J.S. University, Shikohabad

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VALUE ADDED COURSE

"Stored Grain Insect Pests and Management:
Techniques for Protecting Stored Crops"

Faculty of Agricultural Sciences



J.S. University, Shikohabad Faculty of Agricultural Sciences

Value Added Course

AGVAC-16

"Stored Grain Insect Pests and Management: Techniques for Protecting Stored Crops"

Learning Objectives:

This value-added course will provide students with an understanding of the common insect pests that infest stored grains and the methods used for managing these pests. Students will learn about the biology and behavior of stored grain insect pests, the techniques for detecting and monitoring their populations, and the strategies for preventing and controlling infestations.

Course Outcomes:

Upon completion of this course, students will be able to:

- 1. Identify and classify stored grain insect pests
- 2. Understand the biology and behavior of stored grain insect pests
- 3. Develop strategies for preventing and controlling stored grain insect infestations
- **4.** Apply the principles of integrated pest management to manage stored grain insect pests

Duration: 8-10 weeks (depending on the pace of the student)

Intake: 60 students



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Course Modules (Syllabus):

Module-1

Introduction to Stored Grain Insect Pests

- Overview of stored grain insect pests and their impact on crop production
- Identifying and classifying stored grain insect pests
- The biology and behavior of stored grain insect pests

Module-2

Detection and Monitoring of Stored Grain Insect Pests

- Techniques for detecting and monitoring stored grain insect populations
- The use of traps, pheromones, and other monitoring tools
- Sampling methods for determining pest densities

Module-3

Prevention and Control of Stored Grain Insect Pests

- Strategies for preventing stored grain insect infestations
- The use of cultural and physical control methods
- The use of chemical control methods

Module-4

Integrated Pest Management of Stored Grain Insect Pests

- Principles and practices of integrated pest management
- Developing an integrated pest management plan for stored grain insect pests
- Monitoring and evaluating the effectiveness of pest management strategies



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Assessment:

- Weekly quizzes and assignments
- Final project on designing and implementing stored grain insect management plan.

Reference books:

- Insect Pests of Stored Grain: Biology, Behavior, and Management Strategies by D. P. Singh and R. N. Sinha
- 2. Stored Grain Ecosystems by D. P. Singh and R. N. Sinha
- 3. Stored-Grain Pests and Their Management by J. K. Sharma and D. R. Goyal
- **4.** Integrated Pest Management of Stored Products by M. Mahroof and T. M. Thayaparan

5. Stored Grain Pests and their Control in India by S. S. R. Rao and R. N. Sinha

Name of Faculty)

Course Coordinator

Dean of Faculty

(Name of Faculty)

(Name of Faculty)

Director General