

**Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)**

B. Sc. (Ag.) (Sixth Semester - Regular) Examinations, April - 2026

PPT-325 – Diseases of Field & Horticultural Crops & their Management-II



Time: 2 hrs

Maximum: 50 Marks

The figures in the right hand margin indicate marks.

PART – A

Q.1. Fill in the blanks with suitable word / figure.

(0.5 x 10 = 5 Marks)

- Brown rust of wheat is caused by _____.
- Urediospores of yellow rust have _____ germ pores.
- The alternate host of black rust is _____.
- The repeating spore of stem rust fungi is _____.
- The name of internally seed borne disease of wheat is _____.
- Karnal bunt affected grains emits rotten fish or dead fish odour due to production of _____.
- The primary source of wheat powdery mildew disease is *via* _____.
- Chemical fungicide specific for Smut disease is _____.
- Causal organism of Bird eye spot of grapes: _____.
- Fungus associated with Mango malformation disease _____.

Q. 2. Define (or) Explain the following in one or two sentences.

(1 x 5 = 5 Marks)

- Autocious rust
- Systemic fungicides
- Cultural management of plant disease
- Etiology
- Asexual fruiting bodies

Q3. Match the following

(0.5 x 10 = 5 Marks)

Column – A

Column – B

- | | |
|---------------------------------|--|
| (a) Grassy shoot of sugarcane | (i) <i>Plasmopora viticola</i> |
| (b) Red rot | (ii) Gram +ve |
| (c) Wilt of sugarcane | (iii) <i>Sporosorium scitamineum</i> |
| (d) <i>Erwinia tracheiphila</i> | (iv) <i>Elsinoe ampelina</i> |
| (e) Downy Mildew of grapes | (v) Red vascular discolouration without white criss-cross |
| (f) Whip-smut of sugarcane | (vi) Heterocious |
| (g) Bird eye spot of grapes | (vii) <i>Glomerella tucumanensis</i> |
| (h) <i>Leifsonia xyli</i> | (viii) Phytoplasma |
| (i) Rust of pea | (ix) Gram -ve |
| (j) Brown Rust | (x) Autocious |

Q4. Write True or False against each statement

(0.5 x 10 = 5 Marks)

- a. Initial symptoms of Sclerotinia rot of sunflower is visible during pod development.

- b. Maximum damage can be seen, when the infection of White rust disease is systemic.
- c. The term hyperplasia means increase in size of the cells.
- d. Concentric rings or target board appearance is characteristic to *Alternaria* leaf spot.
- e. Systemic infection of Downy mildew of mustard causes “staghead” symptoms.
- f. *Sclerotinia* produces conidia in basipetal chains.
- g. Specific fungicide recommended for Powdery mildew pathogen is Plantvax.
- h. *Albugo candida* produce conidia inside an acervulus.
- i. Primary infection in powdery mildew of cucurbits is caused by ascospores.
- j. Chilli leaf Curl Virus (CLCV) is transmitted by whitefly.

PART – B

Attempt ANY FIVE questions. All question carries equal marks

(6 x 5 = 30 Marks)

- 5. Discuss in brief about the symptoms, etiology, disease cycle, epidemiology and management of Powdery mildew of Mango.
- 6. What are the causal organisms associated with Yellow rust and Brown Rust of Wheat? Briefly explain their symptoms, disease cycle and management.
- 7. Discuss in brief about the various symptoms associated with Downy mildew and White Rust of Mustard. Write down their causal organisms and disease cycle.
- 8. Write in brief about the symptoms, etiology, disease cycle, epidemiology and management of Red Rot of Sugarcane.
- 9. Write in brief about the symptoms, etiology, disease cycle, epidemiology and management of **either** Wilt of Chickpea **or** Anthracnose of grapes.
- 10. Write in brief about the symptoms, disease cycle, epidemiology and management of Apple scab mentioning its causal organism.

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