

Seat No: _____

Enrollment No: _____

PARUL UNIVERSITY
COLLEGE OF AGRICULTURE

B.Sc.(Hons.)Agriculture, Summer 2017 - 18 Examination

Semester: 2

Date: 26/05/2018

Subject Code: 20107152

Time: 10:30 am to 01:00 pm

Subject Name: Fundamentals of Plant Pathology

Total Marks: 60

Instructions

1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1 Do as Directed.

(10)

A. Fill in the blanks.

1. Technical name of Blitox-50 is _____.
2. Blast of rice is caused by _____.
3. _____ disease is constantly present in a moderate to severe form and is confined to a particular country or district.
4. Fosetyl-Al is _____ in nature.
5. Fire blight of apple disease was first time reported by _____.
6. Collection and destruction of crop debris from field is known as _____.
7. Application of lime in soil reduces the _____ disease by increasing the pH of soil.
8. Application of sulphur in soil reduces the _____ disease by decreasing the pH of soil.
9. The means of survival are the _____ in infection chain or disease cycle.
10. Trade name of mancozeb is _____.

B. Multiple choice type questions.

(10)

1. Loranthus is...
 - a) Complete root parasite
 - b) Partial stem parasite
 - c) Partial root parasite
 - d) Complete stem parasite
2. Discovered 'Mycoplasma'...
 - a) X. S. Prusiner
 - b) Y. Mckinney
 - c) Doi and Ishii
 - d) T. O. Diener
3. _____ facultative parasites can pass their entire life in the soil.
 - a) Unspecialized
 - b) Specialized
 - c) Obligate
 - d) none
4. Tridemorph...
 - a) Beam
 - b) Amistar
 - c) Bavistin
 - d) Calixin
5. Little leaf disease of brinjal is caused by...
 - a) Fungi
 - b) Phytoplasma
 - c) Bacteria
 - d) Nematode
6. Which one is a beneficial plant bacterium?
 - a) *Erwinia amylovora*
 - b) *Rhizobium* spp.
 - c) *Clostridium tetani*
 - d) *Xanthomonas campestris* pv. *Citri*
7. Club root of crucifers caused by
 - a) *Armillariella mellea*
 - b) *Synchytrium endobioticum*
 - c) *Plasmodiophora brassicae*
 - d) *Ophiobolous graminis*
8. Rice tungro virus transmitted by _____.
 - a) Aphids
 - b) Leaf hopper
 - c) whitefly
 - d) Jassids

9. Father of Forest pathology...
- a) Miles Joseph
 - b) E F Smith
 - c) E J Butler
 - d) Robert Hartig
10. Coffee rust disease was introduced in India from...
- a) Sri Lanka
 - b) Europe
 - c) Java
 - d) Philippines

Q-2. A. Define the following. (Any five)

(05)

1. Antibiotic
2. Obligate parasite
3. Symptom
4. Antisporulant
5. Viroids
6. Inoculation
7. Mycelium

B. Answer the following. (Any five)

(05)

1. Name three reference books related to this course.
2. Enlist the source of survival of pathogen.
3. Enlist mechanisms of biological control.
4. Name the phanerogamic plant parasites.
5. Explain plant disease triangle with diagram.
6. Enlist the different type of plant resistances.
7. Enlist important plant pathogens.

Q.3 Write short notes. (Any five)

(15)

1. Explain process of penetration of plant pathogen in host during infection.
2. Give classification of fungicides based on methods of application.
3. Plant quarantine.
4. Differentiate between Autoecious rust and Heteroecious rust,
5. Differentiate between Biotroph and Necrotroph.
6. Differentiate between Systemic fungicides and Non-systemic fungicides.

Q.4 Long questions (any three)

(15)

1. Explain in brief: survival.
2. Explain in brief: dispersal.
3. Explain in brief: Infection process.
4. General principles of plant disease management.