

Date: 9-03-2022

Registration number:

**ST. JOSEPH’S COLLEGE (AUTONOMOUS), BENGALURU-27**

**B.Sc. MICROBIOLOGY - V SEMESTER**

**SEMESTER EXAMINATION: OCTOBER 2021**

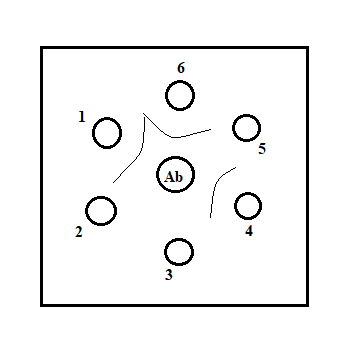
**(Examination conducted in March 2022)**

**MB 5118 - Immunology and Medical Microbiology**

Time- 2 ½ hrs Max Marks-70

This question paper contains 2 printed pages and four parts

1. **Answer any Five of the following 5X3=15**
2. What is “Ghon Focus”?
3. Comment on the significance of NK cells.
4. In what forms does the HBV exists in the host?
5. What is the significance of adhesion in microbial virulence?
6. Define Interferon and comment on their importance.
7. Are aspergillosis and aspergilloma different? Justify.
8. Compare active and passive immunity.
9. **Answer any Five of the following 5X5=25**
10. Discuss the selection process of monoclonal antibodies.
11. Explain the life cycle of the malarian protozoan.
12. Draw a neat and labelled diagram of an antibody.
13. Elaborate on any 5 methods of disease transmission.
14. Give an account of the inflammatory process.
15. Elucidate the structure of the thymus with a neat diagram.
16. List and explain any five factors that determine antigenicity of an agent.
17. **Answer any Two of the following 2X10=20**
18. Give a detailed account of any 5 virulence factors of *Staphylococcus*.
19. What are vaccines? Classify and describe the different kinds of vaccines.
20. Explain the classical pathway of complement activation.
21. **Answer the following 1X10=10**
22. Afew patient sera samples have been sent for diagnosis to detect the circulating antigen present. The patients had similar complaints and symptoms. The following image represents the results of the analysis. The numbers 1 to 6 represent the different patient sera.
23. Identify the technique**. (1)**
24. What can you comment on the antigens present in the 6 different sera obtained from patients? Justify your answer(s). **(5)**
25. What is the mechanism behind the formation of the line between the central well and sera 1? **(4)**

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