

KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Agriculture 2012 & Previous Admissions (Old Scheme) II Semester Re-Examination-July-2017

Path.1101

Introductory Plant Pathology (1+1)

Marks: 80 ime: 3 hours

Time: 3 hours $(10^{6}x1=10)$ I State whether True or False Acervulus is a sexual fruiting of fungi Giberellic acid is a growth regulator produce by the fungus Fusarium Rhizoctonia solani is a sclerotia fungus 3 Paragynus antheridium is observed in Pythium spp. 4 Little leaf of brinjal is caused by phytoplasma Match the following Aureofunginsol 6 Trichomes Yeast Antifungal antibiotic Claviceps, Phytophthora Sexual reproduction in bacteria 8 Binary fission Necrotroph Bacteria 10 Holocarpic II Write short notes on any TEN (10x3=30)Pathotoxin Fastidious vascular bacteria Phyllody Polycyclic diseases 4 Heterothallism Sclerotial fungi 6 Isogametic copulation Azygospores Mycelia strerilia 10 Sporodochia 11 Inoculum potential Physiological races

III Answer any SIX

(6x5=30)

- 1 Differentiate between downy mildew and powdery mildew fungi.
- What is virus? Give a brief account of viral diseases and mode of spread.
- 3 Differentiate between rust and smut diseases.
- 4 Reproduction, survival and mode of spread of bacterial plant pathogens.
- 5 Important fungal characters of the sub division Basidiomycotina.
- 6 Explain three types of rust disease in wheat.
- 7 Illustrate the the life cycle of *Puccinia graminis tritici*.

8 Define following technologies

- a) Incubation period
- b) Viroid
- c) Microcyclic rust
- d) Plasmodium
- e) Oospore

IV Write essay on any ONE

(1x10=10)

Write important characters and classification of Zygomycotina. Write briefly the life cycle of *Rhizopus*.

What is Pathogenesis? Describe in detail about role of enzymes, toxins and growth regulators in plant disease development.
