

KERALA AGRICULTURAL UNIVERSITY
B.Sc. Hons. (Agriculture) – 2007 Admission - Vth Semester
Final Examination - January 2010

Cat. No. : Path 3103

Title : Diseases of Field Crops and
their Management (2+1)

Max. marks: 80
Time : 3 hours

I Fill up the blanks

Marks : 10 x 1 = 10

1. _____ disease in rice is due to zinc deficiency
2. Brown spot of rice is _____ seed borne.
3. Yellow mosaic virus disease in pulses is transmitted by the vector _____
4. Late blight of potato is caused by the fungus _____
5. _____ is a destructive viral disease of cassava.
6. _____ is a selective foliar fungicide for the management of downy mildew disease.
7. Black arm of cotton is caused by _____
8. Loose smut of wheat is due to the fungus _____
9. Bark shredding is a characteristic symptom of dry root rot disease caused by _____
10. _____ is a selective (organophosphate) fungicide for the management of disease caused by *Phytophthora*.

II. Write short notes (Any ten)

10 x 3 = 30

1. Tundu disease of wheat
2. Physical methods for the management of internally seed borne fungal diseases.
3. Bacterial and fungal wilt diseases of pulses.
4. Selective fungicides for the management of rice blast disease
5. Management of dry root rot disease (*Macrophomina phaseolina*)
6. Compare and contrast the symptoms of rice blast and brown leaf spot of rice.
7. Special method for the management of black arm disease of cotton.
8. Cultural methods for the management of damping off disease of crucifer caused by *Pythium spp.*
9. Symptoms of collar rot due to *Sclerotium rolfsii* and *Rhizoctonia solani*.
10. Viral diseases and vectors relationship.
11. Phytoplasma disease of field crops.
12. Selective fungicides for the management of powdery mildew disease

III. Short Essays (Any Six)

6 x 5 = 30

1. Role of antibiotics in Plant Disease Management.
2. Compare and contrast various types/symptoms due sheath blight and sheath rot disease of rice and write briefly the integrated management of these diseases.
3. Factors responsible for the outbreak of rice blast and write briefly the integrated management of the disease.
4. List out important powdery mildew disease of pulses with casual organisms. Draw common life cycles of the pathogens.
5. Important diseases of potato with special reference to symptoms.
6. Write briefly the classification of non-systemic fungicides with suitable examples.
7. List out important common diseases of cucurbits with causal organisms and Write briefly the management of powdery mildew and downy mildew disease.
8. Non parasitic diseases of field crops.

IV. Write essay (Any One)

1 x 10 = 10

1. List out important diseases of cereals Write in details about the symptoms of three rust disease of wheat with life cycles.
2. List out important diseases of sugarcane and cotton. Write the symptoms, epidemiology and integrated disease management of red rot disease of sugarcane.