

MANIPAL UNIVERSITY**FIRST YEAR B.P.T./B.O.T. DEGREE EXAMINATION – AUGUST 2011****SUBJECT: ANATOMY****(COMMON FOR BOTH NEW & OLD REGULATIONS)**

Monday, Aug 22, 2011

Time: 10.00-13.00 Hours.

Max. Marks: 80

1. Describe the origin root value, course, distribution and applied anatomy of the following:
- 1A. Axillary nerve
1B. Musculocutaneous nerve
- (10+10 = 20 marks)
2. Explain inversion and eversion under the following headings:
- 2A. Joints involved
2B. Ligaments of the joints
2C. Attachments of two muscles causing each of these movements
2D. Nerve supply of the muscles
- (3+7+7+3 = 20 marks)
3. Write briefly on:
- 3A. Blood supply of superolateral surface of cerebral hemisphere
3B. Hypothalamus
3C. Ascending tracts of the spinal cord
3D. Corpus callosum
3E. Basal nuclei
- (5×5 = 25 marks)
4. Write short notes on:
- 4A. Dorsum of tongue
4B. Posterior relations of stomach
4C. Spleen
4D. Azygos vein
4E. Vas deferens
- (3×5 = 15 marks)



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FIRST YEAR B.P.T./B.O.T./B.Sc.M.L.T./B.Sc.N.M.T/B.Sc.R.T.
DEGREE EXAMINATION – AUGUST 2011

SUBJECT: PHYSIOLOGY

Tuesday, August 23, 2011

Time: 10.00-13.00 Hours.

Max. Marks: 80

✍ **Answer all questions.**

1. Essay:

- 1A. Mention the functions of hypothalamus. Explain any two functions.
1B. Name the hormones of anterior pituitary and posterior pituitary. Mention one function of each of these hormones.

(10+10 = 20 marks)

2. Write short notes on:

- 2A. Functions of stomach.
2B. Glomerular filtration rate.
2C. Functions of middle ear.
2D. Transport of oxygen in blood.
2E. Functions of placenta.
2F. Stretch reflex.
2G. Functions of platelets.
2H. Actions of aldosterone and cortisol.

(5×8 = 40 marks)

3. Write brief answers to the following:

- 3A. Draw a labelled diagram of a sarcomere.
3B. Tabulate two differences between smooth and skeletal muscles.
3C. Mention two factors affecting cardiac output.
3D. Define stroke volume and give its normal value.
3E. Mention two actions of testosterone.
3F. Name the hormones secreted by the ovary.
3G. List two differences between a cretin and a pituitary dwarf.
3H. Mention any two features of cerebellar lesion.
3I. List any two differences between sympathetic and parasympathetic nervous system.
3J. Mention the location in the cerebral cortex where visual and auditory impulses are relayed.

(2×10 = 20 marks)



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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)



MANIPAL UNIVERSITY
FIRST YEAR B.O.T. DEGREE EXAMINATION – AUGUST 2011
SUBJECT: PSYCHOLOGY – I

Thursday, August 25, 2011

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. Define Psychology. Discuss any five application of psychology.
2. Discuss the important milestones in physical development.
3. What is personality style? Explain any four personality styles with suitable examples.
4. Discuss any two important theories of emotion.
5. Describe the difference between observation and experimental method with suitable examples.
6. What is a concept? Explain how concepts are important in the process of thinking.
7. Define motivation. Describe any two theories of motivation.
8. Define learning. Explain the concepts of observation learning.



MANIPAL UNIVERSITY**FIRST YEAR B.O.T. DEGREE EXAMINATION – AUGUST 2011****SUBJECT: OCCUPATIONAL THERAPY – I
(Therapeutic Activities)**

Friday, August 26, 2011

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

1. What are the characteristics of an occupational therapy activity? Discuss in detail the therapeutic application of activity.
(5+10 = 15 marks)
2. Illustrate the paradigm of occupational functioning theory. Explain in detail life roles.
(5+10 = 15 marks)
3. Outline the occupational therapy assessment process in brief and explain in detail the types of documentation procedures used in occupational therapy.
(5+10 = 15 marks)
4. Name any five joints in the trunk and explain the palpation procedure of any two joints of trunk in detail.
(5+10 = 15 marks)
5. **Short Notes:**
 - 5A. Volition subsystem of MOHO.
(5 marks)
 - 5B. Explain the palpation procedure of xiphoid process.
(5 marks)
 - 5C. Purpose and goals of upper extremity splinting.
(2½+2½ = 5 marks)
 - 5D. Classify Mosey's group interaction skills.
(5 marks)

