

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 – AUGUST 2011

SUBJECT: ANATOMY

Monday, August 22, 2011

Time: 10.00-11.30 Hrs.

Max. Marks: 40

1. List the endocrine glands in the human body. Briefly describe any two of the endocrine glands.

(2+3+3 = 8 marks)

2. List the parts of digestive system. Explain the internal features of the pharynx.

(2+6 = 8 marks)

3. Answer briefly on:

- 3A. Typical spinal nerve
3B. Trachea
3C. Pericardium
3D. Male urethra
3E. Arch of the aorta
3F. Uterine tube
3G. External features of spinal cord
3H. Middle ear

(3×8 = 24 marks)



MANIPAL UNIVERSITY
FIRST YEAR B.Sc.C.V.T DEGREE EXAMINATION – AUGUST 2011 ,
SUBJECT: PAPER – III: BIOCHEMISTRY

Wednesday, August 24, 2011

Time: 10.00-11.30 Hours

Max. Marks: 40

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

1. Write in detail the synthesis of glucose from pyruvate.

(8 marks)

2. Discuss the metabolism of calcium under the following headings:

2A. Factors favouring and hindering absorption.

2B. **SIX** functions.

(3+3 = 6 marks)

3. **Answer the following:**

3A. With the help of a graph describe the effect of substrate concentration on enzyme activity.

3B. Write the reactions of ketogenesis.

3C. Explain the structure of Watson and Crick model of DNA.

3D. Name the lipoproteins and mention the function of each.

(4×4 = 16 marks)

4. **Answer the following:**

4A. Mention four differences between kwashiorkor and marasmus.

4B. Write short notes on the principle buffer system of the ECF.

4C. Write four functions of essential fatty acids.

4D. Define transamination reaction. Give one example.

4E. Give the co-enzyme form and the deficiency manifestations of thiamine and niacin.

(2×5 = 10 marks)



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FIRST YEAR B.Sc. C.V.T. DEGREE EXAMINATION – AUGUST 2011
SUBJECT: PAPER IV – ELECTROCARDIOGRAM

Thursday, August 25, 2011

Time: 10.00-13.00 Hrs.

Max. Marks: 80

✍ Answer all the questions, Label the diagram wherever necessary.

1. Explain Unipolar, Bipolar and Augmented leads with the help of Einthoven Triangle.
(20 marks)

2. Explain cardiac cycle in detail with the help of Diagram.
(20 marks)

- 3A. What are the criteria for AVNRT?
- 3B. What is cardiac axis? Explain the cardiac axis in different disease and condition.
- 3C. What are the ECG findings for VT & VF?
- 3D. Explain Trifascicular block.
- 3E. How do you detect atrial enlargement by ECG?

(8×5 = 40 marks)