| Reg. No. | | | | | | | | | | |
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# MANIPAL UNIVERSITY

## M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2011

## PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY

Monday, February 07, 2011

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

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

1. Discuss the structure of bacterial cell.

(25 marks)

2. Define and enumerate Antigen- antibody reactions. Describe ELISA.

(25 marks)

**3. Write short notes on:**

3A. Transduction

3B. Bacterial filters

3C. Anaphylaxis

3D. Passive immunity

3E. Monoclonal antibodies.

(10×5 = 50 marks)

| Reg. No. | | | | | | | | | | |
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# MANIPAL UNIVERSITY

## M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2011

## PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY

Tuesday, February 08, 2011

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

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

1. Discuss pathogenesis and laboratory diagnosis of pulmonary tuberculosis. Add a note on drug resistance in tuberculosis.

(25 marks)

2. Classify fungal infections of skin and its appendages. Discuss dermatophytes in detail.

(25 marks)

**3. Write short notes:**

3A. Aspergillosis

3B. Laboratory diagnosis of acute diarrhoeal diseases

3C. MRSA

3D. Prophylaxis of tetanus

3E. Chromoblastomycosis.

(10×5 = 50 marks)

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# MANIPAL UNIVERSITY

## M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2011

## PAPER III: PARASITOLOGY AND VIROLOGY

Wednesday, February 09, 2011

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

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

1. Classify enteroviruses. Discuss the pathogenesis, laboratory diagnosis and prophylaxis of Poliomyelitis.

(25 marks)

2. Describe the life cycle, pathogenesis and laboratory diagnosis of *Plasmodium falciparum.*

(25 marks)

**3. Write short notes on:**

3A. Larva migrans

3B. Microfilaria

3C. Prophylaxis of rabies

3D. Yellow fever

3E. Laboratory diagnosis of Hepatitis B.

(10×5 = 50 marks)