

**Department of Plant Pathology**  
**RK (PG) College, Shamli-247776**

**Course Outcome**

**1. Fundamentals of Plant Pathology and (AG-204) (3+1)**

At the end of the semester the students will:

- CO 1: Learn about the basics of plant pathology.
- CO 2: Get knowledge about the scope and objective of plant diseases and its development.
- CO 3: Learn about various types of plant pathogens.
- CO4: Gain knowledge about the general characters, reproduction of plant pathogen e.g., fungi, Bacteria and viruses.

**2. Principles of Integrated Disease Management (AG-307) (2+1)**

At the end of the semester the students will:

- CO 1: Understand about the categories of diseases.
- CO 2: Learn about the importance, concept and principles of Integrated Diseases Management (IDM).
- CO 3: Learn how to diagnose plant disease.
- CO 4: Know about the Calculation and dynamics of economic injury level and importance of Economic threshold level.
- CO5: Learn about Methods of control: Host plant resistance, cultural, mechanical, physical, legislative, biological and chemical control.
- CO6: Get knowledge about survey surveillance and forecasting of diseases.

**3. Diseases of Field and Horticultural Crops & their Management-I (AG-506) (2+1)**

At the end of the semester the students will:

- CO 1: Have a thorough understanding Symptoms, etiology, disease cycle and management of major diseases of following crops:

**Field Crops:** Rice: Blast, Brown spot, Bacterial Blight. Sheath blight, false smut, Khaira and tungro; Maize: stalk rots, downy mildew.; Sorghum: smuts; Bajra: downy mildew and ergot; Groundnut: early and leaf spots; etc.

**Horticultural Crops:** Guava: wilt and anthracnose; Banana: Panama wilt, sigatoka and bunchy top etc.

**Cruciferous vegetable:** Alternaria leaf spot and black rot; Brinjal: phomopsis blight, sclerotinia and little leaf; Tomato: early and late blight, leaf curl and mosaic; Okra: Yellow Vein Mosaic; Beans: Anthracnose and bacterial blight etc.

#### **4. Diseases of Field and Horticultural Crops & their Management-II (AG-605) (2+1)**

At the end of the semester the students will:

CO 1: Learn about Symptoms. etiology. disease cycle and management of major diseases of following crops:

**Field Crops:** Wheat: Rusts, loose smut, karnal bunt, powdery mildew. Alternaria blight and ear cockle; Sugarcane: red rot, smut, wilt and grassy shoot etc.

**Horticultural Crops:** Mango: Anthracnose, malformation, powdery mildew; Citrus: canker and gummosis; Grape vine: Downy mildew powdery mildew; Apple: scab and Fire blight; Potato: Early and late blight, Common scab. powdery scab. black scurf and potato mosaic.

#### **5. Rural Agricultural Work Experience (RAWE) and Agro-industrial Attachment (AIA) subject related work**

At the end of the semester the students will:

CO 1: Get practical experience of the field.

CO 2: Get opportunity to have a close observation of the farmers working in the field.

CO 3: Get attached to various agro-industries and learn about their functioning.