



বিদ্যাসাগর বিশ্ববিদ্যালয়
VIDYASAGAR UNIVERSITY
Question Paper

B.Sc. Major Examinations 2021

(Under CBCS Pattern)

Semester - III

Subject : AGRO SERVICE

Paper : C 5 - T & P

(Crop Health, Problems and Diagnosis–Cereals, Pulses and Oil Seeds)

Full Marks : 60 (Theory : 40 + Practical : 20)

Time : 3 Hours

Candidates are required to give their answers in their own words as far as practicable.

The figures in the margin indicate full marks.

(Theory)

Group - A

A. Answer any **three** of the following questions :

12×3=36

1. Define insect pest? Write the important insect pests that cause major damage to paddy crop? How nematodes & snails damage paddy crop and what are the control measures? Do you think Rice stem borer is the most important insect pest in paddy field? If so state its symptoms of damage and control measures. 1+2+5+4
2. Why aphid and borer are serious insect pests in some oilseed and vegetable crops? What are the non-chemical and chemical methods of controlling these major insects? 2+5+5

3. Differentiate fungal, bacterial and viral diseases with example? What precautions should be taken to reduce the disease infestations of any crop? State important diseases of Rice and Wheat and mention their control measures. 2+2+(4+4)
4. Why pulse crops are important in a crop sequence. State the major insect and diseases of common pulse crops grown in West Bengal. Write their control measures. 3+6+3
5. What are the general precautions need to be taken for insect and disease management of pulse crops? As pulses are leguminous crops application of toxic insecticides or fungicides will be harmful for nodule formation and atmospheric N fixation—justify with your solutions. 6+6
6. Write in brief the important insects and diseases of common oilseed crops grown in West Bengal. State their eco-safe control measures. 8+4

Group - B

B. Answer any *two* of the following questions : 2×2=4

1. State the control measures of Gall Midge and Gandhibug.
2. Blight is a common disease of cereals, oilseeds and potato—justify the comment with eco-safe control measures.
3. Why rodents are harmful pest? In which crops this pest are commonly observed ?
4. Smut and rust diseases are commonly associated with which crops ? State any chemical used for prevention of smut or rust.

(Practical)

Paper - C 5 P

(Crop Health, Problems and Diagnosis—Cereals, Pulses and Oil Seeds)

Marks : 20

Group - A

A. Answer any *one* of the following question : 15×1=15

1. From your experience of field visit mention the important insects and diseases found in any common paddy-based crop sequence with symptoms and control measures.

2. Write the procedure of collection of specimens of major insect and disease pest during your study period.
3. State the important visual diagnosis of nutrient deficiency syndrome in plants.

Group - B

B. Answer any *one* of the following question :

5×1=5

1. Mention the identifying feature of damage of Pulses due to pod borer, hairy caterpillar, mosaic, root rot and wilt.
 2. Mention the identifying character of damage of rice due to stem borer, BPH, leaf folder, sheath blight and brown spot.
 3. Write in brief the identification of damage of wheat by seedling blight, smut and rust and of oilseed rapeseed–mustard by aphid and blight.
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