RT

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/ FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2016

SUBJECT: PATHOLOGY

(2010 REGULATION/2011 BATCH/2010 SCHEME/2011 SCHEME/BDT 201/CBS-PFT 204)

Wednesday, June 15, 2016

Time: 10:00-11:30 Hrs. Max. Marks: 40

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

1. Define osteomyelitis. Mention the etiology and discuss the morphology of bone osteomyelitis.

(1+2+5 = 8 marks)

2. Define neoplasia. Give four differences between a benign and a malignant tumour.

(3+4 = 7 marks)

3. **Write short notes on:**

3A. Granuloma

3B. Metaplasia

3C. Types of embolism

3D. Morphology of lepromatous leprosy

3E. Etiology of gastric ulcer

(5 marks × 5 = 25 marks)

RT

Reg. No.										

MANIPAL UNIVERSITY

SECOND YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/B.Sc. RRT & DT/ FOURTH SEMESTER B. PFT DEGREE EXAMINATION – JUNE 2016

SUBJECT: MICROBIOLOGY

(COMMON FOR 2010 REGULATION/2011 BATCH/2010 SCHEME/2011 SCHEME/BDT 202/PFT 206)

Friday, June 17, 2016

Time: 10:00-11:30 Hrs. Max. Marks: 40

✍ **Draw Diagrams wherever appropriate.**

1. Classify immunity. Discuss the mechanism of innate immunity.

(2+5 = 7 marks)

2. Discuss the investigation of nosocomical infections. State the importance of MRSA in nosocomial infections.

(6+2 = 8 marks)

3. **Write short notes on:**

3A. Laboratory diagnosis of tuberculosis

3B. Pathogenesis of tetanus

3C. Laboratory diagnosis of streptococcal skin infection

3D. Laboratory diagnosis of urinary tract infections

3E. Constituents and significance of cell mediated immunity

(5 marks × 5 = 25 marks)

Reg. No.										

MANIPAL UNIVERSITY

SECOND YEAR B. Sc. R.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: RESPIRATORY DISEASE PROCESS
(2010 SCHEME)

Monday, June 20, 2016

Time: 10:00-13:00 Hrs. Max. Marks: 80

1. Explain on the etiology, pathophysiology, diagnosis and treatment of tetanus.

(2+8+4+2 = 16 marks)

2. Describe pneumothorax in detail. Describe its management.

(8+8 = 16 marks)

3. **Write short notes on**:

3A. AIDS

3B. Gullian Barre syndrome

3C. Lung abscess

3D. Pneumoconiosis

3E. Cardiogenic shock

3F. Pulmonary tuberculosis

(8 marks × 6 = 48 marks)

Reg. No.										

MANIPAL UNIVERSITY

SECOND YEAR B. Sc. R.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: DIAGNOSTIC TECHNIQUES
(2010 SCHEME)

Wednesday, June 22, 2016

Time: 10:00-13:00 Hrs. Max. Marks: 80

✍ **Draw diagrams wherever necessary.**

1. What are the anatomical locations for arterial blood gas sampling? What are the pre-requisites of ABG sampling? What are the situations where false blood gas values are obtained?

(4+8+4 = 16 marks)

2. Describe the conduction system of heart with help of a diagram. Describe the standard lead position of a 12 lead ECG. Draw labeled diagram of normal ECG and life threatening arrhythmias.

(4+4+8 = 16 marks)

3. **Write short notes on:**

3A. Radiographic views to detect pneumothorax.

3B. What are the indications and routes of central venous catheterization? Explain briefly with diagram the CVP tracing.

3C. Post Bronchodilator test

3D. Write the chest x ray characteristics of:

i) Atelectasis ii) Lung abscess

3E. Respiratory acidosis

3F. Zeroing a PA catheter transducer

(8 marks × 6 = 48 marks)

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MANIPAL UNIVERSITY

SECOND YEAR B.Sc. R.T. DEGREE EXAMINATION – JUNE 2016

SUBJECT: APPLIED CARDIOPULMONARY ANATOMY AND PHYSIOLOGY

(2010 SCHEME)

Friday, June 24, 2016

Time: 10:00-13:00 Hrs. Max. Marks: 80

1. Write in detail anatomy of the heart. Write a note on cardiac cycle. Add a note on regulation of cardiac output.

(6+6+4 = 16 marks)

2. Name the primary and accessory muscles of respiration. Add a note on diaphragm and scalene muscle.

(6+10 = 16 marks)

3. **Write short notes on:**

3A. Tracheobronchial tree

3B. Respiratory acidosis

3C. Airway resistance

3D. Carbondioxide transport from tissues to atmosphere

3E. Ventilation perfusion relationship

3F. Respiratory alkalosis

(8 marks × 6 = 48 marks)