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

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

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| **Code :** | **18AG2038** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PRECISION FARMING AND AGRO INFORMATICS** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | **Course Outcome** | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | |
| 1. | Define site specific management. | CO1 | 1 |
| 2. | Write the characteristic features of geo-referencing. | CO2 | 1 |
| 3. | Expansion of GIS and GPS. | CO1 | 1 |
| 4. | List out tools used in block chain marketing. | CO1 | 1 |
| 5. | Define UMAV. | CO1 | 1 |
| 6. | What is e-agriculture? | CO2 | 1 |
| 7. | Define agricultural expert system. | CO1 | 1 |
| 8. | Differentiate between Wofost and Cropsyst. | CO2 | 1 |
| 9. | What is decision support system? | CO1 | 1 |
| 10. | Write any two applications of ICT in agriculture. | CO1 | 1 |
| 11. | Brief soil information system. | CO2 | 1 |
| 12. | Define geospatial technology. | CO1 | 1 |
| 13. | Brief computer controlled devices used for irrigation. | CO2 | 1 |
| 14. | List out applications of IT in nutrient management. | CO1 | 1 |
| 15. | Define Fertigation. | CO1 | 1 |
| 16. | List the application of mobile mapping systems in agriculture. | CO1 | 1 |
| 17. | List the crop simulation models used in agriculture. | CO1 | 1 |
| 18. | What is contigent crop planning? | CO1 | 1 |
| 19. | List out the sensors used in precision farming systems. | CO1 | 1 |
| 20. | Write any two precision farming technologies used in banana cultivation. | CO2 | 1 |

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| **PART – B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | Discuss the importance of GPS in precision farming. | CO1 | 5 |
| 22. | Write in detail the UMAV and its tools. | CO1 | 5 |
| 23. | Explain the Fertigation technology installation with sensors. | CO2 | 5 |
| 24. | Write short notes on crop simulation models. | CO2 | 5 |
| 25. | Explain precision farming technology of cotton. | CO2 | 5 |
| 26. | Write in detail on computer models for understanding plant growth processes. | CO1 | 5 |
| 27. | Explain computer controlled devices for agri-input management. | CO1 | 5 |
| 28. | Discuss the smartphone Apps for farm market prices and post-harvest management. | CO2 | 5 |
| 29. | Explain geo-spatial technology for generating agri-information systems. | CO1 | 5 |
| 30. | Write short notes on Cropsyst. | CO1 | 5 |
| 31. | Explain corpcontigent planning using IT tools. | CO2 | 5 |
| 32. | Explain agriculture expert systems for nutrient management. | CO2 | 5 |

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| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
| 33. | a. | Give a detailed account of GIS and GPS in precision farming. | CO1 | 8 |
| b. | Explain the scope, importance, and application of UMAV in precision famring. | CO1 | 7 |
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| 34. | a. | Write in detail the sensors used in precision farming of banana and tomato. | CO2 | 8 |
| b. | Discuss the role of ICT in agriculture. | CO1 | 7 |
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| 35. | a. | Explain the scope of crop simulation model for understanding plant processes with its types and applications. | CO2 | 8 |
| b. | Discuss in detail the smartphone app and computer controlled devices for precision farming. | CO1 | 7 |