



**Gandhi Institute of Engineering and Technology University, Odisha,
Gunupur
(GIET University)**

B. Sc. (Ag.)(Third Semester) Examinations, January – 2024
ENT-212 – Pests of Crops and Stored Grains and Their
Management

Time: 2 hrs

Maximum : 50 Marks

The figures in the right hand margin indicate marks.

PART – A

Q.1. Fill in the blanks with suitable word / figure.

(0.5 x 10 = 5 Marks)

- Circular hole on rice grains is caused by..... under storage condition
- Scientific name of mango hopper.....
- Yellow sticky trap is effective against.....
- Othreis fullonica* causes damage in citrus at stage of it's life cycle
- Example of multiple dose anticoagulant rodenticide is.....
- Pigeon pea sterility mosaic virus is transmitted by.....
- Banding of mango tree trunk with grease is done to control.....
-is used as trap crop of against *Helicoverpa armigera* in cotton
- Gummosis is caused by..... in coconut
- Banana bunchy top disease is transmitted by.....

Q. 2. Define (or) Explain the following in one or two sentences.

(1 x 5 = 5 Marks)

- Pest
- Alley ways
- Parasitoid
- Symptoms of FAW in maize
- Secondary stored grain pest

Q3. Match the following

(0.5 x 10 = 5 Marks)

Column – A

Column – B

- | | |
|--|-----------------------------------|
| (a) Avoid excess use of N fertilizer | i. <i>Epiricania melanoleuca</i> |
| (b) Sugarcane pyrrilla | ii. Panicle mites |
| (c) White stippling on leaves | iii. BPH |
| (d) Chaffy panicles of rice not easily pulled out | iv. Thrips/mites |
| (e) Citrus tristeza | v. GLH |
| (f) Tungro virus disease in rice | vi. Green triangle pesticide |
| (g) Trash mulching | vii. <i>Toxoptera citricidi</i> |
| (h) Black sooty mould on upper surface of coconut leaves | viii. Sugarcane early shoot borer |
| (i) Frasses and excreta in central whorl of maize | ix. Rugose spiralling whitefly |
| (j) Chlorantraniliprole | x. Fall army worm |

Q4. Write True or False against each statement

(0.5 x 10 = 5 Marks)

- a. Sexual dimorphism is observed in Yellow stem borer of rice.
- b. Khapra beetle is a secondary pest of stored grains.
- c. Zinc phosphide is an acute rodenticide.
- d. Shot holes on leaves of grape vines are caused due to grape vine stem girdler.
- e. Rosette flowers in cotton are caused due to American boll worm.
- f. Floating cases in rice is caused due to rice BPH.
- g. Bagging of pomegranate fruits is done to avoid *Deudorix isocrates*.
- h. Hadda beetle is a pest of mustard.
- i. Cashew stem and root borer completes one life cycle in a year.
- j. *Rhynchophorus ferrugineus* have six black spot on thorax and male has conspicuous long snout having tuft of hairs.

PART – B

Attempt ANY FIVE questions. All question carries equal marks

(6 x 5 = 30 Marks)

5. Write about various traditional and improved grain storage structures.
6. Elaborate the IPM practices followed to manage the sugarcane pests.
7. Enlist the important pests of mustard, their damage symptoms and management.
8. Explain the non-chemical methods for management of pests of rice.
9. What are non insect pests? Enlist important non insect pests with their damage symptoms and management.
10. Mention the marks of identification and damage symptoms of:
 - i. FAW
 - ii. Epilachna beetle
 - iii. Fruit fly

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