



KERALA AGRICULTURAL UNIVERSITY
B.Sc. (Hons.) Ag. 2018 Admission
I Semester Final Examination-February-2019

Path.1101

Fundamentals of Plant Pathology (2+1)

Marks: 50
Time: 2 hours

I State True or False

(10x1=10)

- 1 Downy mildew of grape is caused by *Peronospora parasitica*
- 2 Rod shaped virus particle contains 20 to 40 % nucleic acid
- 3 Rust causing fungi belongs to Sub-Division Ascomycotina
- 4 Mycoplasma/Mollicutes belongs to Division Gracilicutes
- 5 *Phytophthora* and *Pythium* are good examples for obligate parasites
- 6 Nematodes transmits only tubular viruses
- 7 Genus *Erwinia* has a peritrichous flagella
- 8 Tufts of mycelium on the lower side of the leaf is a typical symptoms of powdery mildew
- 9 Increase in cell size is called hypoplasia
- 10 Viruses does not move from cell to cell via plasmadesmata

II Write Short notes on any FIVE of the following

(5x2=10)

- 1 Contributions of Anton de Bary.
- 2 Differentiating characters of *Plasmopara* and *Peronospora*.
- 3 Classification of the diseases in relation to their occurrence.
- 4 Importance of Irish Famine.
- 5 Disease tetrahedron.
- 6 Vegetative reproduction in fungi.
- 7 Phanerogamic plant parasites.

III Answer any FIVE of the following.

(5x4=20)

- 1 Sexual reproduction in fungi.
- 2 Parasexual reproduction in fungi
- 3 General characteristics of plant viruses.
- 4 Mechanisms of variability in plant pathogens.
- 5 Symptoms and management of red rust of tea.
- 6 General characters of plant parasitic nematodes.
- 7 Indirect transmission of plant pathogens.

IV Write an essay on any ONE of the following

(1x10=10)

- 1 Survival of plant pathogens.
- 2 Role of enzymes in plant disease development.
