

KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Agriculture – 2008 Admission - IIIrd Semester.
Final Examination – January-February 2010

Cat. No. : Path 2102

Max. marks: 80

Title : Principles of Crop Disease Management (1+1)

Time : 3 hours

**I. Fill up the blanks / Match the following/ State True or False / Define :
(10 x 1 = 10)**

True / False

1. Soil application of gypsum is adopted for the management of club root disease of cabbage and cauliflower.
2. Heavy application of nitrogenous fertilizers reduce the incidence of fungal diseases.
3. Banana bunchy top disease is assessed based on per cent disease index.
4. Deep summer ploughing is adopted for the management of soil borne diseases.
5. Dry root rot of pulses (*Macrophomina phaseolina*) is managed by frequent irrigation at the time of flowering.
6. Aerated steam therapy is followed for the management of viral diseases of sugarcane.
7. Dinocap (Kerathane) is a selective fungicide for the management of brown spot of rice.
8. Pre-immunized seedling is used for the management of citrus tristeza virus.
9. Streptomycin sulphate is recommended for the management of fungal diseases.
10. *Pseudomonas fluorescence* is a fungal antagonistic microflora used against various fungal diseases.

II. Write short notes/answers etc. on ANY TEN (10 x 3 = 30)

1. Pairing and Prolinage
2. Roving survey
3. Diseases management by adjusting soil pH
4. Jenson's hot water treatment
5. Trap crop
6. Embargoes
7. Mixed cropping
8. Eradicant
9. Biological control
10. Fungistasis
11. Bordeaux paste
12. Organic phosphate fungicide

III. Write short essays on ANY SIX of the following (6 x 5 = 30)

1. Cultural methods for disease management
2. Special methods of application of fungicides
3. Mechanical & Physical methods for disease management.
4. Cross protection in citrus disease management
5. Bioassay of fungicides
6. Biochemical resistance.

7. Wound dressing fungicides
8. Seed treatment
9. Classification of fungicides based on chemical nature.
10. Poly genic resistance.

IV. Write essays on ANY ONE

(1 x 10 = 10)

1. Define biological control. Write briefly the methods of mass multiplication of *Pseudomonas* and *Trichoderma*.
2. Mechanisms of disease resistance in plants