

U-34/2051
FUNDAMENTALS OF PLANT PATHOLOGY
Paper-PATH-101
(Semester-II)

Time : Three Hours]

[Maximum Marks : 110

Note : Attempt *two* questions each from Section A and B. Section C will be compulsory. Section A and B consisting of 4 questions carry 16 marks each. Section C consisting of 23 questions carry 2 marks each.

SECTION-A

- I. Explain the following :
 - (a) Importance of plant diseases.
 - (b) Scope and objectives of plant pathology.
- II. Define Pathogenesis. Discuss various causes and factors affecting disease development.
- III. Give various differences between phytoplasma and spiroplasma. Also give examples of disease caused by them.
- IV. What do you mean by plant pathogens. Discuss types of parasitism and variability in plant pathogens.

SECTION-B

- V. (a) Briefly describe rules of nomenclature of fungi.
(b) Define fungi and mention characteristics features of fungi.
- VI. Discuss stylet-borne transmission and circulative propagative transmission of plant viruses.
- VII. Describe the diseases caused by *Meloidogyne* spp. including below and above ground symptoms, different species involved and management measures.
- VIII. Define Epidemiology. Discuss various factors affecting disease management.

SECTION-C

- IX. Write short notes on following :
- (a) Pandemic.
 - (b) Pathogenesis.
 - (c) Disease triangle.
 - (d) Protozoa.
 - (e) Asexual reproduction of fungi.
 - (f) Growth regulators.
 - (g) Necrotroph.
 - (h) IDM.
 - (i) Alternate host.

- (j) Antibiotic.
 - (k) Spiroplasmas.
 - (l) Fungistatic.
 - (m) Survival of plant Pathogens.
 - (n) Endemic.
 - (o) Defence mechanism in plants.
 - (p) Antibody.
 - (q) Mycelium.
 - (r) Hypertrophy.
 - (s) Fungicide.
 - (t) Collateral host.
 - (u) Endoparasite.
 - (v) Plant pathogens.
 - (w) Classify plant diseases on the basis of causes.
-