

**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)



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## MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T./B.Sc. C.V.T./FOURTH SEMESTER BACHELOR OF  
CLINICAL OPTOMETRY/B.PFT DEGREE EXAMINATION – DECEMBER 2014

SUBJECT: PHARMACOLOGY/PHARMACOLOGY II (PFT 202)  
(2010 BATCH/2011 BATCH/2011 SCHEME/GS 2011 & 2012 BATCH/GS)

Friday, December 19, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ Answer the following questions:

1. Define the following terms:

- 1A. Therapeutic index
- 1B. Potency
- 1C. Biotransformation
- 1D. Zero order kinetics

(1 mark × 4 = 4 marks)

2. List two advantages and two disadvantages of the following routes of drug administration:

- 2A. Oral
- 2B. Intramuscular

(2 marks × 2 = 4 marks)

3. List two drugs belonging to the following groups and list two therapeutic uses of any one of them:

- 3A. Macrolides
- 3B. Selective COX-2 inhibitors
- 3C. Adrenergic agonists
- 3D. Opioids

(2 marks × 4 = 8 marks)

4. Mention two drugs each useful in the following conditions and mention two specific adverse effects of any one of them:

- 4A. Tuberculosis
- 4B. Amoebiasis
- 4C. Malaria
- 4D. Epilepsy

(2 marks × 4 = 8 marks)

- 5A. Enumerate two glucocorticoids and mention their two uses and two specific adverse effects.  
5B. Write a short note on drug nomenclature.

(3+3 = 6 marks)

- 6A. Enumerate two anticancer drugs and mention their two general toxicities.  
6B. Mention two beta lactam antibiotics and explain the mechanism of action of any one of them.

(2+3 = 5 marks)

7. **Mention two examples for each of the following groups of drugs:**

- 7A. Anticholinergics  
7B. Calcium channel blockers  
7C. Anthelmintics  
7D. Proton pump inhibitors  
7E. Aminoglycosides

(1 mark × 5 = 5 marks)



**MANIPAL UNIVERSITY****SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2014****SUBJECT: DEVELOPMENT ACROSS THE LIFE SPAN  
(2011 BATCH)**

Saturday, December 20, 2014

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

✍ **Long questions:**

1. Describe the development of social skills in infancy and early childhood. (10 marks)

2. Write the assumptions of Freud's theory of psychosexual development influencing a person's ability. (10 marks)

3. **Write short notes on:**

3A. Factors contributing to self-concept and identity in adolescence

3B. Sensory development of child in first six months

3C. Five types of gross motor control

3D. Epigenetic principle

(5 marks × 4 = 20 marks)





**MANIPAL UNIVERSITY**  
**SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2014**

**SUBJECT: BIOMECHANICS AND KINESIOLOGY**  
**(2011 BATCH)**

Monday, December 22, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

**✍ Answer ALL questions. Draw diagram wherever necessary.**

**✍ Long Questions:**

1. Describe spine column structures and its movements. Explain pelvic girdle.

(12+8 = 20 marks)

2. Describe temporal variable in normal gait and explain deviation in hemiplegic and foot drop gait.

(10+10 = 20 marks)

3. **Write short notes on:**

3A. Properties of dense fibrous tissue and bone

(5+5 = 10 marks)

3B. Describe joints and movements of the foot.

(10 marks)

3C. Describe shunt and spurt muscles and its influence in joint motion.

(10 marks)

3D. Functions of the hand.

(10 marks)



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**MANIPAL UNIVERSITY**  
**SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2014**  
**SUBJECT: THERAPEUTIC ACTIVITIES AND EXERCISES**  
**(2011 BATCH)**

Tuesday, December 23, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **Long questions:**

1. Define 'activities health'. What are the indicators that determine if an individual is in a state of activities health?

(5+15 = 20 marks)

2. Explain the components of the client centered model with suitable diagram.

(15+5 = 20 marks)

3. **Short Notes:**

- 3A. Mind-brain-body performance subsystem
- 3B. Purpose of activity analysis in Occupational therapy
- 3C. Analyzing activities from the perspective of time
- 3D. Strategies to improve neuromuscular control

(10 marks × 4 = 40 marks)



**MANIPAL UNIVERSITY****SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2014****SUBJECT: OCCUPATIONAL PERFORMANCE: PERSONAL AND CONTEXTUAL FACTORS  
(2011 BATCH)**

Wednesday, December 24, 2014

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **Long Answer Questions:**

1. Define stress. Discuss in detail response system of body while encounter a stressor.  
(2+18 = 20 marks)
2. Define and classify edema. Discuss in detail anti-edema intervention strategies.  
(2+3+15 = 20 marks)
3. **Write short notes on:**
  - 3A. Define muscle tone and discuss about Ashworth scale  
(2+8 = 10 marks)
  - 3B. Explain about higher level thinking abilities  
(10 marks)
  - 3C. Define construction apraxia and discuss assessment procedure for the same.  
(4+6 = 10 marks)
  - 3D. Explain mechanism of skin damage due to loss of protective sensation.  
(10 marks)

