

**T.Y.B.SC. SEM – V (CBCS - 2016 Course) : SUMMER - 2019**  
**SUBJECT: BOTANY PLANT PATHOLOGY & PLANT PROTECTION**

Day: Monday  
Date: 15/04/2019

**S-2019-0867**

Time: 11.00 A.M. To 02.00 P.M.  
Max. Marks: 60

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**N.B.:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
  - 3) Draw neat and labelled diagrams **WHEREVER** necessary.
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**Q.1** Attempt any **TWO** of the following: **(12)**

- a) Explain 'Cock's postulates' in short.
- b) Describe symptoms and control measures of downy mildew of grapes.
- c) Explain transmission and control of plant virus diseases.

**Q.2** Attempt any **TWO** of the following: **(12)**

- a) Describe structural defense mechanism of pathogen attack.
- b) Describe IPM system in disease control.
- c) Write in short 'Quarantine laws'.

**Q.3** Attempt any **TWO** of the following: **(12)**

- a) Describe the 'disease triangle' in short.
- b) Explain the concept of 'disease clinic'.
- c) Give in short importance of plant pathology.

**Q.4** Attempt any **THREE** of the following: **(12)**

- a) Describe importance of 'remote sensing' in plant pathology.
- b) Write control measures of tikka disease of groundnut and black arm of cotton.
- c) Describe the mechanism of pathogenesis.
- d) Give any two environmental factors affecting disease development.

**Q.5** Attempt any **FOUR** of the following: **(12)**

- a) Describe epidemiology.
- b) What is eradication? Explain its role in disease control.
- c) Write a note on seed certification in respect to disease control.
- d) 'Molecular diagnostics' explain its role in disease control.
- e) Explain sanitary measures in plant disease control.

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