

Seat No: \_\_\_\_\_

Enrollment No: \_\_\_\_\_

**PARUL UNIVERSITY**  
**COLLEGE OF AGRICULTURE**  
**B.Sc.(Hons.) Agriculture Summer 2021 - 22 Examination**

Semester: 6

Subject Code: 20107303

Subject Name: **DISEASES OF FIELD AND HORTICULTURAL  
CROPS AND THEIR MANAGEMENT - I**

Date: 02/04/2022

Time: 10:30 am to 01:00 pm

Total Marks: 50

---

**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 A Fill in the blanks (Each of 0.5 mark)**

(5)

1. Kresiek phase symptom is found in \_\_\_\_\_ disease of rice.
2. The causal organism of Sigatoka disease in banana is \_\_\_\_\_ .
3. \_\_\_\_\_ variety of rice is responsible for epidemic of bacterial leaf blight in Bihar.
4. \_\_\_\_\_ fungus produces aflatoxin.
5. *Claviceps fusiformis* produces \_\_\_\_\_ toxin in bajra.
6. The first recognized virus disease of plants in world is \_\_\_\_\_.
7. Yellow mosaic virus of green gram is transmitted by \_\_\_\_\_.
8. Charcoal rot symptoms are produced by \_\_\_\_\_.
9. Black rot of crucifers is caused by \_\_\_\_\_.
10. Leaf curl of tomato is caused by \_\_\_\_\_.

**B. Tick mark ( ✓ ) the appropriate answer (A, B, C or D) of the multiple choice questions (Each of 0.5 mark)**

(10)

1. **Damping –off disease is favoured by.....**  
(A) Low soil moisture (B) Medium soil moisture  
(C) Dry soil (D) High soil moisture
2. **Bud rot of coconut is caused due to...**  
(A) *Phytophthora parasitica* (B) *Phytophthora citrophthora*  
(C) *Phytophthora palmivora* (D) *Phytophthora infestans*
3. **Blister blight of tea is caused due to ...**  
(A) *Cephaleuros mycoidea* (B) *Exobasidium vexans*  
(C) *Phomopsis vexans* (D) *None of above*
4. **Fungal pathogen causing vascular wilt is survived in soil in the form of....**  
(A) Oospore (B) Chlamydospore  
(C) Sclerotia (D) Conidia
5. ***Fusarium* wilt of banana is also known as.....**  
(A) Panama disease (B) Moko disease  
(C) Bunchy top (D) Sigatoka disease
6. **State the percentage which is used to prepare Bordeaux paste.....**  
(A) 1% (B) 5%  
(C) 10% (D) 20%
7. **The common name of Tilt is.....**  
(A) Difenconazole (B) Propiconazole  
(C) Hexaconazole (D) Penconazole

8. **Which part of pomegranate tree is mainly infected by *Cercospora punicae*?**  
 (A) Stem (B) Fruits  
 (C) Leaves (D) Branches
9. **0.05 g. = \_\_\_\_\_ ppm.**  
 (A) 50 (B) 5000  
 (C) 500 (D) 5
10. **State the name of coffee disease caused by *Hemileia vastatrix*.....**  
 (A) Twig rot (B) Black rot  
 (C) Kolerago (D) Rust
11. **The primary source of inoculum for *Pythium aphanidermatum* is.....**  
 (A) Zoospore (B) Oospore  
 (C) Zygospore (D) Sclerotia
12. **Fruit becomes mummified and abundant pycnidia are produced on fruit surface is a characteristic symptoms of...**  
 (A) Fruit rot of chilli (B) Guava wilt  
 (C) Phomopsis fruit rot of brinjal (D) Potato scab
13. **Disease can be controlled by knowing about....**  
 (A) the cause of disease (B) the production method of pathogen  
 (C) the forecasting about the disease (D) None of these
14. **Simple spray of water can reduce...**  
 (A) bacterial disease (B) Powdery mildew disease  
 (C) Alternaria leaf spot disease (D) Downy mildew disease
15. **'Buck eye rot' is a disease of.....**  
 (A) Leaves of tomato (B) Leaves of sorghum  
 (C) Tomato fruits (D) Stem of tobacco
16. **Black gram anthracnose infected tissues produces necrotic areas with black dots. They are pathogenic part like .....**  
 (A) Conidia (B) Acervuli  
 (C) Cleistothecium (D) Zygospore
17. **Bacterial leaf blight of rice can be effectively managed by .....**  
 (A) Strepto cycline 10g alone (B) Hexaconazole 1g  
 (C) Carbendazim 10g alone (D) Streptocycline 1 g + Copper oxychloride 20g
18. **Fingermillet blast pathogen survive in the collateral host such as .....**  
 (A) Barberry (B) Brinjal  
 (C) *Triticum aestivum* (D) *Leersia hexandra*
19. **Rhizome rot pathogen of ginger is transmitted by.....**  
 (A) Air (B) Soil  
 (C) Rhizome (D) Insect
20. **Sterility mosaic disease of pigeon pea is transmitted by .....**  
 (A) Eriophyid mite (B) Thrips  
 (C) Aphids (D) Jassids

**Q . 2 A. Define the following (Any five out of seven)**

1. Phytopathology
2. Disease
3. Symptom
4. Epidemiology
5. Syndrome
6. Primary inoculum
7. Infection

**(5)**

**B. Answer the following ( Any five out of seven)**

**(5)**

1. State the primary and secondary source of inoculum of guava wilt.
2. Give the historical significance of rust of coffee.
3. Which state is badly affected by rhizome rot of ginger and why?
4. Which pathogen was responsible for famous Bengal famine during 1942-43?
5. Give the teliomorphic stage of *Pyricularia grisea*.
6. Why adult plants of pigeonpea get wilted even though when there may be plenty of moisture in field?
7. Which fungal pathogen causes panama disease in banana? Give its systemic position?

**Q . 3 Do as directed ( Any five out of six)**

**(10)**

1. Differentiate between loose smut and covered smut of sorghum
2. Describe the disease cycle of ergot of bajra
3. Differentiate between early and late leaf spot disease of groundnut
4. Symptoms of seed and seedling rots of soybean
5. Diagrammatic representation of disease cycle of phytophthora blight of colocasia
6. Management of damping off of vegetables

**Q . 4 Attempt the following (Any three out of four)**

**(15)**

1. Describe the symptoms, causal organism, disease cycle, perennation and the management of blast of rice.
2. Describe the early tikka and late tikka disease of ground nut
3. Describe the characteristic symptoms, mode of spread and management of yellow vein mosaic disease of okra
4. How many smut diseases occur on maize in India? Describe the symptoms, causal organism, disease cycle, perennation and the management of any one disease in detail.