QP Code: U25B018

Reg. No : .....
Name : .....

ST MARY'S COLLEGE (AUTONOMOUS), THRISSUR-20

II SEMESTER (FYUGP) DEGREE EXAMINATION, MARCH 2025
B Sc Botany
BOT2CJ101 : MICROBIAL DIVERSITY AND PHYTO PATHOLOGY
2024 Admission Onwards
(Credits: 4)

Time: 2 Hours **Maximum Marks: 70**

Section A

*Answer **all**. Each question carries **3** Marks* ***(Ceiling: 24 Marks)***

1. List the key features of the Five Kingdom classification. [BTL1]
2. Illustrate how plant viruses can differ in terms of morphology. [BTL2]
3. What are the three different groups of archaebacteria, provide example. [BTL2]
4. Explain the structure of mesosomes. [BTL2]
5. Describe acid fast staining. [BTL2]
6. What are microbial biofertilisers? [BTL1]
7. What role do soil microbes play in maintaining plant health? [BTL4]
8. What are Koch's postulates? [BTL1]
9. What is meant by necrosis? [BTL2]
10. What are biopesticides? [BTL1]

Section B

*Answer **all**. Each question carries **6** Marks* ***(Ceiling: 36 Marks)***

11. Describe the structure of prions and discuss why they are different from viruses. [BTL4]
12. Compare and contrast the COVID-19 and H1N1 pandemics in terms of origin, symptoms, and global impact. [BTL4]
13. Elaborate the phases of bacterial growth. [BTL2]
14. Explain various staining methods of microorganisms. [BTL1]
15. Summarize the reasons for the development of antimicrobial resistance. [BTL2]
16. Describe the role of virus in genetic engineering. [BTL5]

Turn Over

17. Evaluate the envrionment impact of chemicals in disease management. [BTL5]

18. Write the etiology,symptom,epidemology and management of quick wilt of pepper. [BTL3]

Section C

*Answer **any one**. Each question carries **10** Marks* ***(1x10=10 Marks)***

19. Summarise the transformation and transduction methods of gene transfer. [BTL2]

20. Describe the different microbial applications in biotechnology. [BTL3]

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