## UNIVERSITY OF RUHUNA

## BACHELOR OF SCIENCE (SPECIAL) DEGREE LEVEL I (SEMESTER II) EXAMINATION – JANUARY 2018

SUBJECT: BOTANY

COURSE UNIT: Advanced Plant Pathology (BOT 4052)

Time: Two hour (2 h)

## Answer for only four (04) questions

(1)

- (i) List the characteristic features found in phytoplasmas.
- (ii) Giving examples state symptoms caused by phytoplasmas in plants.
- (iii) "Identification and classification of phytoplasmas are mainly depend on molecular techniques" discuss this statement.
- (2) Discuss the versatility of bacterial secretory system found in plant pathogenic bacteria.

(3)

- (i) What is the genetic basis of hypersensitive response (HR) in plants?
- (ii) Describe in detail how hypersensitive response (HR) provides the first line of defense in plants against biotrophic pathogens.
- (4) Write an account on fungal toxins and their role in pathogenicity.

(5)

- (i) "Systemic acquired resistance (SAR) is an important phenomenon in plants against plant pathogens" discuss.
- (ii) Explain how this differs from induced systemic resistance (ISR).

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