

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/
FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2017****SUBJECT: PATHOLOGY**

(2010 REGULATION/2011 & 2015 SCHEME/2010 & 2015 SCHEME/2011 & 2015 SCHEME/BDT 201/2015 & 2014 SCHEME)

Friday, June 02, 2017

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

✍ **Illustrate your answers with diagrams wherever necessary.**

1. Define necrosis. Mention and explain four morphologic types of necrosis. Give one example for each.

(2+4+2 = 8 marks)

2. Define neoplasia. List five differences between benign and malignant tumors.

(2+5 = 7 marks)

3. **Write short notes on:**

3A. Etiology of atherosclerosis

3B. Peripheral blood findings of iron deficiency anaemia

3C. Clinical features and microscopy of lepromatous leprosy

3D. Complications of diabetes mellitus

3E. Definition, etiology and clinical features of chronic bronchitis

(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 2017****SUBJECT: MICROBIOLOGY**

(COMMON FOR 2010 REGULATION/2011 & 2015 SCHEME/2010 & 2015 SCHEME/2011 & 2015
SCHEME/BDT 202/2015 & 2014 SCHEME)

Monday, June 05, 2017

Time: 10:00-11:30 Hrs.

Max. Marks: 40

 **Draw Diagrams wherever appropriate.**

1. Define and classify hypersensitivity reactions. Discuss the mechanism of IgE mediated hypersensitivity reaction.
(1+2+5 = 8 marks)
2. Discuss the pathogenesis and laboratory diagnosis of cholera.
(3+4 = 7 marks)
3. **Write short notes on:**
 - 3A. Bacterial growth curve
 - 3B. Prophylaxis of poliomyelitis
 - 3C. Autoclave
 - 3D. Laboratory diagnosis of HIV infection
 - 3E. Gram negative bacterial cell wall(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.T./B.Sc. R.R.T. & D.T.
DEGREE EXAMINATION – JUNE 2017****SUBJECT: PHARMACOLOGY**

(COMMON FOR 2010 REGULATION/2011 & 2015 SCHEME/2012 SCHEME/2011 & 2015 SCHEME/2015 SCHEME /BDT 203)

Wednesday, June 07, 2017

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer the following questions:

1. Explain the following terms with an example:

- 1A. Idiosyncrasy
- 1B. Synergism
- 1C. Chemoprophylaxis
- 1D. Local anesthetics

(2 marks × 4 = 8 marks)

2. Mention one advantage and one disadvantage of the following routes of drug administration:

- 2A. Transdermal
- 2B. Subcutaneous

(1 mark × 2 = 2 marks)

3A. Explain the mechanism of action of chloroquine.

3B. List two classes of antiasthmatic drugs with an example for each.

3C. List two cholinergic receptors and mention two adverse effects of atropine.

(2+2+2 = 6 marks)

4. Mention two examples and two uses of the following group of drugs:

- 4A. Proton pump inhibitors
- 4B. NSAIDs
- 4C. ACE inhibitors

(2 marks × 3 = 6 marks)

5. List two drugs used in the following conditions:

- 5A. HIV infection
- 5B. Vomiting
- 5C. Parkinsonism
- 5D. Tuberculosis
- 5E. Epilepsy

(1 mark × 5 = 5 marks)

- 6A. List two anticoagulants and explain the mechanism of action of any one.
- 6B. List two beta blockers and mention their two therapeutic uses and two adverse effects.
- 6C. Define first order kinetics.
- 6D. List two aminoglycosides and mention their four common properties.
- 6E. List two glucocorticoids and mention their two uses and two adverse effects.

(3+3+1+3+3 = 13 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.Sc. RRT & DT DEGREE EXAMINATION – JUNE 2017****SUBJECT: BDT 204 – RENAL DISEASE, PRINCIPLES OF RENAL REPLACEMENT THERAPY & WATER TREATMENT PLANT**

Friday, June 09, 2017

Time: 10.00-13.00 Hrs.

Max. Marks: 80

1. Long essay questions:

- 1A. Discuss the needling techniques of arteriovenous fistula (AVF) and clinical monitoring for stenosis.
- 1B. Discuss the reprocessing steps and their importance.
- 1C. Discuss the principles of dietary prescription in chronic kidney disease.

(10 marks × 3 = 30 marks)

2. Short essay questions:

- 2A. Discuss the peritoneal equilibration test (PET).
- 2B. Discuss the diagnosis of peritoneal dialysis peritonitis.
- 2C. Discuss anticoagulation in hemodialysis.
- 2D. Discuss the role of the reverse osmosis (RO) in water treatment for hemodialysis.
- 2E. What is acquired immunity? Describe its role in renal transplant rejection.
- 2F. Describe the process of complement dependent cytotoxic (CDC) cross match.

(5 marks × 6 = 30 marks)

3. Short notes questions:

- 3A. What are the complications of renal transplantation?
- 3B. Name four adverse effects of steroids.
- 3C. What are the advantages of dialyzer reprocessing?
- 3D. What is the role of carbon filters in water treatment for hemodialysis?
- 3E. What are the side effects of epoietin therapy?
- 3F. What are the components of a hemodialysis prescription?
- 3G. What is uremic encephalopathy?
- 3H. How is cramps during hemodialysis managed?
- 3I. How is intradialytic hypotension managed?
- 3J. What are the manifestations of dialysis disequilibrium syndrome?

(2 marks × 10 = 20 marks)

