

# KERALA AGRICULTURAL UNIVERSITY

B.Sc (Hons.) Agriculture 2016 Admission  
1<sup>st</sup> Semester Final Examination-March-2017

Cat. No: Path 1101

Marks: 50.00

Title: Fundamentals of Plant Pathology (2+1)

Time: 2 hours

**1. Fill up the blanks**

(10x1=10)

1. Black stem rust of wheat caused by -----
2. White fly transmitted viral disease in black gram-----
3. Black tip of mango caused by -----
4. Alternate host for cumbu rust -----

**Match the following**

- |                                    |   |                                |
|------------------------------------|---|--------------------------------|
| 5. Holocarpic                      | - | Bacteria                       |
| 6. Anton de bary                   | - | Aureofunginsol                 |
| 7. Sexual reproduction in bacteria | - | <i>claviceps, Phytophthora</i> |
| 8. Antifungal antibiotic           | - | Yeast                          |
| 9. Necrotrop                       | - | Binary fission                 |
| 10. Trichomes                      | - | Father of Modern mycology      |

**II. Write short notes/answers etc on ANY FIVE**

(5x2=10)

1. Isogamous fertilization
2. Karyogamy
3. Plasmodium
4. Pathotoxin
5. Antagonism
6. Compound interest disease
7. Acervulus
8. Fastidious vascular bacteria

**III. Answer any FIVE questions**

(5 x4=20)

1. Explain the favourable conditions for disease dispersal of bacteria.
2. Give a brief note on phytoplasma.
3. Discuss in brief about history of plant pathology in India.
4. Write about the life cycle of club root of cabbage.
5. Differentiate between downy mildew and powdery mildew fungi.
6. Differentiate between rust and smut diseases.
7. What is virus; give a brief account of viral diseases and mode of spread.

**IV. Write Essay on any ONE**

(1x10=10)

1. Define fungi. Describe in detail about the General characters of fungi, classification of fungi, methods of reproduction.
2. What is Pathogenesis? Describe in detail about role of enzymes, toxins and growth regulators in plant disease development.

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