Reg. No.										

MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2012

PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY

Thursday, July 12, 2012

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. Classify sterilisation. Discuss various methods of disinfection followed in a tertiary care hospital.

(25 marks)

2. Describe Major Histocompatibility Complex (MHC) and discuss its role in immune response. Add a note on Human Leukocyte Antigen (HLA) typing.

(25 marks)

3. Write short notes on:

3A. Real Time Polymerase Chain Reaction

3B. Bacterial Plasmid

3C. Biological role of complement system

3D. ELISA

3E. Virulence factors in bacteria

(10×5 = 50 marks)

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MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2012

PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY

Friday, July 13, 2012

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 pathogenesis and laboratory diagnosis of Typhoid fever. Add a note on drug resistance in Salmonella.

(25 marks)

2. Describe the pathogenesis and laboratory diagnosis of systemic mycoses.

(25 marks)

3. Write short notes on:

3A. Acute Pyogenic Meningitis

3B. ESBL

3C. Describe the laboratory diagnosis of Urinary Tract Infections

3D. Dermatophytoses

3E. Discuss the laboratory diagnosis of Eumycotic mycetoma

(10×5 = 50 marks)

Reg. No.										

MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2012

PAPER III: PARASITOLOGY AND VIROLOGY

Saturday, July 14, 2012

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. Discuss in detail the pathogenesis, laboratory diagnosis and prophylaxis of Poliomyelitis. (25 marks)

2. Describe the laboratory diagnosis of parasitic infections. (25 marks)

3. **Write short notes on:**

3A. Cultivation of viruses

3B. Laboratory diagnosis of HIV Infection

3C. Parvovirus B19

3D. *Giardia lamblia*

3E. Life cycle of *Toxoplasma gondii*

(10×5 = 50 marks)