

MANIPAL UNIVERSITY**M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2014****PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY**

Monday, February 03, 2014

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Write answers that are brief, clear, relevant and legible.**
- ✍ **Illustrate your answers with neatly drawn and correctly labeled diagram wherever appropriate.**

1. Describe the mechanisms and clinical significance of gene transfer in bacteria.

2. Define and classify immunity. Describe the mechanisms of innate immunity.

(25×2 = 50 marks)

3. Write short notes on:

3A. Autoclave

3B. Bacterial growth curve

3C. Cytokines

3D. Monoclonal antibody

3E. Delayed hypersensitivity

(10×5 = 50 marks)



MANIPAL UNIVERSITY**M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2014****PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY**

Tuesday, February 04, 2014

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Write answers that are brief, clear, relevant and legible.**
- ✍ **Illustrate your answers with neatly drawn and correctly labeled diagram wherever appropriate.**

1. Describe the epidemiology, pathogenesis and laboratory diagnosis of Acute Diarrhoeal Diseases (ADD) caused by bacteria
2. Enumerate subcutaneous fungal Infections. Describe epidemiology, pathogenesis and laboratory diagnosis of Mycetoma.

(25×2 = 50 marks)

3. Write short notes on:

- 3A. Pathogenesis laboratory diagnosis of Gas Gangrene.
- 3B. Discuss the laboratory diagnosis of Sexually Transmitted bacterial Infections (STI).
- 3C. MRSA
- 3D. Aspergillosis
- 3E. Candidaemia

(10×5 = 50 marks)



Reg. No.

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M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2014
PAPER III: PARASITOLOGY AND VIROLOGY

Wednesday, February 05, 2014

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Write answers that are brief, clear, relevant and legible.**
- ✍ **Illustrate your answers with neatly drawn and correctly labeled diagrams wherever appropriate.**

1. Enumerate transfusion transmitted viral infections. Discuss pathogenesis and laboratory diagnosis of Hepatitis B virus infection.

2. Enumerate haemoflagellates. Describe the pathogenesis and laboratory diagnosis of Kala azar.
(25×2 = 50 marks)

3. **Write short notes:**

3A. Tissue cultures in virology

3B. Serodiagnosis of HIV infection

3C. Hydatid cyst

3D. Enterobius vermicularis

3E. Prophylaxis of human rabies

(10×5 = 50 marks)

