

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

Q.P.Code: 202015

Time: Three Hours

Maximum: 100 Marks

I. Essay Questions:

(2 x 10 = 20)

1. Mention the HACEK (Haemophilus, Aggregatibacter, Cardiobacterium, Eikenella, Kingella species) group of bacteria. Describe the morphology, cultural characters, pathogenicity and lab diagnosis of Hemophilus influenzae.
2. Classify Rickettsia. Describe in detail pathogenesis and lab diagnosis of Typhus fevers.

II. Short Questions:

(8 x 5 = 40)

1. Rat bite fever.
2. Group D Streptococci.
3. Lab diagnosis of Pulmonary tuberculosis.
4. Actinomycotic Mycetoma.
5. Antigenic constituents and virulence factors of Bordetella pertussis.
6. Laboratory diagnosis of Chlamydial infections.
7. Pathogenicity and lab diagnosis of Clostridium perfringens.
8. Lab diagnosis of Leptospirosis.

III. Reasoning Out:

(4 x 5 = 20)

1. Swabs are generally unsatisfactory specimen for anaerobic culture.
2. Enterotoxins are important in pathogenesis of diarrhoea by Escherichia coli.
3. Plague is a Zoonotic disease.
4. Haemophilus influenza has fastidious growth requirements.

IV. Very Short Answers:

(10 x 2 = 20)

1. Donovanian Granulomata.
2. Halberstaedter - Prowazek bodies.
3. Cultural characters of Mycoplasma.
4. Non pathogenic Treponemes.
5. Experimental animals in leprosy.
6. Pontiac fever.
7. 'Mercury Drops' colony.
8. Cold agglutination test.
9. Cat scratch disease.
10. Standard Agglutination test.
