

MANIPAL UNIVERSITY

FIRST YEAR B.P.T./B.O.T. DEGREE EXAMINATION – JUNE 2011

SUBJECT: ANATOMY

(COMMON FOR BOTH OLD & NEW REGULATIONS)

Monday, June 06, 2011

Time: 10.00-13.00 Hours.

Max. Marks: 80

1. Explain the knee joint under the following headings:

1A. Type and subtype

1B. Articular surfaces

1C. Ligaments

1D. Movements and muscles producing each of the movements

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

2. Explain the median nerve under the following headings:

2A. Origin and root value

2B. Course and relations

2C. Branches and distribution

2D. Applied anatomy

(2+8+8+2 = 20 marks)

3. Write briefly on:

3A. Third ventricle

3B. External features of spinal cord

3C. Internal capsule

3D. Circle of Willis

3E. Visual pathway

(5×5 = 25 marks)

4. Write short notes on:

4A. Fertilization

4B. Testis

4C. Bronchopulmonary segments

4D. Suprarenal gland

4E. Nasopharynx

(3×5 = 15 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.R.T.
DEGREE EXAMINATION – JUNE 2011****SUBJECT: PHYSIOLOGY**

Wednesday, June 08, 2011

Time: 10.00-13.00 Hours.

Max. Marks: 80

Answer all questions.

1. Describe the stages of erythropoiesis. Add a note on regulation of erythropoiesis. (10 marks)
2. Mention any six functions of hypothalamus. Explain any two. (10 marks)
3. **Write short notes on the following:**
 - 3A. Describe the chemical regulation of respiration.
 - 3B. Draw a neat labelled diagram of the stretch reflex arc.
 - 3C. Describe the process of deglutition.
 - 3D. Enumerate the events of neuromuscular transmission.
 - 3E. Describe erythroblastosis fetalis.
 - 3F. Define glomerular filtration rate (GFR). Give its normal value. Describe the factors affecting GFR.
 - 3G. Mention the hormones of anterior pituitary. Describe the functions of any two.
 - 3H. Describe the functions of middle ear. (5×8 = 40 marks)
4. **Write brief answers to each of the following:**
 - 4A. Define the following terms:
 - i) Vital capacity
 - ii) Cyanosis
 - 4B. Mention two clinical features of cerebellar lesion
 - 4C. Name the hormones of ovaries. State one function of each.
 - 4D. What is myopia? How is it corrected?
 - 4E. List two uses of an electrocardiogram (ECG).
 - 4F. Draw a neat labelled diagram of a nephron.
 - 4G. Mention two differences between passive transport and active transport.
 - 4H. Name one permanent contraceptive method in males and females.
 - 4I. What is Cushing's syndrome? Mention two clinical features of this syndrome.
 - 4J. Give the average normal value for the following:
 - i) Hemoglobin concentration in adult males
 - ii) Cardiac output in adults

(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)



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

MANIPAL UNIVERSITY

FIRST YEAR B.O.T. DEGREE EXAMINATION – JUNE 2011

SUBJECT: PSYCHOLOGY – I

Monday, June 13, 2011

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ **Answer ALL questions.**

✍ **All questions carry equal marks.**

1. What is memory? Discuss the various types of memory.
2. Discuss any three methods of Psychology.
3. Define intelligence. Describe any three tests to assess intelligence.
4. Discuss primary and secondary of emotions. Describe their general characteristics.
5. Discuss the applications of psychology in any five fields.
6. Explain the salient stages of language development.
7. Define personality. Discuss any four styles of personality.
8. What is conditioning? Discuss the difference between operant and classical conditioning.



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

Wednesday, June 15, 2011

Time: 10:00-13:00 Hrs.

Max. Marks: 80

✍ Answer ALL questions.

1. Discuss in detail the themes of Occupational Behavior Approach (OBA).
(15 marks)
2. Define person, environment, and task, and explain the characteristics of the same in relation to human performance.
(9+6 = 15 marks)
3. Define occupational therapy evaluation and discuss in detail the evaluation process in occupational therapy.
(3+12 = 15 marks)
4. Discuss the various chronological facts about development of Occupational Therapy in India.
(15 marks)
5. **Short Notes:**
 - 5A. MOHO postulates regarding change and intervention.
 - 5B. Muscle grading in activity analysis.
 - 5C. Therapeutic use of crafts.
 - 5D. Environmental adaptations.

(5×4 = 20 marks)

