JHARKHAND Rai University
RANCHI

End Semester/Reappear (Semester V) Examination December 2024

Programme:B. Sc. (Hons.) Agriculture

Course:Pest of Crops and Stored Grains and their Management **Full Marks: 50**

Course Code:13A.313 **Time: 2 Hrs.**

Enrolment no. _____

Q.No.	Questions	CO	Bloom Taxonomy Category	Marks
	Section I			
1	**Short Answer type questions.**			**4 x 5 = 20**
a	If a garden has wilting plants with hollow stems, which pests might be responsible? Explain your reasoning.	CO3	Understand	
	or			
	Differentiate between the damage caused by direct defoliators and sap-sucking insects on crop yield.	CO3	Understand	
b	A farmer is experiencing an increase in whitefly infestations on his tomato crop. Suggest three non-chemical methods they could apply to manage the whitefly population effectively.	CO4	Apply	
	or			
	How would you identify and treat an aphid infestation in a nursery of ornamental plants?	CO4	Apply	
c	Explain how improper moisture control can lead to fungal contamination in grains.	CO1	Understand	
	or			
	Explain the role of temperature in development of insect pests in stored grain.	CO1	Understand	
d	Describe how leafhopper feeding affects the appearance and quality of field crops.	CO2	Understand	
	or			
	Differentiate between pests of sugarcane borers and root feeders.	CO2	Understand	
	Section II			
Long Answer type questions.				**2 x 15 = 30**
2	a. Evaluate the damage caused by black-headed caterpillars, dusky cotton bugs, and rose thrips, and describe appropriate management practices for controlling these pests.	CO3	Evaluate	
	b.Describe the process of assessing pest damage in a small-scale coconut plantation.	CO3	Apply	
	or			
	a. Provide an overview of the distribution, host range, damage symptoms, life cycle, and control measures for three pests of coffee crop, along with their scientific names, orders, and families.	CO3	Analyze	
	b. Briefly explain Cigarette beetle.	CO3	Understand	
3	a. Create an integrated plan for grain storage management that includes guidelines for pest control, moisture management, and structural maintenance.	CO4	Create	
	b.If faced with fungal contamination in stored grain, what steps would you take to control it?	CO4	Apply	
	or			
	a. Compare and contrast the efficiency of physical, biological, and chemical control measures in preventing insect infestations in stored grain.	CO4	Analyze	
	b. Apply integrated pest management (IPM) to control insect pests in a grain storage facility?	CO4	Apply	

Course Outcome:

At the end of the course, the students will be able to-

CO1 Understand the biology, diversity, distribution of insects, and their relationships with crop and the environmental condition of a particular area.

CO2 Comprehend the identification method of different insect pest of field, horticultural crops and stored grains at the field level.

CO3 Skill development in identification of nature of damage and symptoms caused by the pests for using suitable techniques of pest management for effective control.

CO4 Comprehend the management of crop pest through Integrated Pest Management approach.