

**Bachelor of Physiotherapy
Degree Examination**

Semester III--New Regulations

EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer section A and B in separate answer books

Answer any FIVE from each section

All questions carry equal Marks

SECTION—A

1. Analyse the muscle work of
 - (a) Alternate sitting and standing up
 - (b) Crook-half lying single knee up drawing and down pressing.
2. Describe how you will utilise suspension therapy to mobilise the knee joint.
3. Discuss the methods of correcting faulty posture in a young school boy.
4. Describe the various breathing exercises.
5. Describe the technique of giving relaxed passive movements.

6. What preparations will you make before commencing massage to the back under following headings ?
 - (a) Patient
 - (b) Therapist
 - (c) Treatment area and any advice following treatment.

SECTION B

7. Discuss briefly how you will measure a patient for supply of a cane and train an elderly person to walk with a cane.
8. Give a scheme of exercises to strengthen the Intrinsic muscles of the hand.
9. Describe facial massage. List the local contra indications to give massage for the face.
10. Write down the techniques involved in measurement of joint motion. Describe the goniometric evaluation of the elbow flexion.
11. Write briefly the endurance exercise and Frenkel's exercise.
12. What are the causes of muscular weakness and how will you strengthen biceps from muscle power 1.

B. P. T. Degree Examination
THIRD SEMESTER — NEW REGULATIONS

SUBJECT : EXERCISE THERAPY AND MASSAGE

Time : 3 Hours

Max. 100 Marks

Answer Section A and Section B in separate Answer Books.

Answer any FIVE questions from each all questions carry EQUAL marks.

SECTION A

1. Describe how you would prepare a lady patient for MASSAGE to her face. What local contraindications you may check for rule out, before commencing massage over the face?
2. Discuss briefly how will you apply SLING SUSPENSION for increasing the range of ALL MOVEMENTS at the shoulder joint.
3. Write down the different principles and laws related to HYDROTHERAPY treatment. What safety precautions you will adopt while treating a child in the hydrotherapy pool.
4. Write down the techniques involved in measurement of Joint Motion. Describe the measuring procedure for goniometric evaluation of SHOULDER ROTATION.
5. Write down a scheme of STRENGTHEN EXERCISES for the extensors of the spine.
6. Explain why the patients position is important in the technique of application of MASSAGE. Give a suitable position for
 - a) General Body Massage
 - b) Heavy Swollen Leg
 - c) Massage Treatment to Facial Palsy

SECTION—B

List down the various types of Pathological Gaits seen in patients of Post Polio Paralysis with Paralysis of key muscles in the leg. Discuss how will you reeducate these patients for correcting towards proper Gait pattern.

Give a scheme of CO-ORDINATION exercises for the legs.

What is a LEVER ?

Explain How levers may be used to provide :

- a) A balance mechanism
- b) A mechanical Advantage
- c) A speed advantage Give one Autotomical example of each type of lever

Enumerate the MASSAGE manipulations which could be used and explain how the technique could be modified in treatment of :

- a). Oedema in the lower leg.
- b Burn scar in the palm.

Write down the complications found in patients after PROLONGED BEDREST. Discuss the MAINTENANCE EXERCISES carried out for prevention of above complications in patients on prolonged bed rest.

What is generally understood by the term "POOR POSTURE" ?

Give the principles of treatment by means of which a good posture may be established.

[ND 789]

**Bachelor of Physiotherapy
Degree Examination**

Third Semester
(New Regulations)

Paper - EXERCISE THERAPY AND MASSAGE

Time : Three hours Maximum : 100 marks

Answer Section A and B in separate answer books

Answer any FIVE from each section

All questions carry equal marks

SECTION - A

1. Define and explain the various types of levers with examples in human body.
2. Describe the Axes and planes in relation to movements in human body.
3. Explain the physiological effects of massage on various systems of human body.
4. Explain the technique of progressive resisted exercises to strengthen quadriceps femoris muscle.
5. Describe the pathological "Gluteus medius weakness" Gait.
6. Describe the general causes, signs and symptoms of physical tension and the techniques for its relaxation.

SECTION B

7. Describe the "Kneeling" position. Explain the muscle work, effects and uses of Kneeling.
8. Describe the technique of measuring girth of thigh using a measuring tape.
9. Describe the various types of crutch walking.
10. Give a systematic account of Human Gait Cycle.
11. Explain the technique of Massage for upper limb.
12. Describe the method of manual muscle testing (0 to 5) for Ankle plantar flexors.

[MB 906]

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION

(New/Revised Regulations)

Third Semester

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum :100 marks

Answer Section A and B in separate answer books.

Answer any FIVE from each Section.

All questions carry equal marks.

SECTION A

1. Describe human locomotion:
2. Discuss the relation of speed to range of movements of lever.
3. Describe kneading manipulation and its therapeutic applications.
4. Describe normal human posture and its training programme.
5. Describe the pulley action of two jointed muscle and its function.
6. Describe fundamental principle of motion

[MB 906]

SECTION B

7. Describe the technique of stretching of calf muscles^{ing}
8. What is relaxation? What are the methods of inducing relaxation?
9. Describe standing position and its muscle work.
10. State how would you assess the
 - (a) Range of motion.
 - (b) Disparity of limb length.
 - (c) Muscle strength.with
11. How would you treat a patient of facial paralysis v massage manipulation?
12. Write notes on :
 - (a) Angle of pull.
 - (b) Reflex action.
 - (c) Rotatory motion.

[AK 906]

**BACHELOR OF PHYSIOTHERAPY
DEGREE EXAMINATION.**

(New/Revised Regulations)

Third Semester

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Section A and B in separate answer books.

SECTION A — (50 marks)

Write an essay on any ONE of the following :
(14)

(a) Describe the technique of facial massage giving the effects of manipulations used. Write down the local contraindications to be checked for before performing massage over the face.

(b) Write down the causes for weakness or paralysis of the muscles. Discuss the measures used to obtain initiation of contraction of muscles affected by paralysis.

Write brief answers on any TWO of the following :
(2 × 8 = 16)

- (a) Levers.
- (b) Crutch walking.
- (c) P.N.F. Techniques.

April-1996

[AK 906]

3. Write short notes on any FIVE of the following
(5 × 4 = 20)

- (a) Walking cycle.
- (b) Passive stretching to sternocleidomastoid.
- (c) Methods of obtaining local relaxation.
- (d) Oxford classification of muscle power grading.
- (e) Tests for coordination and endurance.
- (f) Free exercises for mobilising the shoulder.
- (g) Free exercises for the abdominal muscles.

SECTION B — (50 marks)

1. Write an essay on any ONE of the following :

(a) Describe how you would prepare a patient for massage to the lower extremity. State the manipulations you would use giving their effects.

(b) Discuss the factors which commonly cause limitation of the range of joint movement. Describe the various methods used for increasing the range of movement.

[PK 904]

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Third Semester

(New/Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A — (50 marks)

1. Write an essay on any ONE of the following :

(a) Discuss briefly the physiological effects of massage on the different systems of the body.

(b) List down the causes for incoordination.

Give a scheme of Frenkel's exercises for treating incoordination of the legs. (14)

2. Write brief answers on any TWO of the following :

(a) Discuss briefly the basic conditions for obtaining general body relaxation.

(b) Endurance exercises.

(c) Discuss sitting position briefly on muscle work, effects and uses. (2 × 8 = 16)

3. Write short notes on any FIVE of the following :

(a) Effects and uses of lying position.

(b) Shoulder bracing free exercises for the retractors of the scapula.

[PK 904]

(c) Free exercises for the extensors of the spine.

(d) Value of group exercises.

(e) Walking cycle.—

(f) Types of muscle work. (5 × 4 = 20)

SECTION B — (50 marks)

4. Write an essay on any ONE of the following :

(a) Give a brief classification of various manipulations used in massage. Discuss the various points to be considered while giving massage.

(b) Discuss the principles involved in good technique giving relaxed passive movements.

List down the effects and uses of relaxed passive movements. (1)

5. Write brief answers on any TWO of the following :

(a) Discuss the factors which predispose to poor posture.

(b) Discuss the technique of assisted exercises facilitate inefficient/weak muscles.

(c) Discuss briefly the tests in common use assessment of patient's condition prior to planning the exercise treatment. (2 × 8 = 16)

6. Write short notes on any FIVE of the following :

(a) Different speeds of active exercises.

(b) Movements in different planes.

(c) Inertia.

October-1996

[PK 904]

(d) Examples for three orders of ~~the~~ ^{the} ~~orders~~ ^{orders} found in the human body.

(e) Springs.

(f) Pendular suspension.

(g) Pelvic tilt.

(5 × 4 = 20)

[MS 904]

BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION.

Third Semester

(Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A

1. Write an essay on any ONE of the following : (20)
 - (a) Scope of passive movements and stretching.
 - (b) Joint manipulations in physiotherapy.
2. Write short notes on any SIX : (6 × 5 = 30)
 - (a) Second order levers.
 - (b) Fixation in muscle testing.
 - (c) Muscle strength Vs endurance.
 - (d) Assisted exercises in suspension therapy.
 - (e) Shunt and spurt muscles.
 - (f) Composition of forces.
 - (g) Kneeling position.
 - (h) Indications and contraindications for hydro-therapy.

[MS 904]

SECTION B

3. Write an essay on any ONE of the following : (20)
 - (a) Techniques of progressive resisted exercises with illustrations.
 - (b) Effects of massage on various systems.
4. Write short notes on any SIX : (6 × 5 = 30)
 - (a) Muscle cramps.
 - (b) Role of trunk muscles in crutch walking.
 - (c) Anatomical position.
 - (d) Centre of gravity of human body and base of support.
 - (e) Group exercises.
 - (f) Spinal extension exercises.
 - (g) Pelvic tilt.
 - (h) Pulleys and springs.

[SV 904]

Sub. Code : 5131

**BACHELOR OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Third Semester

(Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A

1. Write an essay on any ONE of the following :
(20 marks)

(a) Describe in detail the muscle strengthening proprioceptive neuro muscular facilitation (PNF) techniques.

(b) Describe the complications of prolonged Bed rest of a patient and its prevention.

2. Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Whirlpool bath.

(b) Petrissage.

(c) Resisted exercise.

(d) Foot drop gait.

(e) Isotonic contractions.

(f) Effluage.

(g) Types of joint ranges.

(h) Stretching of sternomastoid.

SECTION B

3. Write an essay on any ONE of the following : (20 marks)

(a) What are the percussion manipulations? Describe the techniques, effects, uses and contra-indications of Hacking and Clapping.

(b) How will you reeducate a weak elbow flexors from muscle power 0 to 15?

4. Write short notes on any SIX : (6 × 5 = 30 marks)

(a) Kneading.

(b) Macqueen's power system.

(c) Abnormal posture.

(d) Indications and contra indications of Hydrotherapy.

(e) Exercises in scoliosis.

(f) Contra indications of massage.

(g) Axial suspensions.

(h) Third order of levers.

[SM 904]

October-1998

BACHELOR OF PHYSIOTHERAPY DEGREE
EXAMINATION.

Third Semester

(Revised Regulations)

Paper IV— EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Write Section A and B in separate answer books. —

SECTION A

Write an essay on any ONE of the following : (20)

(a) Suspension Therapy and its uses.

(b) Describe the various methods of muscle strengthening.

2. Write short notes on any SIX : (6 × 5 = 30)

a) Stroking manipulations.

(b) Gravity.

(c) First order lever.

(d) Axis and planes.

(e) Active assisted exercises.

(f) Sternocleidomastoid tightness.

(g) Temporal summation.

(h) Slow reversal.

SECTION B

3. Write an essay on any ONE of the following : (20)

(a) Progressive Neuromuscular Facilitation technique.

↗ (b) General effects of massage.

4. Write short notes on any SIX : (6 × 5 = 30)

(a) Load assisted exercises.

(b) Group therapy.

(c) Stabilisation in muscle testing.

(d) Contraindications of massage.

(e) Hip flexor lightness.

(f) Physiological and therapeutic effects of exercises

(g) Mechanism of neuromuscular coordination.

(h) Gluteus medius gait. ↑

[SG 904]

**BACHELOR OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Third Semester

(Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Write Section A and B in separate answer books.

SECTION A

1. Write an essay on any ONE of the following : (20)

(a) Describe the technique of facial massage giving the effects of manipulations used. Write down the local contra-indications to be checked for before performing massage over the face.

(b) Write down the causes for weakness or paralysis of the muscles. Discuss the measures used to obtain initiation of contraction of muscles affected by paralysis.

(c) Describe how will you utilise suspension therapy to mobilise the knee joint.

2. Write brief notes on any SIX of the following :
(6 × 5 = 30)

- (a) Levers
- (b) Crutch walking
- (c) Walking cycle
- (d) Free exercises for the abdominal muscles
- (e) Oxford classification of muscle power grading
- (f) Intrinsic foot muscle exercises
- (g) Suspension therapy.

SECTION B

3. Write an essay on any ONE of the following : (20)

(a) Discuss briefly how will you measure a patient for supply of crutches and train an elderly person to walk with crutches.

(b) Write briefly the endurance exercises and Frenkel's exercise.

(c) What are the causes of muscular weakness and how will you strengthen biceps from muscle power 1.

4. Write short notes on any SIX of the following :
(6 × 5 = 30)

- (a) Ranges of muscle work
- (b) Equilibrium
- (c) Types of sling suspension
- (d) Principles and laws related to hydrotherapy
- (e) Free exercises for mobilising the shoulder
- (f) Value of group exercises
- (g) Muscular weakness.

April-2000

[KB 907]

Sub. Code : 5131

**BACHELOR OF PHYSIOTHERAPY DEGREE
EXAMINATION.**

Third Semester

(Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Section A and B in separate answer books

SECTION A

1 Write an essay on any ONE of the following (20)

(a) Describe in detail the muscle strengthening proprioceptive neuro-muscular facilitation (PNF) techniques.

(b) Joint manipulations in physiotherapy

2 Write short notes on any SIX

(a) Whirl pool Bath

(b) Second order levers

(c) Resisted exercise

- (d) Foot drop gait
- (e) Composition of forces
- (f) Indication and contra indications for Hydrotherapy
- (g) Types of joint ranges
- (h) Composition of forces.
- (e) Abnormal posture
- (f) Role of Trunk muscles in crutch walking
- (g) Anatomical position
- (h) Macqueen's power system.

SECTION B

3. Write an essay on any ONE of the following (20)

- (a) Effects of massage on various systems
- (b) How will you re-educate a weak elbow flexors from muscle power 0 to 15?

4. Write short notes on any SIX : (6 × 5 = 30)

- (a) Muscle cramps
- (b) Kneading
- (c) Group exercise
- (d) Pelvis tilt

[KC 907]

Sub. Code : 5131

BACHELOR OF PHYSIOTHERAPY
DEGREE EXAMINATION.

Third Semester

(Revised Regulations)

Paper I — EXERCISE THERAPY AND MASSAGE

Time : Three hours

Maximum : 100 marks

Answer Sections A and B in separate answer books.

SECTION A

1. Answer any TWO of the following: (2 × 15 = 30)

(a) Explain the fundamental standing position with muscle work.

(b) Write the strengthening technique for the following muscles :

(i) Wrist extensors.

(ii) Hip abductors.

(c) What are the modalities used to prevent joint stiffness and explain the mobilization of shoulder joint?

(f) Movements in different planes.

(g) Maintenance exercises for patient of prolonged rest.

(h) Gonometry.

3. Write an essay on any ONE of the following : (20)

(a) Explain the causes for in coordination. Give an account on Frenkel's exercises for treating in coordination of legs.

(b) What are the manipulations used in chest physiotherapy? Explain the techniques, effects and contra indications of any two.

4. Write short notes on any SIX : (6 × 5 = 30)

(a) Equilibrium.

(b) Buoyancy.

(c) IT Band tightness.

(d) Ranges of muscle work

(e) Effects of bad posture.

(f) Explain the muscle work in standing.

(g) Petrissage

(h) Angle of pull.