

Reg. No.

MANIPAL UNIVERSITY

FIRST YEAR B.Sc. M.L.T./ B.Sc. N.M.T./ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc. C.V.T.
DEGREE EXAMINATION – JUNE 2011

SUBJECT: ANATOMY

Monday, June 06, 2011

Time: 10.00-11.30 Hrs.

Max. Marks: 40

Answer all the questions:

1. List the parts of the respiratory system. Describe the features, blood supply and nerve supply of the lateral wall of the nose.

(1+3+2+2 = 8 marks)

2. Explain the external features of the heart with the help of a diagram. Add a note on the internal features of right atrium.

(4+4 = 8 marks)

3. **Answer briefly on:**

3A. Classification of synovial joints.

3B. Pleura.

3C. Superior mediastinum.

3D. Azygos vein.

3E. Rectum.

3F. Vas deferens.

3G. Ovary.

3H. Corpus striatum.

(3×8 = 24 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: PAPER – II: PHYSIOLOGY**

Wednesday, June 08, 2011

Time: 10.00-11.30 Hrs.

Max. Marks: 40

1. Essay questions:

- 1A. Draw and label a spirogram showing the various lung volumes and capacities.
- 1B. Define blood pressure. Give its normal value and mention three factors influencing blood pressure.
- 1C. Explain the synaptic transmission in the form of a flow chart.
- 1D. Mention any two functions of thyroid hormones. List three clinical features of myxedema.

(5×4 = 20 marks)

2. Write short answers for the following:

- 2A. Classify white blood cells.
- 2B. Mention the components of blood.
- 2C. Define hypoxia and mention any two types of hypoxia.
- 2D. List two functions of middle ear.
- 2E. Define cardiac output. Give its normal value.
- 2F. List the functions of basal ganglia.
- 2G. List two muscle proteins.
- 2H. Name any four hormones produced by anterior pituitary.
- 2I. Write the components of reflex arc.
- 2J. Mention the components of vestibular apparatus and give its functions.

(2×10 = 20 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.P.T./B.O.T/ B.Sc. M.L.T./ B.Sc. N.M.T./ B.Sc. R.T./ B.Sc. M.I.T./ B.Sc.C.V.T****DEGREE EXAMINATION – JUNE 2011****SUBJECT: BIOCHEMISTRY**

Friday, June 10, 2011

Time: 10.00-11.30 Hours

Max. Marks: 40

✍ **Answer ALL the questions.**

✍ **Draw diagrams and flow charts wherever appropriate.**

1. Write the reactions of synthesis of glucose from lactate.

(8 marks)

2. Write the reactions of urea cycle.

(6 marks)

3. **Write short notes on the following:**

3A. Structure of DNA.

3B. Activation of zymogens in the GIT.

3C. Mechanisms of glucose absorption in the small intestine.

3D. Biochemical functions and deficiency manifestations of vitamin D.

(4×4 = 16 marks)

4. **Write briefly on:**

4A. Basal metabolic rate.

4B. Inhibitors of electron transport chain.

4C. Dietary fibers.

4D. Transamination reaction.

4E. Emulsification of fats.

(2×5 = 10 marks)



MANIPAL UNIVERSITY**FIRST YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2011****SUBJECT: PAPER IV – ELECTROCARDIOGRAM**

Monday, June 13, 2011

Time: 10.00-13.00 Hrs.

Max. Marks: 80

✍ **Answer all the Questions, Label the diagram wherever necessary.**

1. Explain in Detail the Anatomy of Peripheral Circulation (Aorta and its branches and Vena-Cavea).
(20 marks)

2. How do you Detect LVH and RVH in ECG with Sokolow-Lyons Voltage criteria and Romilt-Estes point Criteria?
(20 marks)

- 3A. Write a note on ECG machine and Holter monitor.
- 3B. Explain Bi-Fascicular and Trifascicular Block.
- 3C. Explain the conditions which will produce wide QRS and short PR interval.
- 3D. Explain:
 - i) ECG paper speed in Normal, Tachycardia and Bradycardia
 - ii) Normal standardization, normal X and Y-axis
 - iii). Explain the positions of Chest Lead placement
- 3E. What is Levocardia/Dextrocardia? Explain the ECG Changes in True and Technical Dextrocardia.

(8×5 = 40 marks)

