



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag. 2015 Admission
V Semester Final Examination-March-2018

Path.3103

Disease of Field Crops and their Management (2+1)

Marks: 50
Time: 2 hours
(10x1=10)

I Fill in the blanks

- 1 -----is called Night Queen disease of rice.
- 2 -----disease of wheat has strict international quarantine measures for its trade.
- 3 Vector of groundnut bud necrosis is-----
- 4 The toxin responsible for the wild fire disease of tobacco is-----
- 5 A geminivirus disease in cassava transmitted through white flies is-----

State True or False and if false, correct it

- 6 Rice Tungro disease is caused by phytoplasma and is transmitted by jassids.
- 7 Sulfur fungicides are generally recommended for the management of downy mildew diseases of vegetables. .
- 8 *Bemisia tabaci* transmits Begomoviruses having ssRNA in a semi-persistent manner.
- 9 Ug99 is a *Puccinia recondita* f.sp. *tritici* race causing yellow rust disease in wheat.
- 10 Udbatta and false smut are present in epidemic form in all rice growing tracts of Kerala.

II Write Short notes on ANY FIVE of the following (5x2=10)

Note: Write the causal organism, the most important and diagnostic symptoms of the disease (in one sentence only) and a specific systemic fungicide/chemical with its dosage used for its management

- 1 Red rot of sugarcane
- 2 Kresek of rice
- 3 Downy mildew of cucurbits
- 4 Stenosis of cotton
- 5 Damping off of tobacco
- 6 Stem rust of wheat
- 7 Basal swelling and root rot of cowpea

III Answer ANY FIVE of the following (5x4=20)

- 1 Downy mildew diseases in cereals and millets
- 2 Viral and phyto plasmal diseases of rice and their management.
- 3 Black shank of tobacco.
- 4 Red rot of sugarcane.
- 5 Diseases caused by Begomoviruses in field and vegetable crops.
- 6 Differentiate different smut diseases of sorghum based on their symptoms
- 7 Black arm of cotton

IV Write an essay on ANY ONE of the following (1x10=10)

- 1 Explain the symptoms, etiology, mode of spread, survival and management of rice blast. Neatly draw the disease cycle also depicting the life cycle of the pathogen.
- 2 List out different diseases affecting potato with their causal organisms. Explain the symptoms, etiology, and mode of spread, survival and management of late blight of potato. Neatly draw the disease cycle including pathogen's life cycle.
