA can be achieved? | CO1 | 5 |
| 27. | What are the characteristics of integrated farming system? | CO1 | 5 |
| 28. | Define intercropping. List out the different intercropping systems with examples. | CO2 | 5 |
| 29. | Define conservation agriculture. What are the components of conservation Agriculture? | CO1 | 5 |
| 30. | What are the no cost technologies that can be used for sustainable yield? | CO3 | 5 |
| 31. | Recommend the best dryland IFS model suitable for western agroclimatic zone of Tamilnadu. | CO2 | 5 |
| 32. | Briefly discuss alternate land use system that can be adopted for low rainfall areas. | CO3 | 5 |

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| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
| 33. | a. | Define integrated farming System. What are the enterprises that can be included in wetland Integrated farming system. | CO1 | 15 |
| b. | Explain in detail the resource recycling wet land IFS with suitable examples. | CO3 |
|  |  |  |  |  |
| 34. | a. | List out the LEISA technologies and discuss each technology in brief. | CO3 | 15 |
| b. | Define relative crowing coefficient and Cultivated Land utilization index. How these indicies are used in intercropping system? | CO2 |
|  |  |  |  |  |
| 35. | a. | What are the objectives and the advantages of integrated farming system? | CO3 | 15 |
| b. | What are the different types of farming? List out the systems of farming and their characteristics in detail. | CO1 |