

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
DEGREE EXAMINATION – JUNE 2015

SUBJECT: PATHOLOGY
(2010 SCHEME/2011 BATCH/2010 SCHEME/2011 SCHEME)

Monday, June 15, 2015

Time: 10:00-11:30 Hrs.

Max. Marks: 40

- ☞ Answer ALL questions.
☞ Illustrate your answers with diagrams wherever necessary.

1. Classify anemia. What are the biochemical investigations and peripheral blood smear picture in iron deficiency anemia.
(3+3+2 = 8 marks)

2. Mention the causative organism of Tuberculosis. Define primary and secondary Tuberculosis. Describe morphology of secondary pulmonary tuberculosis.
(1+2+4 = 7 marks)

3. Write short notes on:
 - 3A. Gangrene
 - 3B. Phagocytosis
 - 3C. Osteoporosis
 - 3D. Types of embolism
 - 3E. Factors influencing fracture healing and its complications(5 marks × 5 = 25 marks)



Reg. No.

RT&DT

MANIPAL UNIVERSITY

SECOND YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/B.Sc. RRT & DT DEGREE EXAMINATION – JUNE 2015

SUBJECT: MICROBIOLOGY

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

Wednesday, June 17, 2015

Time: 10:00-11:30 Hrs.

Max. Marks: 40

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

1. Describe the pathogenesis, laboratory diagnosis and prophylaxis of Tetanus.
(3+2+3 = 8 marks)
2. Define and classify immunity. Describe in detail about acquired immunity.
(1+2+4 = 7 marks)
3. Write short notes on:
 - 3A. Bacterial growth curve
 - 3B. Laboratory diagnosis of fungal infections
 - 3C. Bacterial endocarditis
 - 3D. Laboratory diagnosis of Hepatitis B virus infection
 - 3E. Hot air oven(5 marks × 5 = 25 marks)



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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.
DEGREE EXAMINATION – JUNE 2015

SUBJECT: PHARMACOLOGY

(COMMON FOR 2010 REGULATION/2011 BATCH/2012 SCHEME/2011 SCHEME)

Friday, June 19, 2015

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer the following questions:

1. Define the following terms:

- 1A. Biotransformation
- 1B. First pass metabolism
- 1C. Chemoprophylaxis

(2 marks × 3 = 6 marks)

- 2A. List three advantages and three disadvantages of oral route of drug administration.
- 2B. Describe the effects of adrenaline on: heart and blood vessels.
- 2C. List two bronchodilators used in asthma and explain the mechanism of action of any one of them.
- 2D. Describe three factors modifying drug action.

(3+3+3+3 = 12 marks)

- 3A. Name two antiplatelet drugs and mention two therapeutic uses of them.
- 3B. Write basis for combining levodopa and carbidopa in Parkinsonism.
- 3C. Describe mechanism of action of cotrimoxazole and mention its one use.
- 3D. List two therapeutic uses and two adverse effects of corticosteroids.

(2+2+2+2 = 8 marks)

4. Describe the following terms with one example:

- 4A. Brand name of drug
- 4B. Synergism
- 4C. Local anesthetics

(2 marks × 3 = 6 marks)

5. Mention two drugs belonging to the following groups:

- 5A. Sedatives
- 5B. ACE Inhibitors
- 5C. Hypolipidemics

(1 mark × 3 = 3 marks)

6. **List two drugs used in the following conditions:**

6A. Cough

6B. Type 2 Diabetes mellitus

6C. Peptic ulcer

6D. Angina

6E. HIV infection

(1 mark × 5 = 5 marks)



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SECOND YEAR B.Sc. RRT & DT DEGREE EXAMINATION – JUNE 2015

SUBJECT: BDT 204 – RENAL DISEASE, PRINCIPLES OF RENAL REPLACEMENT THERAPY & WATER TREATMENT PLANT

Monday, June 22, 2015

Time: 10.00-13.00 Hrs.

Max. Marks: 80

1. **Long essay questions.**

- 1A. Discuss the classification and etiology of chronic kidney disease.
- 1B. Discuss continuous ambulatory peritoneal dialysis (CAPD) and its complications.
- 1C. Illustrate the typical water treatment plant for hemodialysis.

(10 marks × 3 = 30 marks)

2. **Short essay questions.**

- 2A. Discuss the role of human leukocyte antigen (HLA) in organ transplantation.
- 2B. Discuss the principles of diet in end stage renal disease.
- 2C. What are the complications of Central venous catheter for hemodialysis?
- 2D. Write a note on intradialytic complications.
- 2E. Describe the advantages of dialyzer reprocessing.
- 2F. Discuss anticoagulation in hemodialysis.

(5 marks × 6 = 30 marks)

3. **Short notes questions.**

- 3A. What are the disadvantages of the complement dependent cytotoxic (CDC) cross match method?
- 3B. What are the early complications of peritoneal dialysis catheter insertion?
- 3C. List the dietary sources of potassium.
- 3D. What are the sources of protein in the diet?
- 3E. What is the role of carbon filters in water treatment for hemodialysis?
- 3F. What are the side effects of epoietin therapy?
- 3G. List four immunosuppressant medications used in nephrology.
- 3H. Which phosphate binders are commonly used in end stage renal disease?
- 3I. How can glomerular filtration rate (GFR) be measured from a 24 hour urine collection?
- 3J. What are the components of a dialysis prescription?

(2 marks × 10 = 20 marks)

