

MANIPAL UNIVERSITY
SECOND YEAR B.Sc. R.R.T. & D.T. DEGREE EXAMINATION – JUNE 2013
SUBJECT: BDT 201: PATHOLOGY
Monday, June 10, 2013

Time: 10:00-11:30 Hrs.

Max. Marks: 40

1. Define neoplasia. How is neoplasia different from dysplasia and metaplasia? Explain the characteristic features of malignant tumors with suitable examples. Write a note on the prognosis of tumors.

(1+2+3+2 = 8 marks)
2. Describe the predisposing factors, clinical effects and complications of atherosclerosis.

(2+2+3 = 7 marks)
3. **Write short notes on:**
 - 3A. Megaloblastic anaemia
 - 3B. Osteomyelitis
 - 3C. Bronchiectasis
 - 3D. Types of necrosis with examples
 - 3E. Clinical features and complications of Diabetes Mellitus

(5×5 = 25 marks)



MANIPAL UNIVERSITY

SECOND YEAR B.Sc. R.R.T. & D.T. DEGREE EXAMINATION – JUNE 2013

SUBJECT: BDT 202: MICROBIOLOGY

Wednesday, June 12, 2013

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer all questions. Draw diagrams wherever appropriate:

1. Discuss the mechanisms of autoimmunity. List the diseases involving multiple organs.
(4+3 = 7 marks)
2. Explain the pathogenesis of Mycobacterium tuberculosis. Add a note on its laboratory diagnosis.
(5+3 = 8 marks)
3. Write short notes on:
 - 3A. Pathogenesis of typhoid fever
 - 3B. Laboratory diagnosis of syphilis
 - 3C. Contributions of Robert Koch
 - 3D. Pathogenesis and prophylaxis of rabies
 - 3E. Mechanisms of innate immunity(5×5 = 25 marks)



MANIPAL UNIVERSITY
SECOND YEAR B.Sc. R.R.T. & D.T. DEGREE EXAMINATION – JUNE 2013
SUBJECT: BDT 203: PHARMACOLOGY
Friday, June 14, 2013

Time: 10:00-11:30 Hrs.

Max. Marks: 40

- 1A. Explain the mechanism of action of aspirin.
1B. Enumerate four commonly used NSAIDs other than aspirin and list any four therapeutic uses of NSAIDs. (2+4 = 6 marks)
2. Describe the mechanism of action and one therapeutic use of statins. (2 marks)
3. Enumerate two advantages and two disadvantages of intramuscular route of drug administration. (2 marks)
4. **Explain the basis for the following:**
4A. Levodopa is combined with carbidopa in the treatment of Parkinsonism
4B. Allopurinol is used in the management of chronic gout
4C. Corticosteroids should not be stopped abruptly after prolonged use
4D. Combination of drugs are used in the treatment of pulmonary tuberculosis
4E. Use of salbutamol in bronchial asthma (2×5 = 10 marks)
5. List three classes of anti HIV drugs with one example for each class. (3 marks)
6. **Explain the following terms with an example:**
6A. First pass metabolism
6B. Chemoprophylaxis
6C. Drug antagonism (2×3 = 6 marks)
7. Classify skeletal muscle relaxants with an example for each class. (3 marks)
8. Enumerate two anticholinergic drugs and two uses of any one of them. (2 marks)
9. Explain the mechanism of action of nitrates in angina. (2 marks)
10. Explain the mechanism of action and one therapeutic use of cotrimoxazole. (2 marks)
11. Enumerate two each drugs useful in epilepsy and peptic ulcer. (2 marks)



MANIPAL UNIVERSITY

SECOND YEAR B.Sc. RRT & DT DEGREE EXAMINATION – JUNE 2013

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

Monday, June 17, 2013

Time: 10.00-13.00 Hrs.

Max. Marks: 80

1. Long essay questions:

- 1A. Classify nutrients. Describe the properties of carbohydrates.
- 1B. Discuss CAPD and its complications.
- 1C. Discuss HD adequacy.

(10×3 = 30 marks)

2. Short essay questions:

- 2A. Discuss the role of RO in HD water treatment.
- 2B. Name the different minerals in the body and describe any one.
- 2C. What are the complications of AV graft?
- 2D. Write a note on intradialytic complications.
- 2E. Describe the technique of dialyzer reprocessing.
- 2F. Discuss the use of heparin in HD.

(5×6 = 30 marks)

3. Write short notes on:

- 3A. Which HLA antigens are relevant to renal transplantation?
- 3B. What is pericatheter leak in PD?
- 3C. List the fat soluble vitamins.
- 3D. What are the sources of protein in the diet?
- 3E. What is the role of water softeners in water treatment?
- 3F. What is uremic encephalopathy?
- 3G. List four immunosuppressant medications used in nephrology.
- 3H. Which phosphate binders are commonly used in ESRD?
- 3I. How can GFR be measured from a 24 hour urine collection?
- 3J. What are the components of a dialysis prescription?

(2×10 = 20 marks)

