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MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2010

PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY

Monday, February 01, 2010

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. Describe various methods of cultivation of bacteria.

(25 marks)

2. Describe hybridoma technology and its application.

(25 marks)

3. Write short notes on:

3A. Dark ground microscope.

3B. Genetic engineering.

3C. Heterophile agglutination tests.

3D. Immune complex diseases.

3E. Antigen presenting cells.

(10×5 = 50 marks)



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M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2010

PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY

Tuesday, February 02, 2010

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. Describe the pathogenesis and laboratory diagnosis of pulmonary tuberculosis. (25 marks)

2. Describe the pathogenesis and laboratory diagnosis of dermatophytoses. (25 marks)

3. Write short notes on:

3A. Methicillin resistant *Staphylococcus aureus*.

3B. Salmonella carriers.

3C. Mycotoxins.

3D. VDRL test.

3E. Prophylaxis of tetanus.

(10×5 = 50 marks)



MANIPAL UNIVERSITY**M.Sc. MEDICAL (FINAL) MICROBIOLOGY DEGREE EXAMINATION – FEBRUARY 2010****PAPER III: PARASITOLOGY AND VIROLOGY**

Wednesday, February 03, 2010

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. Describe the life cycle, pathogenesis and lab diagnosis of *Wuchereria bancrofti*.
(25 marks)
2. Enumerate the arboviral diseases found in India. Discuss the pathogenesis, epidemiology and prophylaxis of Japanese B encephalitis.
(25 marks)
3. Write short notes on:
- 3A. Human oncogenic viruses.
- 3B. Prophylaxis of HIV infection.
- 3C. Congenital rubella.
- 3D. Cryptosporidiosis.
- 3E. Larva migrans.

(10×5 = 50 marks)

