

Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore Shri Vaishnav Institute of Agriculture Generic/Elective course

III semester

Course Code	Course Name	TEACHING & EVALUATION SCHEME							
		Theory			Practical		Credits		
		END SEM University Exam	Mid term exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*	L	P	Total
AGGE104	Introduction to Plant Pathology	60	20	20	00	00	4	0	4

- 1. Legends: L Lecture; P Practical
- *Teacher Assessment shall be based on following components: Quiz / Assignment / Project / Participation in Class.

Objective:

Learning introductory Plant Pathology

Course Outcomes

- 1. Students will learn concepts and causes of plant diseases
- 2. Students will learn management of plant diseases

THEORY

UNIT I

Introduction: Importance of plant diseases, scope and objectives of Plant Pathology. Terms and concepts in Plant Pathology. Pathogenesis. Factors affecting disease development: disease triangle and tetrahedron and classification of plant diseases. Symptoms of Plant Diseases.

UNIT II

Fungi: general characters, definition of fungus, somatic structures, types of fungal thalli, fungal tissues, modifications of thallus, reproduction (asexual and sexual). General morphological characters of algae and protozoa.

UNIT III

Bacteria and mollicutes: general morphological characters. Basic methods of classification and reproduction of bacteria. General morphological characteristics of phytoplasma, spiroplasma. Viruses: nature, structure, replication and transmission. n General morphological characters of viroid.

Study of phanerogamic plant parasites. Nematodes: General morphology and reproduction, classification and symptoms caused by plant nematodes (Heterodera, Meloidogyne, Anguina, Radopholus etc.)

UNIT V

Dispersal and survival of plant pathogens. Principles and methods of plant disease management. Nature, chemical combination, classification, mode of action and formulations of fungicides.

Suggested Readings

- G.N. Agrios (2005) Plant Pathology, Fifth Edition. Elsevier Academic Press.
- Dube, H.C. (2013). An Introduction to Fungi, 4th (Edition), Scientific Publishers, Jodhpur, India,
- Das Gupta, M.K. (1987). Principles of Plant Pathology, Allied Publ. Pvt. Ltd.
- S.K. Tripathi, M.S. Bhale , V.K. Yadav & Ashish Shrivastava (2024). Fundamentals of Plant Pathology. Scientific Publishers, Jodhpur, Rajasthan, India.

(Prof. Vinod Dhar)

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