| Reg. No. | | | | | | | | | | |
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# GANDHI INSTITUTE OF ENGINEERING AND TECHNOLOGY UNIVERSITY, ODISHA, GUNUPUR
# (GIET UNIVERSITY)

B. Sc. (Ag.) (Fifth Semester) Examinations, November-2024

## PPT-314 –Diseases of field and Horticultural crops and their Management-I

Time: 2 hrs | Maximum: 50 Marks

### PART – A

**Q.1. Fill in the blanks with suitable word / figure.** **(0.5 x 10 = 5 Marks)**

a. In Italy blast of Rice called as _____.
b. _____ can be used for instant killing of witch weed, if water is in scarce.
c. The rust pathogen needs more than one host to complete its life cycle, hence it is known as _____.
d. A model to forecast the disease called _____ has been evolved in India.
e. Sugarcane mosaic virus is transmitted by _____.
f. Short smut of sorghum is caused by _____.
g. The causal organism of green ear disease of bajra is _____.
h. Downy mildew of sugarcane is caused by _____.
i. The name of *Phomopsis vexans* in perfect stage is _____.
j. The causal organism of bacterial wilt of tomato _____.

**Q. 2. Define (or) Explain the following in one or two sentences.** **(1 x 5 = 5 Marks)**

a. Predisposing factors and Disease cycle of Phytophthora blight of Colocasia
b. Management of Phomopsis blight of Brinjal
c. Transmission of Papaya ringspot virus
d. Causal organism and symptoms of anthracnose of Sorghum
e. Seed treatment techniques in rice against brown spot

**Q3. Match the following** **(0.5 x 10 = 5 Marks)**

| Column – A | | Column – B | |
|---|---|---|---|
| (a) | *Macrophomina phaseolina* | (i) | *Striga asiatica* |
| (b) | *Puccinia purpurea* | (ii) | Red leaf spot of Sorghum |
| (c) | *Melanopsichium eleusinis* | (iii) | *Cochliobolus miyabeanus* |
| (d) | *Rhizoctonia solani* | (iv) | *Peronosclerospora sorghi* |
| (e) | *Drechslera oryzae* | (v) | Downy mildew |
| (f) | Downy whitish growth | (vi) | *Thanetophorus cucumeris* |
| (g) | *Puccinia sp.* | (vii) | Rust of Sorghum |
| (h) | *Colletotrichum graminicola* | (viii) | Ragi smut |
| (i) | Twisted green leafy structures | (ix) | Minute raised pustules |
| (j) | Red to pink flower | (x) | *Rhizoctonia bataticola* |

**Q4. Write True or False against each statement** **(0.5 x 10 = 5 Marks)**

a. Rice Tungro disease is transmitted by leafhoppers in a persistent manner.

b. Smut causing fungus survives as spore balls in the seed and soil and serves as primary source of inoculum.

c. Secondary spread of smut disease occurs through wind borne chlamydospores.

d. The symptoms of neck blast of Ragi are characterized by spindle shaped spots with gray centres surrounded by reddish brown margin.

e. In rust fungus sporidia are produced on septate promycelium after germination of spores.

f. Guava wilt is caused by *Fusarium sp.*

g. Tobacco mosaic virus is sap transmissible

h. Powdery mildew of castor is caused by *Erysiphe sp.*

i. Secondary infection of Powdery mildew in green gram is spread through air born conidia

j. Sorghum downy mildew survive in plant debris as Oospores

## PART – B

**Attempt *ANY FIVE* questions. All question carries equal marks** **(6 x 5 = 30 Marks)**

5. Describe about symptoms, pathogen, and management of blossom blight of castor.

6. Explain diagrammatically symptoms of turcicum leaf blight of maize, green ear of bajra and false smut of rice.

7. Write about symptoms, disease cycle and management of rust of coffee and blister of tea.

8. Explain about symptoms, disease cycle, favourable conditions, and management of the ring mosaic disease of groundnut.

9. Write elaborately on different viral diseases of tomato.

10. Explain in detail about anthracnose and bacterial blight of Bean.

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