

(Pages : 3)

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Reg. No. :

Name :

Second Semester B.Sc. Degree Examination, August 2024

Career Related First Degree Programme under CBCSS

Group 2(a) – Botany and Biotechnology

Vocational Course

BB 1271 : MICROBIAL METABOLISM, GENETICS AND DISEASES

(2019 – 2022 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** the questions in a word or **one** or **two** sentences. **Each** question carries **1** mark.

1. Write the significance of Nipah.
2. What is the function of leghaemoglobin.
3. Define adenoviral infection.
4. What is Ames test?
5. Give note on green sulphur bacteria.
6. What is H1N1?
7. What are F+ cells?

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8. Name the causative organism of Typhoid fever.
9. Identify the importance of acetyl CoA.
10. What is mixotrophic bacteria?

(10 × 1 = 10 Marks)

SECTION – B

Answer **any eight** questions. **Each** question carries **2** marks. (Answer not to exceed **1** paragraph).

11. What are auxotrophs?
12. What is tetanus?
13. Identify the organisms used for lactic acid fermentation.
14. Comment on Measles.
15. What is facilitated diffusion?
16. Mention the beneficial role of cyanobacteria.
17. Identify the uses of *Saccharomyces cerevisiae*.
18. What is bacterio-chlorophyll?
19. What is meant by replica plating technique?
20. Comment on induced mutations in bacteria.
21. What is transduction?
22. Discuss very briefly, the experiment which give evidence of DNA as genetic material.

(8 × 2 = 16 Marks)



SECTION – C

Answer **any six** questions. **Each** question carries **4** marks. (Answer not to exceed **120** words).

23. Explain the etiology of dengue fever.
24. Write a short note on bacterial intoxications.
25. Explain glycolysis in bacteria.
26. Discuss the properties of plasmids. Explain its types.
27. Give a short note on airborne bacterial diseases.
28. Discuss the etiology and preventive measures of rabies.
29. What is conjugation? Discuss the mechanism in detail.
30. Explain mutation repair mechanisms of bacteria.
31. Discuss the properties and importance of photosynthetic pigments of bacteria.

(6 × 4 = 24 Marks)

SECTION – D

Answer **any two** questions. **Each** question carries **15** marks. (Answer not to exceed **3** pages).

32. Write an essay on neurotropic viral diseases. Discuss the symptoms and preventive measures.
33. What is transformation? Explain Griffith's experiment with a schematic representation.
34. What is fermentation? Discuss its types and applications.
35. Write an essay on dermatoviral diseases citing examples.

(2 × 15 = 30 Marks)

