

MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2007

**SUBJECT: PATHOLOGY AND MICROBIOLOGY
(COMMON FOR BOTH OLD & NEW REGULATION)**

Monday, December 10, 2007

Time: 3 Hrs.

Max. Marks: 80

- ✍ **Answer section A and section B in TWO separate answer books.**
✍ **Draw labelled diagrams wherever appropriate.**

SECTION 'A': PATHOLOGY: 40 MARKS

1. Describe the etiology of leprosy. Tabulate the differences between lepromatous and tuberculoid leprosy. Describe the morphology of any one. (1+4+3 = 8 marks)

2. Describe the process of wound healing by secondary intention. Add a note on factors influencing wound healing. (4+3 = 7 marks)

3. Write short notes on
 - 3A. Sickle cell anemia
 - 3B. Vitamin D deficiency
 - 3C. Basal Cell Carcinoma
 - 3D. Definition and Causes of meningitis
 - 3E. Etiology and clinical features of Carcinoma breast(5×5 = 25 marks)

SECTION 'B': MICROBIOLOGY: 40 MARKS

4. Enumerate the agents causing meningitis. Discuss the laboratory diagnosis of acute bacterial meningitis. (3+5 = 8 marks)

5. Write a neat labeled diagram of bacterial cell. Describe cell envelope. (2+5 = 7 marks)

6. Write short notes on any **FIVE**.
 - 6A. Tyndallisation.
 - 6B. Modes of transmission of infection.
 - 6C. Bacillary dysentery.
 - 6D. Laboratory diagnosis of enteric fever.
 - 6E. Opportunistic infections in AIDS.
 - 6F. Vaccines.(5×5 = 25 marks)



MANIPAL UNIVERSITY

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – DECEMBER 2007

SUBJECT: PHARMACOLOGY
(COMMON FOR BOTH OLD & NEW REGULATIONS)

Tuesday, December 11, 2007

Time: 1½ Hrs.

Max. Marks: 40

1. Answer the following:

- 1A. Enumerate any six nonsteroidal antiinflammatory agents.
- 1B. Explain the antiinflammatory activity of any one NSAID. Mention one advantage and one disadvantage of selective COX-2 inhibitors.
- 1C. Write the mechanism of action of oral anticoagulants.
- 1D. Mention four common features of aminoglycosides.

(3+2+1+2+2= 10 marks)

2. Mention:

- 2A. Four bronchodilators.
- 2B. Two uses and two side effects of diphenhydramine.
- 2C. Four drugs used in tuberculosis.
- 2D. Two advantages and two disadvantages of transdermal preparations.
- 2E. Eutectic local anesthetic mixture and its use.

(2×5 = 10 marks)

3. Give reason/s:

- 3A. Adrenaline is used in anaphylactic shock.
- 3B. Propranolol improves the exercise performance in classic anginal patient.
- 3C. Levodopa is combined with carbidopa in parkinsonism.
- 3D. Chronic treatment of corticosteroids should not be stopped abruptly.
- 3E. Tetracyclines to be avoided in young children.

(2×5 =10 marks)

4. Answer the following:

- 4A. Mention two loop diuretics, write two uses for any one.
- 4B. Define tachyphylaxis and give an example.
- 4C. Mention two uses and two adverse effects of ACE inhibitors.
- 4D. Write briefly on human insulin.
- 4E. Explain the use of digoxin in CHF.

(2×5 = 10 marks)



MANIPAL UNIVERSITY
SECOND YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2007

SUBJECT: EXERCISE THERAPY II

(NEW REGULATION)

Wednesday, December 12, 2007

Time: 3 hrs.

Max. Marks: 80

✍ **Answer ALL the questions.**

1. Explain in detail the dynamic stabilization of the glenohumeral joint. (10 marks)
2. Write in detail about the examination of gait in sagittal and frontal plane. (10 marks)
3. Brief Answers:
 - 3A. Explain the structure and function of Intervertebral Disc. (5 marks)
 - 3B. Discuss the functions of Plantar arches. (5 marks)
 - 3C. Explain the mechanical principles involved with joint distraction in a linear force systems. (5 marks)
 - 3D. Explain the benefits of stretching. (5 marks)
 - 3E. What are the common trick movements and the methods to prevent it? (2+3 = 5 marks)
 - 3F. Explain the principle of Traction. (5 marks)
 - 3G. Discuss the postural abnormalities seen in the vertebral column. (5 marks)
 - 3H. What are the principles of mobilization and write the contraindications. (3+2 = 5 marks)
4. Short Questions. (2×10 = 20 marks)
 - 4A. Define mobilization.
 - 4B. What is creep?
 - 4C. Define Isoinertial muscle action.
 - 4D. Mention the synergists of shoulder abduction.
 - 4E. State the Newton's law of inertia.
 - 4F. Write the Medical Research council grading of muscle power.
 - 4G. What is 1 RM?
 - 4H. What is reciprocal inhibition?
 - 4I. What is the normal Q angle for adult men and women?
 - 4J. Name the broncho pulmonary segments of the left lower lobe.



MANIPAL UNIVERSITY**SECOND YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: ELECTROTHERAPY
(NEW REGULATION)**

Thursday, December 13, 2007

Time: 3 Hrs.

Max. Marks: 80

Answer ALL the questions.**1. Essay questions:**

- 1A. Discuss therapeutic uses of Galvanic Current.
1B. Draw a diagram of kromayer lamp. Describe production of UVR.

(10×2 = 20 marks)

2. Short Notes:

- 2A. Triode valve- construction and uses.
2B. Factors affecting capacitance of a conductor.
2C. Production of LASER.
2D. Magnetron.
2E. Luminous IRR.
2F. Contraindications of Wax therapy.
2G. Cavitation in ultrasound therapy.
2H. Uses of IFT.

(5×8 = 40 marks)

3. Brief Answers:

- 3A. Define Vanthoff's law.
3B. Define earth shock.
3C. Define inverse square law.
3D. Phonophoresis and name any one drug used.
3E. Combination therapy and its one use.
3F. Why is LASER therapy contraindicated in tumor?
3G. What is chronaxie?
3H. Mention various frequency used in ultrasound therapy.
3I. Mention type of electrode used in SWD.
3J. Mention any two ions used in Ionotophoresis and their indications.

(2×10 = 20 marks)



MANIPAL UNIVERSITY**SECOND YEAR B.P.T. DEGREE EXAMINATION – DECEMBER 2007****SUBJECT: PSYCHOLOGY
(NEW REGULATION)**

Friday, December 14, 2007

Time: 3 Hrs.

Max. Marks: 80

- ✍ Answer any **FOUR** questions from Section 'A' and any **FOUR** questions from Section 'B'.
✍ All questions carry equal marks.

SECTION – A

1. Define Psychology and explain observation and introspective methods.
2. What are emotions? Discuss James –Lange and Cannon – Bard theories of emotion.
3. Define learning and describe operant conditioning.
4. What is memory? Write in brief about types and process of memory.
5. Write briefly on any **TWO** of the following.
 - 5A. Obedience.
 - 5B. Intelligence tests.
 - 5C. Erickson's psychosocial theory.

SECTION – B

6. Outline the models of mental disorders and explain the socio – cultural model.
7. Describe various techniques of behaviour therapy.
8. Define clinical psychology and explain its current status as a speciality in health sciences.
9. What is stress? Outline the sources of stress?
10. Write briefly on any **TWO** of the following.
 - 10A. Indian concept of mental health.
 - 10B. Mental retardation.
 - 10C. Crisis reaction.

