

MANIPAL UNIVERSITY
SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010
SUBJECT: PATHOLOGY AND MICROBIOLOGY

Monday, June 07, 2010

Time: 14:00-17:00 Hrs.

Max. Marks: 80

- ✗ Use **SEPARATE ANSWER BOOKS** for each section.
 ✗ Answer all questions.

SECTION – 'A' : PATHOLOGY : 40 MARKS

1. Define necrosis. Describe the types of necrosis with examples. (1+7 = 8 marks)

2. Describe the clinical features, aetiology and basic investigations of two nutritional anemias. (2+2+3 = 7 marks)

3. Write short notes on:
 - 3A. Factors influencing wound healing.
 - 3B. Haemophilia.
 - 3C. Phagocytosis.
 - 3D. Primary tuberculosis.
 - 3E. Mode of spread and prognosis of tumours.(5×5 = 25 marks)

SECTION – 'B': MICROBIOLOGY : 40 MARKS

- 4A. Match the following:

Part – I

- 1) Adhesion
- 2) Motility
- 3) Metabolism
- 4) Protein synthesis

Part – II

- a) Flagella
- b) Ribosome
- c) Pili
- d) Mesosome

(1×4 = 4 marks)

- 4B. Fill in the blanks:

- i) Holding period of hot air oven at 160°C is _____.
 - ii) Syphilis is caused by _____.
 - iii) Plastic syringes are sterilized by _____.
 - iv) _____ is an important virulence factor present in the cell wall of Gram negative bacteria.
- (1×4 = 4 marks)

5. Classify bacteria with examples. Add a note on culture media and culture methods.

(4+2+2 = 8 marks)

6. Define disinfection. Add a note on chemical agents used for disinfection.

(1+7 = 8 marks)

7. Write short notes on:

7A. Koch's postulates

7B. Autoclave

(4×2 = 8 marks)

8. Write briefly about:

8A. Sterilization by Radiation.

8B. Modes of transmission of Infection.

8C. Bacterial flagella.

8D. National Immunization schedule.

(2×4 = 8 marks)



MANIPAL UNIVERSITY
SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010
SUBJECT: ENT AND ORTHOPAEDICS

Wednesday, June 09, 2010

Time: 14:00-17:00 Hrs.

Max. Marks: 80

✂ **USE SEPARATE ANSWER BOOKS FOR EACH SECTION.**

✂ **Answer All Questions.**

SECTION – 'A': ENT: 40 MARKS

1. What is cochlear implant? What are the essential radiological investigations required prior to cochlear implantation?
(4+4 = 8 marks)
2. Discuss the etiopathogenesis of chronic maxillary sinusitis. Discuss regarding the radiological investigation of a case of chronic maxillary sinusitis.
(3+5 = 8 marks)
3. Enumerate cystic lesions in head and neck. Discuss regarding its radiological investigations.
(3+5 = 8 marks)
4. Enumerate the complications of chronic suppurative otitis media. Discuss in detail regarding radiologic investigations of its extra cranial complications.
(3+5 = 8 marks)
5. What is osteomeatal complex (OMC)? Why are coronal cuts preferred in CT OMC?
(3+5 = 8 marks)

SECTION – 'B' : ORTHOPAEDICS : 40 MARKS

6. Describe the Radiological classification of fractures. Outline the methods of treatment of fractures.
(8 marks)
7. Write notes on precautions in handling a trauma victim with spinal injury.
(8 marks)
8. Enumerate the radiological features of Chronic osteomyelitis
(8 marks)
9. Arthrogram
(8 marks)
10. Enumerate commonly used orthopaedic hardware.
(8 marks)



MANIPAL UNIVERSITY
SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010
SUBJECT: FORENSIC MEDICINE

Friday, June 11, 2010

Time: 14:00-15:30 Hrs.

Max. Marks: 40

☞ **All questions are compulsory.**

☞ **Draw labeled diagram wherever necessary.**

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

(2+3 = 5 marks)

2. Explain Vicarious liability and its doctrines.

(5 marks)

3. Explain:

3A. Novus Actus interveniens.

3B. Product liability.

3C. Medical maloccurrence.

3D. Res ipsa loquitor.

(2½×4 = 10 marks)

4. Write short notes on:

4A. Therapeutic privilege.

4B. Medical significance of ages 12 to 18 yrs.

4C. Corporate negligence.

4D. Loco parentis.

(2½×4 = 10 marks)

5. Explain:

5A. Contributory negligence.

5B. Functions of State Medical Council.

5C. Informed Refusal.

5D. Therapeutic Misadventure.

(2½×4 = 10 marks)



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MANIPAL UNIVERSITY
SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010
SUBJECT: RADIOGRAPHIC SPECIAL PROCEDURES

Monday, June 14, 2010

Time: 14:00-15:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

✍ **Each question carries 8 marks.**

1. Classify the contrast reactions according to severity. Add a note on treatment.
2. Write in detail about enteroclysis.
3. Describe barium swallow.
4. Describe dacrocystography.
5. Write short notes on the following:
 - 5A. Sterilization of catheters.
 - 5B. Standard views in single contrast barium enema.



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MANIPAL UNIVERSITY

SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010

SUBJECT: IMAGING PHYSICS AND RADIOGRAPHIC POSITIONING

Wednesday, June 16, 2010

Time: 14:00-15:30 Hrs.

Max. Marks: 40

✍ Answer ALL questions.

1. Draw a labeled diagram of a typical lumbar vertebra. Explain the AP and lateral views for LS spine.
(8 marks)
2. Mention the different views for ankle joint with a diagram showing the anatomy of ankle joint.
(8 marks)
3. Describe the optic foramina and Schullers view.
(8 marks)
4. Write in detail about the reconstruction method used in CT scanner.
(8 marks)
5. What is the principle behind Doppler and what is Doppler shift?
(8 marks)



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SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010

SUBJECT: MEDICINE

Friday, June 18, 2010

Time: 14:00-15:30 Hrs.

Max. Marks: 40

✍ **Answer ALL the questions.**

1. Describe the pathogenesis and clinical features of Bronchogenic Carcinoma. (8 marks)
2. Write short notes of Universal precaution. (8 marks)
3. Write short notes on Diabetes Mellitus. (8 marks)
4. Causes and clinical features of Cholecystitis. (8 marks)
5. What are the causes and clinical features of Pulmonary edema. (8 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.Sc. M.I.T. DEGREE EXAMINATION – JUNE 2010****SUBJECT: SURGERY**

Monday, June 21, 2010

Time: 14:00-15:30 Hrs.

Max. Marks: 40

✍ Answer ALL questions.

1. Classify breast lumps. Describe clinical features and relevant investigations in a case of carcinoma breast.
(8 marks)
2. Enumerate causes of hematuria. Discuss investigations for hematuria.
(8 marks)
3. Write clinical features and investigations of amoebiasis.
(8 marks)
4. Describe the pathophysiology, causes and clinical features of Acute Appendicitis. Mention relevant investigations.
(8 marks)
5. Write in short:
 - 5A. Enumerate causes of hematemesis.
 - 5B. Define fistula.
(4×2 = 8 marks)

