

Reg. No.

MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T./B.Sc. R.T./ B.Sc. C.V.T./ B.Sc. R.R.T & D.T. AND  
FOURTH SEMESTER BACHELOR OF PERFUSION TECHNOLOGY  
DEGREE EXAMINATION – JUNE 2014

SUBJECT: PATHOLOGY

(COMMON FOR 2010 BATCH (NR)/2011 BATCH/2010 BATCH/2011 BATCH)

Monday, June 16, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer ALL questions.

✍ Illustrate your answers with diagrams wherever necessary.

1. Etiopathogenesis, laboratory serum markers and complications of acute myocardial infarction.  
(3+2+3 = 8 marks)

2. Define and classify anaemia. Enumerate the causes and laboratory diagnosis of iron deficiency anaemia.  
(3+4 = 7 marks)

3. Write short notes on:

3A. Lobar pneumonia

3B. Septic shock

3C. Granulomatous inflammation

3D. Mechanism of metastasis

3E. Peptic ulcer

(5 marks × 5 = 25 marks)



**MANIPAL UNIVERSITY****SECOND YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/B.Sc. RRT & DT/  
FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2014****SUBJECT: MICROBIOLOGY  
(COMMON FOR 2010 BATCH (NR)/2011 BATCH/2010 SCHEME/2011 SCHEME)**

Wednesday, June 18, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer all questions. Illustrate your answers with neat labeled diagram wherever necessary.**

1. Enumerate the organisms causing sexually transmitted diseases. Describe the pathogenesis, clinical features and laboratory diagnosis of Human Immunodeficiency virus infection. (2+2+2+2 = 8 marks)

2. Describe the bacterial cell structure with a neat labeled diagram. (4+3 = 7 marks)

3. **Write short notes on:**

- 3A. Sources and routes of spread of nosocomial infections
- 3B. Antibacterial susceptibility testing
- 3C. Life cycle of *Ancylostoma duodenale*
- 3D. Prophylaxis of tetanus
- 3E. Laboratory diagnosis of Urinary tract infection (UTI)

(5 marks × 5 = 25 marks)



**MANIPAL UNIVERSITY****SECOND YEAR B.P.T./B.O.T./B.Sc. M.I.T./B.Sc. C.V.T./B.Sc. R.R.T. & D.T. /  
FOURTH SEMESTER BACHELOR OF CLINICAL OPTOMETRY/B.PFT  
DEGREE EXAMINATION – JUNE 2014****SUBJECT: PHARMACOLOGY****(COMMON FOR 2010 BATCH (NR)/2011 BATCH/2012 SCHEME/2011 SCHEME & GS2011 & 2012 BATCH)**

Friday, June 20, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

**Answer the following questions:**

1. Define the following terms with an example for each:

- 1A. Synergism
- 1B. Iatrogenic disease
- 1C. Chemoprophylaxis

(2 marks × 3 = 6 marks)

2A. Mention two advantages and two disadvantages of intravenous routes of drug administration.

2B. List four factors affecting absorption of a drug.

2C. Mention three groups of drugs with an example for each class useful in hypertension.

(2+2+3 = 7 marks)

3. Mention two drugs each useful in the following condition:

- 3A. Parkinsonism
- 3B. Vomiting
- 3C. HIV infection
- 3D. Insomnia
- 3E. Diabetes mellitus

(1 mark × 5 = 5 marks)

4. Describe the mechanism of action of the following drugs:

- 4A. Omeprazole
- 4B. Salbutamol

(2 marks × 2 = 4 marks)

5. Explain the basis for the following:

- 5A. Allopurinol is used in the treatment of chronic gout
- 5B. Nitroglycerin is used in the treatment of angina pectoris

(2 marks × 2 = 4 marks)

6. List two examples each for the following class of drugs:

- 6A. Loop diuretics
- 6B. Glucocorticoids
- 6C. Anticoagulants
- 6D. Quinolones
- 6E. Aminoglycosides

(1 mark  $\times$  5 = 5 marks)

7. Enumerate three anticholinergics and list their three therapeutic uses.

(3 marks)

8. Write short notes on the following:

- 8A. Drug nomenclature
- 8B. Aspirin

(3 marks  $\times$  2 = 6 marks)



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## MANIPAL UNIVERSITY

SECOND YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2014

SUBJECT: PAPER IV – DIAGNOSTIC AND THERAPEUTICS CARDIOLOGY  
(2011 SCHEME)

Monday, June 23, 2014

Time: 10.00-11.30 Hrs.

Max. Marks: 40

✍ **Answer all the questions, draw the diagram wherever necessary.**

1. Explain ACC/AHA guidelines for exercise testing in patients with valvular heart disease.
2. Explain basic components of cardiac pacemakers.
3. Write a note on Bruce protocol on treadmill test and non –coronary indications in detail.
4. Explain X-ray features of Pulmonary artery and venous hypertension.
5. Write a note on strength duration curve of pacing and factors affecting the SD curve.

(8 marks × 5 = 40 marks)



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## MANIPAL UNIVERSITY

SECOND YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2014

SUBJECT: PAPER V – CONGENITAL & ACQUIRED HEART DISEASE  
(2011 SCHEME)

Wednesday, June 25, 2014

Time: 10.00 – 11.30 Hrs.

Max. Marks: 40

✍ Answer ALL the questions.

✍ Draw the diagram wherever necessary.

1. Explain major electrophysiological abnormalities, X-ray and echocardiography in Ebstein's anomaly.
2. Explain clinical features and natural history of DORV in detail.
3. Explain ECG, X-ray, Echocardiographic findings in Endocardial cushion defect in detail.
4. Explain etiology and Severity assessment of Aortic Regurgitation.
5. Explain classification and related ECG findings in Tricuspid Atresia.

(8 marks × 5 = 40 marks)

