

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)



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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)



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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.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)



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SECOND YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2017

**SUBJECT: PAPER IV – DIAGNOSTIC AND THERAPEUTIC CARDIOLOGY
(2015 SCHEME)**

Friday, June 09, 2017

Time: 10.00-11.30 Hrs.

Max. Marks: 40

✍ **Answer ALL the questions.**

✍ **Draw the diagram wherever necessary.**

1. Explain Non coronary indications of TMT and types of ST-T changes.
2. Define sound wave. Explain ultrasound transducer surface area, frequency, near field and far field relationship.
3. Define slew rate, Sensitivity and Hysteresis of pacemaker function.
4. Write a note on permanent pacemaker leads and types of sensors in rate responsive pacemakers.
5. Explain the methods of performing HUTT test in detail.

(8 marks × 5 = 40 marks)



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SECOND YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2017

SUBJECT: PAPER V – CONGENITAL & VALVULAR HEART DISEASE
(2015 SCHEME)

Monday, June 12, 2017

Time: 10.00 – 11.30 Hrs.

Max. Marks: 40

✍ Answer ALL the questions.

✍ Draw the diagram wherever necessary.

1. Explain classification, ECG and Echo findings in patent ductus arteriosus.
2. Explain ECG, X-ray, Echocardiography in Ebstein's Anomaly in detail.
3. Explain clinical presentation, ECG and Severity assessment of Aortic Stenosis.
4. Explain ECG and echocardiography in DORV.
5. Define pathophysiology of Mitral Regurgitation.

(8 marks × 5 = 40 marks)

