

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

## M.Sc. (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2005

### PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY

Tuesday, July 05, 2005

Time available: 3 Hours

Maximum Marks: 100

---

**✍ Answer all the questions.**

**✍ Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**

1. Discuss the pathogenesis, laboratory diagnosis and prophylaxis of diphtheria.

(35 marks)

2. Discuss the pathogenesis and laboratory diagnosis of Escherichia coli diarrhoeal disease in man.

(35 marks)

3. Write short notes on:

3A. Rhinosporidiosis

3B. Mycotoxins

3C. Oral thrush

(10×3 = 30 marks)

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

## M.Sc. (FINAL) MICROBIOLOGY DEGREE EXAMINATION – JULY 2005

### PAPER III: PARASITOLOGY AND VIROLOGY

Wednesday, July 06, 2005

Time available: 3 Hours

Maximum Marks: 100

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

1. Discuss Oncogenic viruses and their mechanism in human oncogenesis.

(35 marks)

2. Classify nematodes and their mode of infection. Explain the life cycle and laboratory diagnosis of *Ancylostoma duodenale*.

(35 marks)

3. Write short notes on:

3A. Japanese B encephalitis.

3B. *Giardia lamblia*.

3C. *Hymenolepis nana*.

(10×3 = 30 marks)

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

**M.Sc. (FINAL) MICROBIOLOGY DEGREE EXAMINATION – DECEMBER 2005**

## **PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY**

Monday, December 05, 2005

Time available: 3 Hours

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 appropriate.**

1. Describe the various methods of cultivation of bacteria.  
(35 marks)
  
2. Enumerate the serological tests done in the laboratory. Describe in detail the precipitation reaction.  
(35 marks)
  
3. Write short notes on
  - 3A. Bacterial mutation.
  - 3B. HLA – complex.
  - 3C. Antibiotic sensitivity testing in the laboratory.

(10×3 = 30 marks)

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

**M.Sc. (FINAL) MICROBIOLOGY DEGREE EXAMINATION – DECEMBER 2005**

## **PAPER II: SYSTEMATIC BACTERIOLOGY AND MYCOLOGY**

Tuesday, December 06, 2005

Time available: 3 Hours

Maximum Marks: 100

---

✍ **Answer all the questions.**

✍ **Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**

1. Discuss the role of Atypical Mycobacteria in human disease indicating their diagnosis and treatment.

(35 Marks)

2. Discuss the pathogenesis and prophylaxis of tetanus.

(35 Marks)

3. Write short notes on

3A. Detection of typhoid carrier.

3B. Otomycosis.

3C. Listeriosis.

(10×3 = 30 Marks)

# MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

M.Sc. (FINAL) MICROBIOLOGY DEGREE EXAMINATION – DECEMBER 2005

## PAPER III: PARASITOLOGY AND VIROLOGY

Wednesday, December 07, 2005

Time available: 3 Hours

Maximum Marks: 100

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

1. Classify Cestodes. Describe the morphology, life cycle, pathogenicity and laboratory diagnosis of *Echinococcus granulosus*.

(35 Marks)

2. Discuss the pathogenesis, laboratory diagnosis and prophylaxis of rabies.

(35 Marks)

3. Write short notes on:

3A. KFD.

3B. Extra intestinal amoebiasis.

3C. Herpes simplex virus.

(10×3 = 30 Marks)