

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 2010

SUBJECT: ANATOMY

Monday, June 07, 2010

Time: 10.00-11.30 Hrs.

Max. Marks: 40

1. Name the parts of respiratory system. Briefly explain the right lung.

(2+6 = 8 marks)

2. Describe the right atrium in detail.

(8 marks)

3. Write briefly on:

3A. Large intestine

3B. Kidney

3C. CSF circulation

3D. Epithelium

3E. Synovial joints

3F. Spinal cord

3G. Pleura

3H. Thyroid gland

(3×8 = 24 marks)



MANIPAL UNIVERSITY
FIRST SEMESTER B.Sc. H.I.A. / FIRST YEAR B.Sc. C.V.T. / B.Sc. M.I.T
DEGREE EXAMINATION – JUNE 2010

SUBJECT: PHYSIOLOGY

Wednesday, June 09, 2010

Time: 10:00 – 11:30 Hours

Maximum Marks: 40

1. Essay questions:

- 1A. Mention any four functions of hypothalamus. Explain any one.
- 1B. With the help of a neat labeled diagram of the neuromuscular junction, describe the sequence of events of neuromuscular transmission.
- 1C. Draw a labeled graph showing left ventricular pressure changes during a cardiac cycle and explain the same.
- 1D. Describe the composition and functions of blood.

(5×4 = 20 marks)

2. Write short answers for the following:

- 2A. List any TWO functions of estrogen.
- 2B. Define GFR. Give its normal value.
- 2C. Draw a neat labeled diagram of the sensory pathway that carries pain and temperature sensations from various parts of the body to the brain.
- 2D. Mention TWO factors that shift the oxygen dissociation curve to the right.
- 2E. List any FOUR functions of liver.
- 2F. Mention the functions of middle ear.
- 2G. Mention the normal value of heart rate in adults. Give one condition where heart rate is increased.
- 2H. What is facilitated diffusion? Give an example for the same.
- 2I. Mention any TWO clinical features of diabetes mellitus.
- 2J. What is stroke volume? Give its normal value.

(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 2010**

**SUBJECT: BIOCHEMISTRY
(NEW REGULATIONS)**

Friday, June 11, 2010

Time: 10.00-11.30 Hours

Max. Marks: 40

1. With the help of graphs, explain the effect of competitive and non competitive inhibitors on enzyme activity. (4 marks)
2. Classify lipids giving one example for each class. (3 marks)
3. Tabulate THREE similarities and THREE differences between starch and glycogen. (3 marks)
4. With the help of schematic diagram, explain the biochemical changes taking place in a patient with lactose intolerance after the intake of milk. (4 marks)
5. Explain with reactions, the process of glycolysis. (7 marks)
6. Write short notes on the importance of dietary fibers. (3 marks)
7. Explain the process of protein digestion in the stomach. (3 marks)
8. List four similarities and four differences between marasmus and kwashiorkor. (4 marks)
9. Write the reactions of the urea cycle. (5 marks)
10. Describe the Watson and Crick model of DNA. (4 marks)



Reg. No.																			
----------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

MANIPAL UNIVERSITY

FIRST YEAR B.Sc. C.V.T. DEGREE EXAMINATION – JUNE 2010

SUBJECT: ELECTROCARDIOGRAM

Monday, June 14, 2010

Time: 10.00-13.00 Hrs.

Max. Marks: 80

Answer all the Questions, Label the diagram wherever necessary:

1. How do you approach a given ECG practically (define the method of analysis with normal and abnormal conditions)

(20 marks)

2. Explain in detail (Disease conditions):-

- QIII
- QS in V2 & V3
- Pseudo – Pre – excitation
- Pseudo – notching OR Pseudo – slurring
- Osborn wave

(20 marks)

3A. Explain circulatory system of the heart.

3B. How do you detect Bi-ventricular hypertrophy?

3C. What are the possible ECG signs in acute pulmonary embolism?

3D. Explain the ECG changes in acute, sub-acute and chronic stages of MI.

3E. What are the criteria for AVRT?

(8×5 = 40 marks)

