

M.Sc.(Ag.) Examination, 2019
Semester-II
Agricultural Entomology
Course : AEN-505
(Pests of Field Crops and their Management)

Time : 3 Hours

Full Marks : 50

Questions are of value as indicated in the margin.

Answer **any five** questions

1. Enumerate important insect-pests of sugar cane. Briefly discuss the nature and symptoms of damage caused by any three borer pests and termite of sugar cane. Mention some important cultural practices to manage their populations. 2+6+2=10
 2. Name major insect pests of rapeseed and mustard. Write nature and symptoms of damage caused by any two insects of them. Suggest some suitable management practices against them. 2+4+4=10
 3. Write in very brief on any two pests that attack rice crop at vegetative stage and other two pests that attack the crop at reproductive stage, including their management. 10
 4. Mention some important insect pests of cotton. Explain briefly the biology, seasonal incidence and nature of damage caused by boll worm complex of cotton. What are the possible reasons of increasing menace of these pests in cotton. 2+6+2=10
 5. Briefly discuss the importance of Gram pod borer in chickpea, Spotted pod borer in pigeonpea, Pea semilooper in pea and Bihar hairy caterpillar in green gram. Write effective management practices against them. 5+5=10
 6. Write short notes on **any four** of the following : 2.5×4=10
i) Yellow mite of Jute ii) Gram cut worm iii) Wheat aphid
iv) Sorghum shoot fly v) Sugarcane leaf hopper vi) Tur pod fly
 7. Mention non-chemical control measures against the insect pests for producing following symptom in crops: 2.0×5=10
i) Serpentine mine on leaves of pulse crop ii) Lint stainer of cotton
iii) Knotty fibre in jute iv) Dead heart of central shoot of wheat
v) Yellow mosaic of black gram
 8. Briefly explain the management practices based on ecological engineering for the pests of following crops : 5+5=10
i) Maize ii) Groundnut
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