



Path.2102

KERALA AGRICULTURAL UNIVERSITY

B.Sc. (Hons.) Ag.

2015 & Previous Admission

III Semester Re-examination-March-2018

Principles of Crop Disease Management (1+1)

Marks: 50

Time: 2 hours

(10x1=10)

I State True or False

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

II Write Short notes on ANY FIVE of the following

(5x2=10)

- 1 Embargo
- 2 Methods of application of biocontrol agents
- 3 Eradication
- 4 Fungistasis
- 5 Bordeaux paste
- 6 Phytosanitary certificate
- 7 Induced systemic resistance

III Answer ANY FIVE of the following

(5x4=20)

- 1 Physical and mechanical methods of disease management
- 2 Classification of copper fungicides
- 3 Role of host, pathogen and environment on development of an epidemic
- 4 Cross protection in citrus disease management
- 5 Important mechanisms of action involved in biological control with examples
- 6 Structural defense mechanism in plants
- 7 Biotechnological approaches for disease management

IV Write an essay on ANY ONE of the following

(1x10=10)

- 1 Define fungicide. Mention important characteristics of a good fungicide. How will you prepare 10 litres of 1 % Bordeaux mixture. Write the mode of action, merits and demerits of this fungicide.
- 2 Define biological control. Write briefly the methods of mass multiplication of *Pseudomonas* and *Trichoderma*
