

MANIPAL UNIVERSITY

FIRST YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2017

SUBJECT: ANATOMY
(NR/2015 SCHEME)

Thursday, June 15, 2017

Time: 10.00-13.00 Hours.

Max. Marks: 80

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

1. Describe the obturator nerve under the following headings:

- 1A. Origin
- 1B. Course
- 1C. Branches and distribution
- 1D. Clinical anatomy

(2+5+10+3 = 20 marks)

2. Describe the shoulder joint under following headings:

- 2A. Articulating parts
- 2B. Type and subtype
- 2C. Capsule and ligaments
- 2D. Movements and muscles producing them
- 2E. Rotator cuff

(2+2+7+7+2 = 20 marks)

3. Write briefly on:

- 3A. Medulla oblongata
- 3B. Circulation of CSF
- 3C. Motor decussation
- 3D. Lateral ventricle
- 3E. Internal capsule

(5 marks × 5 = 25 marks)

4. Write short notes on:

- 4A. Vas deferens
- 4B. Stratified epithelia
- 4C. Right atrium of heart
- 4D. Tongue
- 4E. Ovary

(3 marks × 5 = 15 marks)



MANIPAL UNIVERSITY**FIRST YEAR BOT/B.Sc. MRT/B.Sc. CVT/B.Sc. RT DEGREE EXAMINATION – JUNE 2017****SUBJECT: PHYSIOLOGY****(2015 SCHEME (BOT 106)/2011 SCHEME/2015 SCHEME (PAPER II)/2015 & 2010 SCHEME)**

Saturday, June 17, 2017

Time: 10.00-11.30 Hours.

Max. Marks: 40

- ✍ **Answer ALL questions.**
✍ **Draw diagrams and flow charts wherever appropriate.**

1. Essay Questions:

- 1A. Mention any three actions of growth hormone. Describe the regulation of secretion of growth hormone in the form of a flow chart.
1B. Draw a labeled diagram of the visual pathway and explain the effect of lesion of left optic nerve.
1C. Classify white blood cells. Mention one function of each.
1D. Describe the chemical regulation of respiration.

(5 marks × 4 = 20 marks)

2. Short answer questions:

- 2A. List two differences between active transport and passive transport mechanisms.
2B. Draw a labeled diagram of a nerve action potential.
2C. Mention any two functions of cerebrospinal fluid.
2D. List any four properties of cardiac muscle.
2E. Define cardiac output and mention its normal value in adults at rest.
2F. Name the different types of hypoxia.
2G. Mention any two functions of gall bladder.
2H. Mention any two actions of estrogen.
2I. Define GFR and give its normal value.
2J. List two functions of basal ganglia.

(2 marks × 10 = 20 marks)



MANIPAL UNIVERSITY

**FIRST YEAR BPT/BOT/B.Sc. RT/B.Sc. CVT/ B.Sc. RRT & DT
DEGREE EXAMINATION – JUNE 2017****SUBJECT: BIOCHEMISTRY**

(NR/2015 & 2011 SCHEME/2015 & 2010 SCHEME/2015 SCHEME/BDT 103)

Tuesday, June 20, 2017

Time: 10.00-11.30 Hours

Max. Marks: 40

- ✍ **Answer ALL the questions.**
✍ **Draw diagrams and flow charts wherever appropriate.**

1. Explain anaerobic glycolysis under the following headings:
1A. Site and subcellular site
1B. Reactions

(1+7 = 8 marks)

2. Write the steps of urea cycle in detail.

(6 marks)

3. **Write short notes on:**

- 3A. Homopolysaccharides
3B. Classification of compound lipids with one example each
3C. Structure of DNA
3D. Basal metabolic rate

(4 marks × 4 = 16 marks)

4. **Answer the following:**

- 4A. Define the term 'buffer'. Write the Henderson-Hasselbalch equation.
4B. Write the normal serum calcium level. Name the hormones regulating it.
4C. Mention four biologically important compounds derived from glycine.
4D. Write the coenzyme form of thiamine and one reaction where it is involved.
4E. Give the clinical importance of creatine kinase and alkaline phosphatase.

(2 marks × 5 = 10 marks)



MANIPAL UNIVERSITY

FIRST YEAR B.O.T. DEGREE EXAMINATION – JUNE 2017

SUBJECT: BOT 101 - INTRODUCTION TO OCCUPATIONAL THERAPY
(2015 SCHEME)

Thursday, June 22, 2017

Time: 10:00-11:30 Hrs.

Max. Marks: 40

✍ **Answer ALL the questions.**

1. What is the Occupational Therapy Practice Framework? Draw a neat diagram showing the domain of the OTPF.
(5+5 = 10 marks)
2. Describe any two treatment outcomes in occupational therapy with suitable examples.
(5 marks × 2 = 10 marks)
3. **Write short notes on:**
 - 3A. Explain client-centred/person-centred practice in occupational therapy.
(5 marks)
 - 3B. Explain the contributions of William Rush Dunton Jr. in the development of occupational therapy.
(5 marks)
 - 3C. Define performance skills and explain its types.
(2+3 = 5 marks)
 - 3D. Define 'occupational therapy'.
(5 marks)

