

**NATIONAL UNIVERSITY OF LESOTHO**  
**B.Sc. (AGRIC) EXAMINATION**

**CPS 2507: INTRODUCTION TO PLANT PATHOLOGY**

**MAY 2023      TOTAL MARKS: 100      TIMES: 3 HOURS**

**INSTRUCTIONS: ANSWER ANY FIVE QUESTIONS**

**Question 1: (20 marks)**

Discuss pathogenesis and the conditions suitable for disease development.

**Question 2: (20 Marks)**

Describe bacterial cytology, including the types of flagellation in your answer.

**Question 3: (20 Marks)**

Describe plant disease diagnosis under:

- a) Observation of disease symptoms patterns and the population level patterns observed with disease symptoms caused by biotic factors. [10]
- b) The Koch's postulates [5]
- c) Collection of background information for diagnosis of diseases. [5]

**Question 4: (20 Marks)**

Discuss the characteristics of fungi and two important diseases caused by them.

**Question 5: (20 Marks)**

Describe the morphology and chemical composition of viruses.

**Question 6: (20 Marks)**

Differentiate between the following concepts / terms: [5 Marks Each]

- i) Classification of plant diseases based on type of symptoms and based on type of organ affected
- ii) Primary inoculum and secondary inoculum
- iii) Vertical resistance and horizontal resistance
- iv) Fungal passive dispersal and active dispersal