

Registration Number:

Date & session:

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

**END SEMESTER EXAMINATION OCTOBER 2023**

**(Examination conducted in November/December 2023)**

**B. Sc MICROBIOLOGY**

**MB: 5221 IMMUNOLOGY AND MEDICAL MICROBIOLOGY**

**(For current batch students only)**

**This question paper has 1 page and 4 parts**

 **Time: 2 hrs Max Marks: 60**

**I. Answer any Five of the following 5 x 3 = 15**

1. Where does Papain and Pepsin cleave an IgG antibody? What results are obtained?

2. How do TH cells differ from TC cells? Give their functions.

3. List three non-microbial and microbial antigens.

4. a) What are microglial cells? What is its function? -2

 b) Where are Dane particles found? -1

5. Define Gnotobiotic and teratogenic infection.

6. Describe Reynolds Braude Phenomenon.

7. Differentiate between transient and resident flora.

**II. Answer any Five of the following 5 x 6 = 30**

8. Tabulate the differences between Primary and Secondary immune response.

9. Explain Compliment fixation test.

10. What is contact dermatitis? How is it caused?

11. How would you prove that a steroid is positive in passive agglutination reaction?

12. Draw a neat labelled diagram of the organ that filters blood borne pathogens.

13. Why is the Coagulase test performed? Explain the test.

14. Explain how a patient suffering from amebic dysentery is diagnosed?

**III. Answer any One of the following 1 x 10 = 10**

15. Describe the mechanism of allograft rejection.

16. Explain the antigenic structures of the corona virus. How can it be detected?

**IV. Answer the following 1 x 5 = 5**

17. A young boy who had never been immunized to tetanus stepped on a rusty nail and got

 a deep punctured wound. The doctor cleaned out the wound and gave the child an

 injection of tetanus antitoxin.

 a) Why was antitetanus given instead of a booster shot of tetanus toxoid? -2.5

 b) If the boy receives no further treatment and steps on a rusty nail again 4 years

 later, will he be immune to tetanus? -2.5

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