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GIET UNIVERSITY, GUNUPUR – 765022
B. Sc. (Ag.) (Third Semester) Examinations, February – 2023
ENT-212 – Pests of Crops, 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)

- a. Drying of rice plants spreads in a circular fashion is the symptom of ----- pest
- b. Earthing up will be followed to avoid the damage of _____ in sugar cane
- c. In sorghum crop, using of a higher seed rate of 12 kg/ha instead of normal rate of 10 kg/ha is followed to avoid _____ pest
- d. Complete green-coloured forewings in adults are seen in _____ pest of cotton.
- e. _____ insect wings forms diamond like white patches dorsally when wings are folded over back at rest.
- f. In mango orchards, _____ constructs webbings of leaves, without causing damage to leaves.
- g. In citrus, _____ adult pierces the ripe fruit with its strong proboscis and sucks the sweet juice.
- h. _____ girdles (ringing) the grape vine stem as a pre – ovipositional operation resulting in drying up of regions beyond the cut.
- i. Pomegranate flowers and fruits show scab like rough surface is the symptom of _____
- j. Typical 'V' shaped clipping/ cuts on mature coconut leaves is the attack of _____

Q. 2. Define (or) Explain the following in one or two sentences. 1 x 5 = 5 Marks)

- a. Alley ways or path ways
- b. Pigeon pea sterility mosaic virus
- c. Bonfires in ground nut
- d. Coconut root feeding technique
- e. Fruit bagging in citrus

Q3. Match the following (0.5 x 10 = 5 Marks)

Column – A		Column – B	
(a)	Rice hispa	(i)	Yellow Vein Mosaic Virus
(b)	Sugar cane leaf hopper	(ii)	Papilionide
(c)	Brinjal fruit with holes	(iii)	Beetle with spines
(d)	Okra	(iv)	Tomato
(e)	Serpentine leaf miner	(v)	Shoot and fruit borer
(f)	Jasmine mite	(vi)	<i>Epiricania melanoleuca</i>
(g)	Rodenticide	(vii)	<i>Aceria jasmine</i>
(h)	Fruit fly	(viii)	Circular leaf cuttings
(i)	Citrus butterfly	(ix)	Bromadiolone
(j)	Rose leaf cutter bee	(x)	Methyl eugenol

Q4. Write True or False against each statement

(0.5 x 10 = 5 Marks)

- a. Grass hoppers are monophagous pest
- b. Mango stem borer belongs to family pyralidae
- c. Due to the damage of inter nodal borer, sugar cane tissue turns into yellow colour
- d. *Trichogramma australicum* is a egg parasitoid
- e. Killing of soldier termites is followed in termites management
- f. Rosette flowers observed in american bollworm damage
- g. Red gram plume moth forewings are divided into two parts and hindwings into three parts
- h. In case of severe white grub infestation the patches of dead plants are seen in the ground nut fields.
- i. "CUE LURE" is an effective attractant being used to trap pumpkin beetles
- j. Sphinx moth/ gingly hawk moth / death's head moth sucks honey from honey combs and cause annoyance to bees.

PART – B

Attempt ANY FIVE questions. All question carries equal marks

(6 x 5 = 30 Marks)

5. Name the sucking pests occurring in cotton crop with their scientific name, family and order. Describe the nature of damage with management practices for cotton white fly and cotton jassids.
6. List out the pod borers that are attacking pulses with their scientific name, family and order. Describe the symptoms of damage of any three borers among them.
7. Mention the important pests of sorghum, explain the nature and symptoms of damage of sorghum shoot fly, sorghum stem borer & sorghum midge
8. Name the pests in cotton bollworm complex with their scientific name, family and order. Describe the nature of damage with management practices for cotton bollworm complex.
9. Enlist the sugarcane borers with their scientific name, family and order and describe their nature & symptoms of damage.
10. Enlist the major pests that are occurring in rice with their scientific names, family and order. Describe the symptoms of damage and the management practices of rice yellow stem borer and brown plant hopper.

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