

**MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD, PUNE
SEMESTER END EXAMINATION**

B.Sc. (Agri.)

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| Semester : III (New) | Term : I | Academic Year : 2016-17 |
| Course No. : PATH 232 | Title : Principles of Plant Pathology | |
| Credits : 2(1+1) | | |
| Day & Date : Friday, 18.11.2016 | Time : 9.00 to 11.00 | Total Marks : 40 |

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Define pathogenesis. Give the role of enzymes and toxins in pathogenesis.
- Q.2 Enlist continuous and discontinuous dissemination types and describe continuous dissemination.
- Q.3 Describe in detail mode of perpetuation in plant pathogen.
- Q.4 Differentiate between (Any two).
 - 1) Host-specific and Non-host specific toxins
 - 2) Horizontal resistance and vertical resistance
 - 3) Simple interest disease and compound interest disease.
- Q.5 Define epidemiology and describe on the essential conditions for development of an epiphytotic.
- Q.6 Enlist general principles of plant disease management and describe eradication method.
- Q.7 Describe pre-existing structural barriers faced by the pathogen after gaining entry into host.
- Q.8 Comments on the following (Any two).
 - 1) Plant disease forecasting
 - 2) Mechanism of infection by various pathogens
 - 3) Advantages of integrated plant disease management
- Q.9 Describe various avenues of penetration in plant pathogen.
- Q.10 Write short notes on (Any two).
 - 1) Role of alternate host in plant disease
 - 2) Phytoalexins
 - 3) Tyloses

SECTION "B"

- Q.11 Define the following terms.

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| 1) Biotroph | 2) Inoculum |
| 3) Hypersensitivity | 4) Epidemic disease |
- Q.12 Do as directed.
 - 1) Oospore is not a resting spore of downy mildew fungus *plasmopara parasitica*. (State True or False)
 - 2) Give full form of the DIPA.
 - 3) Name the toxin produced by *Pyricularia oryzae*.
 - 4) What do you mean by disease?

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