

M.D. DEGREE EXAMINATION
BRANCH IV – MICROBIOLOGY
PAPER II – SYSTEMATIC BACTERIOLOGY

Q.P. Code: 202015

Time: Three Hours

Maximum: 100 Marks

I. Essay:

(2 x 15 = 30)

1. Discuss the role of non-fermentative Gram negative bacilli in various clinical conditions. Describe the methods of their identification and pathogenicity tests.
2. Give an account of Hansen's bacillus. Review the development of newer concepts in the Bacteriology and Immunology of leprosy.

II. Short notes:

(10 x 5 = 50)

1. Proteocin typing.
2. VRE.
3. Demonstration of toxigenicity of *Corynebacterium diphtheriae*.
4. Specimen collection, processing and interpretation of blood culture.
5. Pseudomembranous colitis.
6. Human chlamydial infections.
7. Mode of action of cholera toxins.
8. Antibiotic resistance in *N. gonorrhoeae*.
9. Infections caused by non-sporing anaerobes.
10. Streptococcal vaccines.

III. Reasoning Out:

(4 x 5 = 20)

1. Blue pus in *Pseudomonas*.
2. Fresh isolates of *Salmonella* are non-agglutinable with O antigen.
3. Staphylococcus infections are localized.
4. Swarming in *Proteus*.
