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

****

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

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| **Code :** | **18AG2023** | **Duration :** | **3hrs** |
| **Sub. Name :** | **PESTS OF CROPS AND STORED GRAINS AND THEIR MANAGEMENT** | **Max. Marks :** | **100** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | | **Questions** | **Course Outcome** | **Marks** |
| **PART – A (20 X 1 = 20 MARKS)** | | | | |
| 1. | Write the boll worm complex of cotton. | | CO2 | 1 |
| 2. | List out pod borers affecting pulse crops. | | CO2 | 1 |
| 3. | Give four major symptoms caused by sucking insect pests. | | CO2 | 1 |
| 4. | Write the damage symptoms of rhinoceros beetle. | | CO2 | 1 |
| 5. | Name the vector and casual organism for gingelly 'phyllody'. | | CO1 | 1 |
| 6. | List the castor foliage feeders. | | CO1 | 1 |
| 7. | How to manage brinjal shoot and fruit borer. | | CO2 | 1 |
| 8. | Write the scientific name, family and order for castor semiooper. | | CO1 | 1 |
| 9. | Give four major symptoms caused by thrips on onion and chillies. | | CO2 | 1 |
| 10. | What are the management practices for 'pollu beetle' on pepper. | | CO3 | 1 |
| 11. | List out the common rodents causing damage in households/godowns. | | CO2 | 1 |
| 12. | List the symptoms of Ragi root aphid. | | CO2 | 1 |
| 13. | List two stored product pests carried from field to storage with Scientific names. | | CO1 | 1 |
| 14. | Mention any two trap crops. | | CO1 | 1 |
| 15. | Mention the causes for the outbreak of BPH in rice. | | CO3 | 1 |
| 16. | What are the biological control measures for pappaya mealy bug? | | CO3 | 1 |
| 17. | Mention any four alternate host for *Conogethes puntiferalis.* | | CO1 | 1 |
| 18. | Name any two locust species found in India. | | CO1 | 1 |
| 19. | List any four mite species infesting horticulture crops. | | CO1 | 1 |
| 20. | List any four weevil species infesting horticulture crops. | | COI | 1 |

|  |  |  |  |
| --- | --- | --- | --- |
| **PART - B (10 X 5 = 50 MARKS)**  **(Answer any 10 from the following)** | | | |
| 21. | Enumerate the IPM practices for common vegetable crop pests. | CO3 | 5 |
| 22. | Write the IPM practices for storage insect and non-insect pests. | CO4 | 5 |
| 23. | Give the IPM practices for tea mosquito bug affecting tea, neem tree and cashew. | CO3 | 5 |
| 24. | List the pests of coffee and write the IPM practices for them. | CO3 | 5 |
| 25. | Write the IPM practices for managing birds. | CO3 | 5 |
| 26. | Enumerate the IPM practices for pests of sweet potato. | CO3 | 5 |
| 27. | Write the IPM practices for managing sucking pests of pepper and cardamom. | CO3 | 5 |
| 28. | Can Bt cotton be one of the components of IPM to manage the pests in cotton – Discuss. | CO4 | 5 |
| 29. | List out the important pests of banana and explain the management measures. | CO1 | 5 |
| 30. | Explain the IPM practices to be adopted in groundnut. | CO3 | 5 |
| 31. | List out some important pest of bhendi and write management measures to combat them. | CO1 | 5 |
| 32. | Write Maize and sorgum shoot fly and borer biology management. | CO2 | 5 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **PART – C (2 X 15 = 30 MARKS)**  **(Answer any 2 from the following)** | | | | |
| 33. | a. | List ten major pests of rice. Give IPM for yellow stem borer and leaf folder of rice. | CO1 | 8 |
| b. | Describe host plants, biology, damage, larva and adult characters and detailed IPM methods of *Heicoverpa armigera*. | CO4 | 7 |
|  |  |  |  |  |
| 34. | a. | What are the borer pests of sugarcane? Write IPM for sugarcane borers. | CO3 | 8 |
| b. | Write in detail the biology, nature of damage and management of coconut back headed caterpillar and red palm weevil. | CO2 | 7 |
|  |  |  |  |  |
| 35. | a. | List out the important pests of mango along with symptoms of damage and management practices. | CO1 | 8 |
| b. | List out the major pests of cruciferous vegetables. Write the bionomics, symptoms of damage and management of diamond back moth. | CO2 | 7 |