

Reg. No.														
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (MICROBIOLOGY) DEGREE EXAMINATION – APRIL 2013

SUBJECT: PAPER I: GENERAL MICROBIOLOGY AND IMMUNOLOGY

Tuesday, April 02, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

1. Define sterilization. Classify the methods and discuss moist heat sterilization. (25 marks)
2. Describe the method of production of monoclonal antibodies and its uses. (25 marks)
3. Write short notes on:
 - 3A. Bacterial growth curve
 - 3B. Bacteriological examination of water
 - 3C. Filamentous appendages of bacteria
 - 3D. Cytokines
 - 3E. Anaphylaxis(10×5 = 50 marks)



MANIPAL UNIVERSITY

MD (MICROBIOLOGY) DEGREE EXAMINATION – APRIL 2013

SUBJECT: PAPER II: BACTERIOLOGY AND MYCOLOGY

Wednesday, April 03, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

☞ Answer ALL questions.

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

2. Describe the laboratory diagnosis of cutaneous mycoses. (25 marks)

3. Write short notes on:

3A. Multi drug resistant Salmonella

3B. Mycotoxins

3C. Laboratory diagnosis of chlamydial infections

3D. Coagulase negative staphylococci

3E. Relapsing fever

(10×5 = 50 marks)



Reg. No.										
----------	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (MICROBIOLOGY) DEGREE EXAMINATION – APRIL 2013

SUBJECT: PAPER III: VIROLOGY AND PARASITOLOGY

Thursday, April 04, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

✍ Answer ALL questions.

1. Classify Retroviruses. Describe the pathogenesis, laboratory diagnosis and control of HIV infection.

(25 marks)

2. Discuss the pathogenesis and laboratory diagnosis of Hydatid cyst.

(25 marks)

3. Write short notes on:

3A. Prion diseases

3B. Teratogenic viruses

3C. Dermal leishmaniasis

3D. Clonorchiasis

3E. Viral inclusion bodies

(10×5 = 50 marks)



Reg. No.									
----------	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

MD (MICROBIOLOGY) DEGREE EXAMINATION – APRIL 2013

SUBJECT: PAPER IV: APPLIED MICROBIOLOGY AND RECENT ADVANCES

Friday, April 05, 2013

Time: 14:00 – 17:00 Hrs.

Max. Marks: 100

Answer ALL questions.

1. Role of non cultural methods in diagnosis of infectious diseases.

(25 marks)

2. Describe the investigation of nosocomial infection outbreak.

(25 marks)

3. **Write short notes on:**

3A. Monoclonal antibodies and their uses

3B. Laboratory diagnosis of anaerobic infections

3C. Neonatal sepsis

3D. Biofilms

3E. Aspergillosis

(10×5 = 50 marks)

