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

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

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| **Code :** | **18AG2022** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PRINCIPLES OF INTEGRATED PEST AND DISEASE MANAGEMENT** | **Max. Marks :** | **100** |

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| **Q. No.** | **Questions** | | **Course Outcome** | **Marks** |
| **PART – A (20X1=20 MARKS)** | | | | |
| 1. | | Define a sporadic pest. | CO2 | 1 |
| 2. | | What is an absolute estimate of population? | CO1 | 1 |
| 3. | | State Kosch’s Postulate. | CO1 | 1 |
| 4. | | What is epiphytotic? | CO1 | 1 |
| 5. | | Write down the formula of infection index of a plant disease with grades 0 to 4. | CO1 | 1 |
| 6. | | In what situation Bordeaux paste is used? | CO2 | 1 |
| 7. | | What do you mean by antixenosis of host plant resistance? | CO1 | 1 |
| 8. | | What is polygenic resistance mechanism? | CO1 | 1 |
| 9. | | Mention any one type of mode of action of systemic fungicide. | CO2 | 1 |
| 10. | | Name each one of an egg parasitoid, larval parasitoid and pupal parasitoid. | CO2 | 1 |
| 11. | | Mention any two biocontrol agents as antagonistics of plant pathogens. | CO2 | 1 |
| 12. | | What is the mode of action of elemental sulfur against fungi? | CO2 | 1 |
| 13. | | What is the mode of action of OP compounds? | CO2 | 1 |
| 14. | | Name any four insect orders comprising of predators. | CO2 | 1 |
| 15. | | Name any two insecticides of plant origin. | CO2 | 1 |
| 16. | | Which intercrop is planted in cotton, chillies and tomato fields against *Spodoptera litura*? | CO1 | 1 |
| 17. | | What are semiochemicals? | CO1 | 1 |
| 18. | | Name the insect controlling protein expressed by transgenic plants. | CO2 | 1 |
| 19. | | Where is NCIPM (National Center for Integrated Pest Management) head quarters functioning ? | CO2 | 1 |
| 20. | | How GIS based risk mapping of crop pests is helpful in IPM? | CO2 | 1 |

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|  | **PART – B (10 X 5= 50 MARKS)**  **(Answer any 10 from the following)** | | |
| 21. | Enumerate the eradication principles of plant diseases. | CO1 | 5 |
| 22. | What do you mean by domestic quarantine? | CO2 | 5 |
| 23. | What is pest risk analysis? | CO1 | 5 |
| 24. | Define economic injury level. | CO1 | 5 |
| 25. | What are the physical factors to protect the crops from plant diseases. | CO2 | 5 |
| 26. | What is a phytosanitary certificate? | CO2 | 5 |
| 27. | What is a life table? What is its use? | CO1 | 5 |
| 28. | What is the mode of action of Bt in insects? | CO1 | 5 |
| 29. | Differentiate between parasitoid and predator. | CO2 | 5 |
| 30. | Write a short note on fumigants in plant protection. | CO2 | 5 |
| 31. | How forecasting of diseases is evaluated? | CO1 | 5 |
| 32. | List some safe handling methods of pesticides. | CO2 | 5 |

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| **PART – C (2 X 15= 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
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| 33. | a. | Give a detailed account of the causes of plant diseases by biotic and abiotic agents. | CO1 | 8 |
| b. | Classify plant diseases according to their prevalence or occurrence. | CO1 | 7 |
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| 34. | a. | Chemically classify synthetic organic insecticides by quoting examples. | CO2 | 8 |
| b. | Give a brief account of neonicotinoid insecticides. | CO2 | 7 |
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| 35. | a. | Enumerate various tools of IPM (Integrated Pest Management). | CO1 | 8 |
| b. | Validate an IPM module either for cotton boll worms or blast and blight of rice. | CO2 | 7 |