



**RAN-1806000301030001**

**First Year Bachelor of Physiotherapy Examination September - 2025**

**Exercise Therapy - I and Basic Biomechanics**

**Time: 3 Hours ]**

**[ Total Marks: 80**

**સૂચના : / Instructions**

(1)

નીચે દર્શાવેલ નિશાનીવાળી વિગતો ઉત્તરવહી પર અવશ્ય લખવી.  
Fill up strictly the details of signs on your answer book

Name of the Examination:

First Year Bachelor of Physiotherapy

Name of the Subject :

Exercise Therapy - I and Basic Biomechanics

Subject Code No.: 1806000301030001

Seat No.:

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Student's Signature

**Section - I**

**Q. 1. Write in detail**

**10**

1. Define walking aids. Discuss in detail about different types of the crutches measurement and its advantages and disadvantages.

**OR**

1. Explain in detail types of suspension with its indication, contraindication, benefits and limitation.

**Q. 2. Write Short Notes: (Three out of Four)**

**15**

1. Write in detail about the benefit of home exercises.
2. Pelvic tilt
3. Three point gait pattern in stair climbing
4. Physiological effects of effleurage

**Q. 3. Write Short Notes: (Five out of Six)**

**15**

1. Uses of monkey bar
2. Pursed lip breathing
3. Significance of trick movement in exercise
4. Define Agonist, Antagonist and synergist
5. Normal end feel
6. Differentiate type I and type II muscle fibres

## Section - II

**Q. 1. Write in detail. 10**

1. Explain in detail Active assisted exercise - principles, classification, techniques, indications, contraindications, effects and uses.

**OR**

1. Describe different girth measurement methods and their significance in physiotherapy practice.

**Q. 2 Write Short Notes: (Three out of Four) 15**

1. Explain the techniques and principles of measuring limb length.
2. Write a note on classification of massage.
3. Describe fundamental and derived starting positions.
4. Explain physiological effects and uses of exercise therapy.

**Q. 3. Write Short Notes: (Five out of Six) 15**

1. Define Axis and Planes of movement.
  2. Write two differences between shunt and spurt muscles.
  3. Mention any three tools and equipment used in exercise therapy.
  4. Write two therapeutic effects of breathing exercises.
  5. List types of levers with one example each.
  6. Define Resisted exercise.
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