

## MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2013

PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY

Thursday, July 11, 2013

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 various methods of antibiotic susceptibility testing and interpretation. (25 marks)

2. Define and classify hypersensitivity. Describe type I hypersensitivity reactions. (25 marks)

3. Write short notes on:

3A. Plasmids

3B. Quality control and quality assurance

3C. Immunofluorescence

3D. T lymphocytes

3E. Bacterial filters

(10×5 = 50 marks)



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PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY

Friday, July 12, 2013

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

✍ Answer **ALL** the questions.

1. Describe the pathogenesis, laboratory diagnosis and prophylaxis of diphtheria. (25 marks)
2. Enumerate subcutaneous mycoses. Describe the pathogenesis and laboratory diagnosis of mycetoma. (25 marks)
3. **Write short notes on:**
  - 3A. Laboratory diagnosis of gas gangrene
  - 3B. Bacterial food poisoning
  - 3C. Atypical mycobacteria
  - 3D. Mucormycosis
  - 3E. Dermatophytes

(10×5 = 50 marks)



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M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2013

PAPER III: PARASITOLOGY AND VIROLOGY

Saturday, July 13, 2013

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. Describe the epidemiology, pathogenesis and laboratory diagnosis of Influenza. Add a note on INFLUENZA vaccines.

(25 marks)

2. Describe the epidemiology and pathogenesis of Kala Azar. Discuss the laboratory diagnosis of Kala Azar.

(25 marks)

3. Write short notes on:

3A. Rabies Vaccine for human use

3B. Viral Haemorrhagic fever

3C. Discuss the role of free living amoebae in human diseases

3D. NACO Strategies for HIV testing in India

3E. Discuss the parasitic causes of diarrhoea in an immunocompromised person.

(10×5 = 50 marks)

