

**PARUL UNIVERSITY**  
**COLLEGE OF AGRICULTURE**  
**B.Sc. (Hons.) Agriculture Winter-2019-20 Examination**

Semester: 5

Subject Code: 20104301

Subject Name: Crop pests and stored grain pests and their management

Date: 20/11/2019

Time: 10:30 am to 01:00pm

Total Marks: 60

**Instructions**

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

**Q.1 Do as Directed.****A. Fill in the blanks. (Each of 1.00 marks)****(10)**

1. Rice weevil classified under \_\_\_\_\_ category.
2. \_\_\_\_\_ is the voracious and most destructive pest of cereals.
3. \_\_\_\_\_ is the minute stored grain insect pest.
4. \_\_\_\_\_ is the damaging stage of pulse beetle.
5. Tungro and yellow dwarf disease of rice transmitted by \_\_\_\_\_ pest.
6. \_\_\_\_\_ is the scientific name of case worm
7. \_\_\_\_\_ parasitizes larvae of *Corcyra cephalonica*.
8. \_\_\_\_\_ is the scientific name of cigarette beetle.
9. \_\_\_\_\_ and \_\_\_\_\_ pests are cotton strainers.
10. \_\_\_\_\_ tablets of Aluminum phosphide used per ton of grains

**B. Multiple choice type questions. (Each of 1.00 mark)****(10)**

1. Grassy stunt virus disease transmit by \_\_\_\_\_
  - a) Green leaf hopper
  - b) White backed plant hopper
  - c) Brown plant hopper
  - d) None of above
2. Damaging stage of Indian meal moths \_\_\_\_\_
  - a) Larvae
  - b) Pupae
  - c) Adult
  - d) None of above
3. Fumigants used for stored grain pests \_\_\_\_\_
  - a) Aluminium phosphide
  - b) Ethylene Dibromide
  - c) Both a and b
  - d) Zinc Phosphide
4. Scientific name of Brinjal fruit and shoot borer is \_\_\_\_\_
  - a) *Eublemma olivacea*
  - b) *Leucinodes orbonalis*
  - c) *Epilachna duodecastigma*
  - d) *Amrasca biguttula*
5. Notching of leaf margins by adults of \_\_\_\_\_ pest
  - a) Hadda beetle
  - b) Ash weevil
  - c) Stone weevil
  - d) Gundhi bug
6. New emerging invasive pest recently reported from Karnataka is \_\_\_\_\_
  - a) *Spodoptera frugiperda*
  - b) *Spodoptera exigua*
  - c) *Spodoptera litura*
  - d) None of above
7. Scientific name of Red rust flour beetle is \_\_\_\_\_
  - a) *Rhyzopertha dominica*
  - b) *Tribolium castaneum*
  - c) *Trogoderma granarium*
  - d) *Lasioderma serricorne*
8. \_\_\_\_\_ causing formation of a tubelike gall that is similar to "onion leaf" or "Silver-shoot".
  - a) *Nymphula depunctalis*
  - b) *Orseolia oryzae*
  - c) *Pelopidas mathias*
  - d) *Scirpophaga incertulas*
9. Pigeon pea sterility mosaic virus disease transmits by \_\_\_\_\_
  - a) Aphid
  - b) Eriophid mite
  - c) Whitefly
  - d) Jassid
10. Scientific name of Painted bug is \_\_\_\_\_
  - a) *Bagrada hilaris*
  - b) *Psalis pennatula*
  - c) *Pelopidas mathias*
  - d) *Hieroglyphus banian*

**Q.2 Do as Directed.**

**A. Define the following. (Any five)**

**(05)**

- 1.Hopper burn
- 2.Pest resurgence
- 3.Earthing up
- 4.Hot spot
- 5.Secondary pests
- 6.Internal feeders
- 7.Ratooning

**B. Answer the following. (Any Five)**

**(05)**

1. Difference between rice moth and rice weevil
2. Difference between primary pests and secondary pests
3. Give any five secondary stored grain pests names.
4. Advantages and disadvantages of earthen pots
5. Give names of three monophagous pests of cereal crops
6. Difference between dry grain heating and wet grain heating
7. Any tworeference books of crop pests and stored grain pests and their management

**Q.3 Write short notes. (Anyfive)**

**(15)**

1. Nature of damage of rice yellow stem borer and castor capsule borer
2. Nature of damage of Indian meal moth and Angoumois grain moth
3. Nature of damage of mustard sawfly and coconut rhinoceros beetle
4. Nature of damage of cotton pink bollworm and spotted boll worm
5. Factors affecting stored grain insect damage
6. Traditional storage structures

**Q.4 Attempt any Three/Long Questions/Example**

**(15)**

1. Management/ control measures of stored grain pests.
2. State practicable components of Integrated Pest Management of important pests of rice and coconut.
3. State practicable components of Integrated Pest Management of important pests of cotton and tomato.
4. State practicable components of Integrated Pest Management of important pests of castor and groundnut.