

## Second Year B. Physiotherapy Examination

## Exercise Therapy-II &amp; Kinesiology

Date : 11-12-2023, Monday]  
Time : 3 Hours]

[Max. Marks : 80

- Instructions :** (1) Figure to the right indicate marks.  
(2) Write legibly.  
(3) Draw diagrams wherever necessary.  
(4) Use Separate answer book for each section.

**SECTION -I**

**Q1.** Describe principles of strengthening of muscle? Discuss the various methods & techniques in strength training? **16 marks**

**OR**

**Q1.** Write the principles of MMT? Discuss in detail MMT for Hip flexors and Extensor. Note on trick movements **16 marks**

**Q2.** Describe various breathing exercise and discuss postural draining with neat diagram **16 marks**

**OR**

**Q2.** Define Posture. Write mechanism to maintain posture with a note on lordotic posture **16 marks**

**Q3.** Write Short notes (3 out of 4)

**12marks**

- I. Properties of water
- II. Fitness testing
- III. Principles of re-education
- IV. Voluntary control grading

**Q4.** Write Short notes (3 out of 4)

**12mks**

- i. General relaxation techniques
- ii. Rhythmic Initiation and stabilization
- iii. Effects & principle of traction
- iv. Open chain and close chain kinematics

**SECTION -II**

**Q5.** Describe in detail the biomechanics of respiration. Add a note on patho-mechanics of respiration. **16 marks**

**OR**

**Q5.** Describe phases of Gait in detail. Write the determinants of gait. Add note on gait variables.

**16 marks**

**Q6.** Write Short notes (2 out of 3)

**8 marks**

- I. Kinetics of Sit to Stand
- II. Scapulohumeral rhythm
- III. Types of muscle contraction with example