B.Sc. (Ag.) Honours Semester-IV Examination, 2017
Course No.: PPC-221
(Diseases of Field Crops and their Management)

Signature of Centre Superintendent

Roll No.: (in figure)_____(in words)_____

Student Index No._____Regn. No._____ of _____

Time: Two Hours **Full Marks: 40**

Questions are of value as indicated in the margin

Part-I
(Objective and Short Answer Type)
(Use only ball point pen)

Time: 20 minutes **Full Marks: 10**

Note: 1. Answer in question paper itself.
2. Striking, rewriting or overwriting are not allowed in the objective type questions.

1. State True (T) or False (F) in respect the following statements: **0.5×5=2.5**

i. Blast disease in the cause of Bengal famine. ☐

ii. Groundnut rust is an *autoceous* rust. ☐

iii. Hot water treatment is a good control method of loose smut of wheat. ☐

iv. Oospore act as a secondary inoculum in disease. ☐

v. Metalaxyl is an effective chemical against rust disease ☐

2. Fill up the blanks with most appropriate words: (*any five*) **0.5×5=2.5**

a) The toxin released by rice blast pathogen are _____ _____ _____.

b) The causal agent of Ergot diseases of cereals is _____.

c) The mycelium of smut fungi is _____.

d) Angular leaf spot of cotton caused by _____.

e) Muriform conidia formed by the genus _____.

f) Snake skin pattern is observed in _____ disease.

3. Tick (√) the correct answer: (*any five*) **0.5×5=2.5**

a) K.C Mehta associated with
i) False smut of rice ii) Wheat must iii) Bunt of wheat iv) Red root of Sugarcane

b) Downy mildew associated with:
i) *Alternaris* ii) *Peronospora* iii) *Rhizactonia* iv) *puccinia*

c) Ratoon stunting of sugarcane caused by
i) Fungi ii) Bacteria iii) Viroid iv) Phytoplasma

d) Sulpher based fungicides are useful against
i) Powdery mildew ii) Downy mildew iii) Smuts iv) Rusts

e) The dose of systemic fungicide is varied between
i) 500-1000 ppm ii) 2000-3000 ppm iii) 1000-2000 ppm iv) None of the above

P.T.O.

4. Match the following A with B: **0.5×5=2.5**

A	**B**
i) Target board effect	ii) Stem rot of Jute
ii) Presence of pycnidium	i) *Alternaria* leaf spot
iii) Sour in smell	iv) Red rot of sugarcane
iv) Boom Burst cycle	iv) *Myzus persical*
v) Potato leaf Moll	v) Black rust of Wheat.

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Part - II
(Descriptive Type)

Time: 100 Minutes **Full Marks: 30**

Questions are of value as indicated in the margin.

Answer *any three* questions from the following.

5. Enlist the fungal and bacterial diseases of rice. Write briefly about an important fungal disease of rice with special reference to symptoms, disease cycle, epidemiological factors and management practices. What are the management practices of bacterial diseases in rice? 2+6+2=10

6. (a) Distinguish the symptoms of three types of rust of wheat with their causal organisms.
   (b) Discuss in brief about symptoms, disease cycle and management of Red rot of Sugarcane.5+5=10

7. (a) Write briefly about symptoms, causal organism and management of stem rot of Jute.
   (b) Describe briefly about symptoms, disease cycle and management of *Fusarium* wilt of Redgram. 5+5=10

8. Write short notes on the following (***any two***): 5×2=10
   i) Green ear of Bajra
   ii) Tikka disease of groundnut
   iii) Club root of mustard
   iv) Covered smut of barley

9. Write briefly (***any five***) 2×5=10
   a) Symptoms of Soybean rust.
   b) Disease cycle of angular leaf spot of cotton.
   c) Symptoms and management of sesamum phyllody.
   d) Symptoms of stalk rot of Maize.
   e) Khaira disease of rice.
   f) Dodder.
   g) Symptoms and management of tobacco leaf curl.

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