

Roll.No.

20UPBCT2003

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

B.Sc PBPBT - END SEMESTER EXAMINATIONS - NOVEMBER 2025

SEMESTER - II

20UPBCT2003 - General Microbiology and Plant Pathology

Total Duration : 2 Hrs.30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Define microbiology and mention its scope and importance.
2. List the different shapes of bacteria with examples.
3. Write a short note on budding in bacteria with one example.
4. Explain how bacteria improve soil fertility.
5. Write the causal organisms, symptoms, and preventive measures of Red rot of sugarcane.
6. Describe the role of cyanobacteria in nitrogen fixation.
7. Write short notes on:
(a) Pili and fimbriae. (b) Chemotaxis in bacteria.
8. Describe the industrial importance of lactic acid fermentation.

Section C

Answer any **THREE** questions ($3 \times 10 = 30$ Marks)

9. Explain how T4 bacteriophage serves as a model organism in molecular biology studies
10. Describe the structure, types, flagellation, nutrition, and respiration of bacteria in detail.
11. Discuss how bacterial recombination contributes to genetic variation and antibiotic resistance.
12. Write an essay on the medical and pharmaceutical importance of bacteria.
13. Write a detailed note on early and late leaf spot diseases of groundnut, giving names of pathogens and symptoms.
