



**KERALA AGRICULTURAL UNIVERSITY**  
**B. Sc. (Hons.) C & B 2018 Admission**  
**II Semester Final Examination-August-2019**

**Path.1201**

**Fundamentals of Plant Pathology (2+1)**

**Marks: 50**  
**Time: 2 hours**

**I Fill in the blanks** **(10x1=10)**

- 1 Soft rot pathogens produce mainly ..... enzymes.
- 2 An example for disease caused by viroid in coconut is .....
- 3 The pathogen responsible for Irish famine is .....
- 4 An example for arbuscular mycorrhizal fungus .....
- 5 Chain of events in the disease development is called .....

**State True or False**

- 6 Club root of cabbage caused by *Plasmodiophora brassicae* is favoured under acidic pH of the soil.
- 7 The fastidious bacteria, *Xyllella fastidiosa* causing pierce disease in grapes is phloem inhabiting.
- 8 Vertical resistance is durable.
- 9 The term 'contagium vivum fluidum' was coined by M W Beijernick.
- 10 Black heart disease of potato is due to inadequate oxygen at storage condition.

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

- 1 Sporadic disease.
- 2 Alternate host.
- 3 Polycyclic disease.
- 4 Disease tetrahedran.
- 5 Phytoplasma.
- 6 Obligate parasite.
- 7 Heterokaryosis.

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

- 1 Ectomycorrhiza.
- 2 Pectinolytic enzymes.
- 3 Phyto alexins.
- 4 Phanerogamic plant parasites.
- 5 Persistant virus and non persistent virus.
- 6 Sexual reproduction in bacteria.
- 7 Parasexualism.

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

- 1 What is toxins? How it differ from enzymes. Give the classification of toxins with suitable examples.
- 2 Biochemical defense mechanism of the host plant against pathogens.

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