

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. END SEMESTER EXAMINATIONS NOVEMBER-2022

SEMESTER -II

20UPBCT2003 - General Microbiology and Plant Pathology

Total Duration : 2 Hrs 30 Mins.

Total Marks : 60

Section A

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

1. Describe general characteristics of cyanobacteria.
2. Give an illustrated account of a ultra structure of a bacterial cell.
3. Classify the different modes of nutrition in bacteria.
4. Explain binary fission in bacteria.
5. Explain the role of bacteria in molecular biology.
6. Predict the specific names of causal organisms and symptoms of the following plant diseases
(a) Red rot of sugarcane (b) Wilt of cotton (c) Tikka of groundnut
7. Narrate the methods to eradicate the pathogens.
8. Differentiate aerobic and anaerobic respiration in bacteria.

Section B

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

9. Explain the structure and reproduction of T4 bacteriophage.
10. With suitable illustrations classify the bacteria on the basis of their flagellation.
11. "The beneficial effect of bacteria outweigh the harmful ones". Justify the above statement and mention the part played by the bacteria in the economy of nature.
12. How will you differentiate between conjugation, transformation and transduction in bacteria.
13. Enumerate the symptoms, causative organism and control measures of bacterial blight of rice and citrus canker.
