

**M.D. DEGREE EXAMINATION**

**BRANCH IV – MICROBIOLOGY**

**PAPER I – GENERAL MICROBIOLOGY AND IMMUNOLOGY**

*Q.P. Code: 202014*

**Time: Three Hours**

**Maximum: 100 Marks**

**I. Essay:**

**(2 x 15 = 30)**

1. Discuss the different methods of microbiological surveillance of Operation Room. Write a protocol for Operation Room surveillance. Add a note on Operation Room sterilization.
2. Discuss the autoantibodies detected in various Connective Tissue disorders. Write the different methods of detection of autoantibodies and interpret them clinically.

**II. Short notes:**

**(10 x 5 = 50)**

1. Different generations of culture media.
2. Stamp's modified Ziehl Neelsen's stain.
3. T cell receptors.
4. Resistotyping.
5. Chimeric antibodies.
6. Detection of endotoxins in therapeutic solutions.
7. Biofilm.
8. Applications of immunoglobulins.
9. Lac operon.
10. Theories of immune response.

**III. Reasoning Out:**

**(4 x 5 = 20)**

1. Disposal of formalinised anatomical tissues is under regulation.
2. Low bacterial count in urine is significant in certain conditions.
3. Phenolic disinfectants are not used in infant nurseries - Why?
4. Beta lactam and Beta lactamase inhibitor antibiotics are used in Urinary tract infections caused by ESBL producing bacteria.

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