

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 Questions: **(2 x 10 = 20)**

1. Explain the mechanism of action of antibiotics on bacteria. Write in detail the development of antibiotic resistance in bacteria.
2. Write in detail about tumour Immunology and immunotherapy of cancer.

II. Short Questions: **(8 x 5 = 40)**

1. Fluorescent Microscopy.
2. ETO sterilization.
3. Immunomodulators.
4. Major Histocompatibility complex.
5. Preservation of stock cultures.
6. Cytokines.
7. Genetic mapping.
8. Plasmids.

III. Reasoning Out: **(4 x 5 = 20)**

1. Hormones, sutures and disposables are sterilized by ionizing radiation.
2. Acute rejection occurs within one week of transplantation.
3. Widal test is negative in the first week of enteric fever.
4. Still birth is more common in pregnant mother with early syphilis than with late syphilis.

IV. Very Short Answers: **(10 x 2 = 20)**

1. Jumping genes.
2. Cold sterilization.
3. Premunition immunity.
4. Freeze etching.
5. Flash method Pasteurisation.
6. Anoxomat.
7. Detection of endotoxins.
8. Super antigens.
9. Coomb's test.
10. Isograft.
