

# MANIPAL UNIVERSITY

**SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008**

**SUBJECT: PATHOLOGY AND MICROBIOLOGY**

Monday, June 09, 2008

Time: 3 Hrs.

Max. Marks: 80

- ✍ Use **SEPARATE ANSWER BOOKS** for each section.
- ✍ Answer **all the question.**

### SECTION – 'A' : PATHOLOGY : 40 MARKS

1. Define neoplasia. Tabulate the differences between benign and malignant tumours. Add a note on spread of tumours. (1+4+3 = 8 marks)
  
2. Define and classify anemia. Describe the aetiology and clinical features of nutritional anemia. (7 marks)
  
3. Write short notes on the following:
  - 3A. Cellular events in acute inflammation.
  - 3B. Fate of thrombus.
  - 3C. Caseous necrosis.
  - 3D. Pulmonary tuberculosis.
  - 3E. Aetiology, mode of infection and clinical features of HIV infection. (5×5 = 25 marks)

### SECTION – 'B' : MICROBIOLOGY : 40 MARKS

- 4A. Match the following:

**Part – I**

- 1) Cholera
- 2) Influenza
- 3) Malaria
- 4) Brucella

**Part – II**

- a) Milk
- b) Mosquito
- c) Water
- d) Aerosol

(1×4 = 4 marks)

- 4B. Fill in the blanks:

- i) Vibrio is \_\_\_\_\_ shaped bacterium.
- ii) Cocci arranged in clusters are called \_\_\_\_\_.
- iii) Ribosome is the site of \_\_\_\_\_ synthesis.
- iv) An example of asbestos disc filter is \_\_\_\_\_.

(1×4 = 4 marks)

5. Classify bacteria. Describe different methods of bacterial culture. (4+4 = 8 marks)
6. Define Infection. Explain briefly the sources and modes of transmission of Infection. (1+4+3 = 8 marks)
7. Write short notes on:
- 7A. Autoclave.
  - 7B. Hepatitis B Vaccine.
- (4×2 = 8 marks)
8. Write briefly on:
- 8A. Bacterial Cell wall.
  - 8B. Opportunistic infections
  - 8C. Sterilization by gases
  - 8D. Urinary tract infection.
- (2×4 = 8 marks)



# MANIPAL UNIVERSITY

## SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008

### SUBJECT: ENT AND ORTHOPAEDICS

Tuesday, June 10, 2008

Time: 3 Hrs.

Max. Marks: 80

- ✂ **USE SEPARATE ANSWER BOOKS FOR EACH SECTION.**  
 ✂ **ANSWER ALL QUESTIONS.**

#### SECTION – 'A': ENT: 40 MARKS

1. Enumerate the causes of epistaxis and it's radiological evaluation. (5+3 = 8 marks)
2. Describe the clinical features of Le forte I fracture and it's radiological evaluation. (4+4 = 8 marks)
3. Enumerate the clinical features and evaluation of a child with adenoid hypertrophy. (4+4 = 8 marks)
4. Describe the types of nasal bone fractures and their assessment. (4+4 = 8 marks)
5. Enumerate the clinical features of pyriform fossa malignancy. What are the radiological investigations required in the assessment? (4+4 = 8 marks)

#### SECTION – 'B' : ORTHOPAEDICS : 40 MARKS

6. With reference to a 40 year old male with a closed fracture of the femur due to road traffic accident, explain the following:
  - 6A. First aid to be given
  - 6B. Complications.
  - 6C. X-rays to be taken
  - 6D. Outline of treatment(2+2+2+2 = 8 marks)
7. Define osteomyelitis. Discuss the pathogenesis, radiographic findings, investigations and complications of osteomyelitis. (1+2+2+1½+1½ = 8 marks)
8. Discuss:
  - 8A. Arthrogram
  - 8B. Orthopaedic implants.(4+4 = 8 marks)
9. Discuss the causes of Perthes', septic arthritis, osteoporosis and fractures. (2+2+2+2 = 8 marks)
10. Discuss the advantages of splints. Describe a Thomas splint. (4+4 = 8 marks)



## MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: FORENSIC MEDICINE

Wednesday, June 11, 2008

Time: 1½ Hrs.

Max. Marks: 40

✍ **All questions are compulsory.**

✍ **Draw labeled diagram wherever necessary.**

1. Outline the procedure involved in disciplinary action against a doctor involved in "Professional Misconduct".

(5 marks)

2. Define Forensic Radiology. Explain its role in hospital setup.

(2+3 = 5 marks)

3. Explain:

3A. Vicarious liability

3B. Medical significance of ages 18 to 21 yrs.

3C. Warning and Warning Notice.

3D. Therapeutic Misadventure

(2½×4 = 10 marks)

4. Write short notes on:

4A. Product liability

4B. Res ipsa loquitor

4C. Therapeutic privilege

4D. Informed Refusal

(2½×4 = 10 marks)

5. Explain:

5A. Corporate negligence

5B. Penal Erasure

5C. Medical maloccurrence

5D. Novus Actus interveniens

(2½× 4 = 10 marks)



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## MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: RADIOGRAPHIC SPECIAL PROCEDURES

Thursday, June 12, 2008

Time: 1½ Hrs.

Max. Marks: 40

**Answer ALL the questions. Each question carries EIGHT marks.**

1. Write in detail about indications, complications, contraindications and procedure of micturating cysto urethrogram.
2. Describe in detail indications, preparations and procedure of barium enema.
3. Discuss indications, contraindications and procedure of barium swallow.
4. Write short notes on:
  - 4A. Low osmolar contrast media
  - 4B. Angiography catheters
5. Write about indications and procedure of dacrocystography.



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## MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008

SUBJECT: IMAGING PHYSICS AND RADIOGRAPHIC POSITIONING

Friday, June 13, 2008

Time: 1½ Hrs.

Max. Marks: 40

✍ Answer **ALL** the questions.

1. Write a note on CT artifact with cause, appearance and remedy.  
(8 marks)
2. Describe the principle of Doppler imaging and its application.  
(8 marks)
- 3A. Explain the landmarks for the radiography of thorax with the labeled diagram.
- 3B. Describe the radiographic view for apex of lungs.  
(4×2 = 8 marks)
4. List the radiographic views for Sacroiliac joint. Explain posterior oblique view with related anatomy.  
(8 marks)
5. List the name of cranial and facial bones. Explain PA view of skull.  
(8 marks)

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# MANIPAL UNIVERSITY

**SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008**

**SUBJECT: MEDICINE**

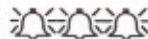
Saturday, June 14, 2008

Time: 1½ Hrs.

Max. Marks: 40

**Answer ALL the questions.**

1. Define haemoptysis. What are the causes of hemoptysis and what are radiological investigations performed on haemoptysis?  
(8 marks)
2. What is Malena? What are the clinical features of Malena? Enumerate FOUR causes of Malena.  
(8 marks)
3. What is CPR? Describe its role in clinical practice.  
(8 marks)
4. Define and classify Shock. Describe the clinical features.  
(8 marks)
5. What are the clinical features of Renal Failure?  
(8 marks)



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**MANIPAL UNIVERSITY**  
**SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2008**

**SUBJECT: SURGERY**

Monday, June 16, 2008

Time: 1½ Hrs.

Max. Marks: 40

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✍ **Write short notes on the following:**

1. Clinical features of appendicitis.
2. Clinical features of pneumoperitoneum.
3. Causes of testicular swelling.
4. Tissue biopsy.
5. Causes of hepatomegaly.

(8×5 = 40 marks)

