

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 – DECEMBER 2016**

SUBJECT: PATHOLOGY

(2010 REGULATION/2011 SCHEME/2010 SCHEME/2011 SCHEME/BDT 201/PFT 204-2014 SCHEME)

Thursday, December 15, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

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

1. Define and classify shock. Discuss the etiopathogenesis of septic shock.
(2+2+3 = 7 marks)

2. Define and classify anemias. Describe the lab investigations with blood and bone marrow findings in Megaloblastic anemia.
(2+2+4 = 8 marks)

3. **Write short notes on:**
 - 3A. Necrosis
 - 3B. Etiopathogenesis of rheumatic heart fever
 - 3C. Definition and FAB classification of acute myeloid leukemia
 - 3D. Primary pulmonary tuberculosis
 - 3E. Causes of thrombocytopenia(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 – DECEMBER 2016

SUBJECT: MICROBIOLOGY

(COMMON FOR 2010 REGULATION/2011 SCHEME/2010 SCHEME/2011 SCHEME/BDT 202/PFT 206-2014 SCHEME)

Friday, December 16, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Draw Diagrams wherever appropriate.**

1. Classify hypersensitivity. With suitable examples discuss the mechanism of immediate hypersensitivity.

(3+5 = 8 marks)

2. Discuss the pathogenesis and laboratory diagnosis of hepatitis B virus infection.

(3+4 = 7 marks)

3. **Write short notes on:**

3A. Louis Pasteur

3B. Bacterial flagella

3C. Virion structure

3D. Investigation of nosocomial infections

3E. Laboratory diagnosis of Streptococcus pneumonia infection

(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.R.T. & D.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: PHARMACOLOGY

(COMMON FOR 2010 REGULATION/2011 BATCH/2012 SCHEME/2011 SCHEME/BDT 203)

Saturday, December 17, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer the following questions:**

- 1A. Mention two advantages and two disadvantages of intramuscular route of drug administration.
List two drugs that can be given by this route.
- 1B. Describe the pharmacological effects of adrenaline on cardiovascular system.
- 1C. List two glucocorticoids and explain their anti-inflammatory action.
- 1D. List two drugs useful in chronic gout and explain the mechanism of action of any one of them.

(3 marks × 4 = 12 marks)

2. **Define the following terms with an example for each:**

- 2A. Synergism
- 2B. Teratogenicity
- 2C. Generic name of a drug

(2 marks × 3 = 6 marks)

- 3A. List two sources of drugs with an example for each.
- 3B. Mention four differences between aspirin and paracetamol.
- 3C. List two classes of drugs with an example for each useful in angina.

(2 marks × 3 = 6 marks)

4. **Mention two examples and two therapeutic uses of the following group of drugs:**

- 4A. Beta lactam antibiotics
- 4B. Benzodiazepines
- 4C. Anticoagulants
- 4D. Proton pump inhibitors

(2 marks × 4 = 8 marks)

5. **List two drugs used in the following conditions:**

- 5A. Parkinsonism
- 5B. Diabetes mellitus
- 5C. Cough
- 5D. HIV infection
- 5E. Epilepsy

(1 mark × 5 = 5 marks)

6. **List one example and one specific adverse effect of the following group of drugs:**

- 6A. Loop diuretics
- 6B. ACE inhibitors
- 6C. Aminoglycosides

(1 mark × 3 = 3 marks)

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SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: BIOMECHANICS AND KINESIOLOGY
(2011 SCHEME)

Monday, December 19, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **Draw diagram wherever necessary.**

✍ **Long questions:**

1. Discuss the events in swing and stance phase of gait cycle with appropriate illustration.
(20 marks)

2. Describe the structures of hand and explain the prehensile manipulative and non-manipulative patterns.
(10+10 = 20 marks)

3. **Write short notes on:**

3A. Describe any five differences between cervical and thoracic vertebrae.
(10 marks)

3B. Describe any five subject factors that influencing joint functions.
(10 marks)

3C. Describe the types of muscle fibers with appropriate illustration.
(8+2 = 10 marks)

3D. Describe the structures of knee joint.
(10 marks)



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SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: THERAPEUTIC ACTIVITIES AND EXERCISES (2011 SCHEME)

Tuesday, December 20, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ Answer ALL questions.

✍ Long Questions:

1. Explain the assumptions, intervention guidelines and limitations of Rehabilitation frame of reference.

(5+10+5 = 20 marks)

2. Describe the process of performing Activities health assessment in occupational therapy. Also explain the purpose of this assessment.

(15+5 = 20 marks)

3. Write short notes on:

3A. Types of muscle contraction and their examples

(10 marks)

3B. Activity adaptation and its purpose

(5+5 = 10 marks)

3C. Major components of the Person- Environment- Occupation- Performance model

(10 marks)

3D. Structure of a frame of reference as given by Mosey

(10 marks)



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SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016

SUBJECT: OCCUPATIONAL PERFORMANCE: PERSONAL AND CONTEXTUAL FACTORS
(2011 SCHEME)

Wednesday, December 21, 2016

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **Long Answer Questions:**

1. Types of In-hand manipulation. Explain testing procedure of grip strength with Jamar dynamometer.

(8+12 = 20 marks)

2. Explain primary cognitive capacities with examples.

(20 marks)

3. **Write short notes on:**

3A. Define and explain testing procedure of visual acuity.

(2+8 = 10 marks)

3B. Unilateral neglect syndrome

(10 marks)

3C. Discuss Callahan's protocol for sensory re-education.

(10 marks)

3D. Write any four differences between reflex and hierarchical model of motor control.

(10 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.O.T. DEGREE EXAMINATION – DECEMBER 2016****SUBJECT: DEVELOPMENT ACROSS THE LIFE SPAN
(2011 SCHEME)**

Thursday, December 22, 2016

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL questions.**

✍ **Long Questions:**

1. Describe the physical development of adolescence period with emphasis on gender differences.

(10 marks)

2. Describe development of social relationship in child.

(10 marks)

3. **Write short notes on:**

3A. Physical changes occurring in middle adulthood

3B. Formal operational stage of Piaget's cognitive development

3C. Institutional and social influence on child's development

3D. Activity theory of aging

(5 marks × 4 = 20 marks)

