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Reg. No.

**MANIPAL UNIVERSITY**

**SECOND YEAR B.P.T./B.O.T./B.Sc. R.T./ B.Sc. C.V.T. AND FOURTH SEMESTER BACHELOR OF PERFUSION TECHNOLOGY DEGREE EXAMINATION – DECEMBER 2014**

**SUBJECT: PATHOLOGY/ PATHOLOGY II (PFT 204)  
(2010 BATCH (NR)/2011 BATCH/2010 SCHEME/2011 SCHEME/GS)**

Wednesday, December 17, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

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

1. Classify anemia. List the clinical features of iron deficiency anemia. Discuss the laboratory diagnosis of the same.

(2+2+4 = 8 marks)

2. Define granulation tissue. Explain the process of healing by primary intention. List the factors affecting wound healing.

(1+3+3 = 7 marks)

3. **Write short notes on:**

3A. Rheumatoid arthritis

3B. Etiology and types of pneumonia

3C. Types of oedema

3D. Laboratory diagnosis of cancer

3E. Mode of infection and clinical features of hepatitis B

(5 marks × 5 = 25 marks)



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## MANIPAL UNIVERSITY

SECOND YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/FOURTH SEMESTER B. PFT  
DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: MICROBIOLOGY/MICROBIOLOGY II (PFT 206)  
(2010 BATCH/2011 BATCH/2010 SCHEME/2011 SCHEME/GS)

Thursday, December 18, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

**Answer all questions. Draw diagrams wherever appropriate.**

1. Define sterilization and disinfection. Explain dry heat method of sterilization.  
(1+1+6 = 8 marks)
2. Define and classify immunity. Describe the mechanisms of innate immunity.  
(1+2+4 = 7 marks)
3. **Write short notes on:**
  - 3A. Laboratory diagnosis of pulmonary tuberculosis
  - 3B. Bacterial cell wall
  - 3C. Laboratory diagnosis of Staphylococcus aureus
  - 3D. Prophylaxis of poliomyelitis
  - 3E. Robert Koch(5 marks × 5 = 25 marks)



**MANIPAL UNIVERSITY**  
**SECOND YEAR B. Sc. R.T. DEGREE EXAMINATION – DECEMBER 2014**  
**SUBJECT: RESPIRATORY DISEASE PROCESS**  
**(2010 SCHEME)**

Friday, December 19, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

- ✍ Answer ALL the questions.
- ✍ Draw diagrams wherever necessary.

1. Describe the grading, diagnostic evaluation and management of dyspnoea.  
(4+4+8 = 16 marks)
2. Enumerate complications of COPD and describe pathophysiology, diagnosis, and management of cor pulmonale.  
(16 marks)
3. Write short notes on:
  - 3A. Montelukast
  - 3B. Post operative pneumonia
  - 3C. Management of hanging patient
  - 3D. Discuss the role of respiratory therapist in the management of Tetanus
  - 3E. Clinical features of Myasthenia Gravis
  - 3F. Ventilator associated pneumonia(8 marks × 6 = 48 marks)



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MANIPAL UNIVERSITY

SECOND YEAR B.Sc. R.T. DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: APPLIED CARDIOPULMONARY ANATOMY AND PHYSIOLOGY  
(2010 SCHEME)

Saturday, December 20, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

1. Describe the anatomy of the upper and lower airway.  
(16 marks)
  
2. How is normal ventilation perfusion distributed in a normal lung? What are the defects in ventilation perfusion ratio?  
(8+8 = 16 marks)
  
3. Write short notes on:
  - 3A. Anatomy of the heart
  - 3B. Factors affecting the diffusion of gases across the alveocapillary membrane
  - 3C. Write about the foetal circulation
  - 3D. What are the common acid- base disorders? Explain with causes
  - 3E. Explain with diagram the respiratory centres
  - 3F. Neural control of respiratory system(8 marks × 6 = 48 marks)



**MANIPAL UNIVERSITY****SECOND YEAR B.Sc. R.T. DEGREE EXAMINATION – DECEMBER 2014****SUBJECT: RESPIRATORY THERAPY SCIENCE II  
(2010 SCHEME)**

Monday, December 22, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

1. What initial ventilator settings will you choose immediately after intubation? What are the monitoring parameters that you will monitor in mechanically ventilated patients? What are the complications of Positive pressure ventilators?

(6+4+6 = 16 marks)

2. What are the signs of respiratory distress in a mechanically ventilated patient? Write the causes of sudden respiratory distress receiving mechanical ventilation. Write the management of the causes of respiratory distress in detail.

(4+6+6 = 16 marks)

3. **Write short notes on:**

- 3A. Static and dynamic compliance  
3B. Spontaneous breathing trial  
3C. Ventilatory management in Pulmonary edema  
3D. Prevention of ventilator associated Pnuemonia  
3E. Rapid shallow breathing index  
3F. CROP score

(8 marks × 6 = 48 marks)

