

B.Sc. (Honours) Agriculture Semester-IV Examination, 2019

Course No: PPC-221[Old]

(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 : 30 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) Bengal famine was caused due to bacterial blight disease. ☐
- ii) Leaf spot in groundnut is caused by *Phytophthora* sp. ☐
- iii) The most common occurring wheat rust in India is black rust. ☐
- iv) Bavistin is a contact fungicide. ☐
- v) Chlamydospores are the non-motile spores ☐

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

- a) Club root pathogen perpetuates in soil as _____.
- b) “Khaira” disease is caused by _____.
- c) Downy mildew can be controlled by _____ group of fungicide.
- d) _____ is an internally seed borne disease.
- e) An ascus usually contains _____ number of ascospores.
- f) “Kresek” syndrome occurs in _____ rice disease.

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

- a) Powdery Mildew is controlled by using
 - i) Sulphur fungicides ii) Copper Fungicides iii) Triazoles iv) All of the above
- b) Plant tissue overgrowth such as galls, tumours, enation caused due to pathogen infection inducing excessive cell division is called
 - i) Hypertrophy ii) Hyperplasia iii) Hypergrowth iv) Hypoplasia

(2)

- c) Reduction in photosynthesis level in host is due to the symptom of
i) Leaf spot ii) Mosaic iii) Chlorosis d) All of the above
- d) Father of Plant Pathology is
i) E. J Butler ii) B. B Mundkur iii) K. C Mehta iv) H. G Khorana
- e) The dose of systemic fungicide is varied between
i) 500-1000 ppm ii) 1000-1500 ppm iii) 1500-2000 ppm iv) None of the above
- f) Sesame Phyllody is caused by
i) Bacteria ii) Fungus iii) Mycoplasma iv) All of the above

4. Match the following: A with B

0.5×5=2.5

A		B	
i)	Wheat Rust	i	Alternaria
ii)	Target board effect	ii)	Heterocious
iii)	Angular leaf spot	iii)	Brown spot
iv)	Cocliobolin	iv)	Cotton
v)	Smut	v)	Tolyposporium

B.Sc. (Honours) Agriculture Examination, 2019
Semester-IV
Course No: PPC-221 (Old)
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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

5. Enlist the important fungal diseases of Rice in West Bengal. Write briefly about Rice blast disease and give its symptoms, disease cycle, epidemiological factors and management practices. Give management practices for controlling bacterial diseases in rice. 2+6+2=10
 6. a) Distinguish the early and late leaf spot of Groundnut.
b) Discuss in brief about symptoms, disease cycle, management of stem rot of jute. 5+5=10
 7. a) Describe the distinguishing symptoms of three types of rust in Wheat along with their causal organisms.
b) Give a brief note on Phanerogamic plant parasites. 5+5=10
 8. Write short notes on the following (**any two**) : 5×2=10
 - i) Stalk rot of Maize
 - ii) Soybean Rust
 - iii) Covered Smut of Barley
 - iv) Red Rot of Sugarcane
 - v) Sheath blight of Rice
 9. Write briefly symptoms and management of the following (**any five**) : 2×5=10
 - i) Tobacco leaf curl
 - ii) Khaira disease
 - iii) Brown spot in Rice
 - iv) Ratoon Stunting in Sugarcane
 - v) Club root of Mustard
 - vi) Fusarium wilt of Redgram
 - vii) Grey blight in Bengal gram
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