

MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: PATHOLOGY AND MICROBIOLOGY****(OLD/NEW REGULATION)**

Monday, September 12, 2005

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. Define inflammation. Describe the cellular events in acute inflammation. (2+6 = 8 marks)
2. Define shock. Describe the pathogenesis of septic shock. (1+6 = 7 marks)
3. Write short notes on any **FIVE**:
 - 3A. Difference between benign and malignant tumours.
 - 3B. Skeletal changes in rickets.
 - 3C. Idiopathic thrombocytopaenic purpura (ITP).
 - 3D. Types of bronchiectasis.
 - 3E. Aetiology of carcinoma cervix.
 - 3F. Factors influencing fracture repair.(5×5 = 25 marks)

SECTION 'B': MICROBIOLOGY: 40 MARKS

4. Define infection. Classify different types of infection. Describe the various modes of transmission of infection. (1+2+5 = 8 marks)
5. Name the etiological agent of tetanus. Explain the pathogenesis and laboratory diagnosis of tetanus. (1+3+3 = 7 marks)
6. Write short note any **FIVE** of the following:
 - 6A. Immunity.
 - 6B. Robert Koch.
 - 6C. Shape and arrangement of bacteria.
 - 6D. Chemical disinfectants.
 - 6E. Candida albicans.
 - 6F. Etiological agents of sexually transmitted diseases.(5×5 = 25 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T./B.O.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: PHARMACOLOGY****(OLD/NEW REGULATIONS)**

Tuesday, September 13, 2005

Time: 1½ Hrs.

Max. Marks: 40

- 1A. Name four opioids. Write three uses and three adverse effects of any ONE.
- 1B. Explain competitive antagonism with an example.
- 1C. Give two examples and two uses for: i) Anticoagulants ii) Calcium channel blockers.
(4+2+4 = 10 marks)
- 2A. Enumerate four glucocorticoids. Mention its two uses and two adverse effects.
- 2B. What is malignant hyperthermia? Name the drug used in its treatment.
- 2C. Mention two advantages and two disadvantages of intravenous route of drug administration.
- 2D. Explain the term chemoprophylaxis with a suitable example.
(4+2+2+2 = 10 marks)
3. Explain the basis for the following:
- 3A. Adrenaline is used along with local anesthetic.
- 3B. Pyridoxine is coadministered with Isoniazid .
- 3C. Edrophonium test in myasthenia gravis.
- 3D. Salbutamol in bronchial asthma.
- 3E. Sodium bicarbonate in barbiturate poisoning.
(2×5 = 10 marks)
4. Mention one use and one adverse effect for the following drugs:
- 4A. Methotrexate.
- 4B. Erythromycin.
- 4C. Thiopentone.
- 4D. Atorvastatin.
- 4E. Lignocaine.
(1×5 = 5 marks)
5. Name two drugs for the following conditions.
- 5A. Typhoid fever.
- 5B. Maturity onset diabetes mellitus.
- 5C. Organophosphorus poisoning.
- 5D. Congestive cardiac failure.
- 5E. Osteoarthritis.
(1×5 = 5 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: EXERCISE THERAPY II**

(NEW REGULATION)

Wednesday, September 14, 2005

Time: 3 hrs.

Max. Marks: 80

✍ Answer ALL questions. Illustrate with clear diagrams wherever applicable.

1. Discuss the factors responsible for stability of hip joint. Add a note on the function of hip abductors.

(6+4 = 10 marks)

2. Define mobilisation. Classify mobilisation. Discuss the methods to improve shoulder range of motion.

(1+3+6 = 10 marks)

3. Write short notes:

3A. Contraindications and precautions to mechanical traction.

3B. Trick movements.

3C. Hold relax method.

3D. Frenkel's exercises.

3E. Trendelenberg gait.

3F. Structure of intervertebral disc.

3G. Various types of pinches.

3H. Ligaments around the elbow joint.

(5×8 = 40 marks)

4. Answer the following questions briefly:

4A. Enumerate any two causes for lordotic posture.

4B. Define osteokinematics and arthrokinematics.

4C. Mention two goals of precrutch training.

4D. List the expiratory types of breathing exercises.

4E. What are the attachments of plantar fascia?

4F. Mention the demerits of manual muscle testing.

4G. Enumerate the different modes of ambulation.

4H. Oxford protocol of strengthening.

4I. Name the rotator cuff muscles.

4J. Any four contraindications to stretching.

(2×10 = 20 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: KINESIOTHERAPEUTICS
(OLD REGULATION)**

Wednesday, September 14, 2005

Time: 3 Hrs.

Max. Marks: 80

Answer any FOUR questions

1. How do you classify the loads working on lumbar spine? Describe in detail the loads on the lumbar spine during various static positions. What are the factors affecting weight lifting? What care should be taken during weight lifting?
(3+6+8+3 = 20 marks)
2. Enumerate the causes of limitation of joint R.O.M. Describe the mobilisation programme for a patient with painful and stiff shoulder . Add a note on precautions to be taken.
(6+10+4 = 20 marks)
3. Describe the various walking aids. What are the indications in prescribing elbow crutches to a patient? Describe in detail the pre crutch training for a patient to be trained on elbow crutches.
(4+4+12 = 20 marks)
4. Describe the types and techniques of applying traction with reference to the cervical spine. In brief give the use of cervical traction. Add a note on contra indication and precautions.
(10+5+5 = 20 marks)
5. Write short notes on any **TWO**:
 - 5A. Rhythmic initiation in PNF.
(10 marks)
 - 5B. Inspiratory type breathing exercises.
(10 marks)
 - 5C. Scapulohumeral rhythm.
(2+8 = 10 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: ELECTROTHERAPY****(NEW REGULATION)**

Thursday, September 15, 2005

Time: 3 Hrs.

Max. Marks: 80

Answer ALL the questions.

1. What are the different kinds of lower motor neuron (LMN) lesions? Explain the same with respect to Strength Duration Curve test.
(3+7 = 10 marks)
2. What are the physiological effects of ultraviolet radiations?
(10 marks)
3. Write short notes on:
 - 3A. Mention examples of earth shock. What are the precautions against the same?
 - 3B. Briefly explain indications and contraindications of Paraffin Wax.
 - 3C. Discuss non luminous Infra Red Radiation (IRR) lamps.
 - 3D. Briefly explain charging and discharging of condensers.
 - 3E. Mention the indications, contraindications and technique of treatment using interference therapy.
 - 3F. What do you know about electromyography.
 - 3G. Discuss the production of ultrasound using a neat diagram showing the components of ultrasonic apparatus.
 - 3H. What are the techniques of application and relief of pain by moist heat therapy?
(5×8 = 40 marks)
4. Write brief answers:
 - 4A. What is a choke coil?
 - 4B. Define direct current.
 - 4C. What is Grothus law?
 - 4D. Define inverse square law.
 - 4E. What is a sinusoidal current?
 - 4F. Enumerate the characteristics of laser.
 - 4G. What is Lewis hunting reaction?
 - 4H. Tabulate the standard doses of ultraviolet (E1-E4) classified by erythema reaction.
 - 4I. Enumerate the thermal effects of ultrasound.
 - 4J. What is microwave diathermy?
(2×10 = 20 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION

(Deemed University)

SECOND YEAR B.P.T. DEGREE EXAMINATION – SEPTEMBER 2005**SUBJECT: PSYCHOLOGY****(NEW REGULATION)**

Friday, September 16, 2005

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. Discuss the principles of operant conditioning.
2. What is motivation? Discuss the theories of motivation.
3. Define personality and outline the styles of personality.
4. Explain the cognitive theory of language development.
5. Write briefly on any **TWO** of the following:
 - 5A. Temperamental traits.
 - 5B. Attitudes.
 - 5C. Observation learning.

SECTION – 'B'

6. Outline the ill effects of stress and discuss the ways of coping with stress.
7. Explain aversive conditioning and token economy procedures.
8. Define clinical psychology and describe its scope as a specialty in health sciences.
9. What is crisis? How to manage crisis reaction?
10. Write briefly on any **TWO** of the following:
 - 10A. Indian concept of mental illness.
 - 10B. Mental retardation.
 - 10C. Supportive psychotherapy.

