Second B.P.Th. (New Course) Examination, December 2005
KINESIO THERAPEUTICS

Total Duration: Section A + B + C = 3 Hours
Section B & C Marks: 60

SECTION - B & SECTION - C

Instructions:
1) All questions are compulsory.
2) The number to the right indicates full marks.
3) Draw diagrams wherever necessary.
4) Answer each Section in the respective answer sheet only.
5) Answers written in the inappropriate sectional answer book will not be assessed in any case.

SECTION - B

2. Attempt any five out of six:
   a) Enumerate any three physiological variations of posture.
   b) Write any three indications for postural drainage.
   c) Define “stride length” and “step length”.
   d) Enumerate the phases of stance phase of gait cycle.
   e) Write any three contra-indications for stretching.
   f) Enumerate three afferent stimuli responsible for postural reflex.

\[5 \times 3 = 15\]

3. Attempt any three out of four:
   a) Write briefly about the determinants of gait.
   b) Explain active and passive insufficiency of muscles with examples.
   c) Discuss in brief the “Concave-Convex” rule for joint mobilization.
   d) Describe in brief the facilitatory stimuli used in proprioceptive neuro-muscular facilitation.

\[3 \times 5 = 15\]

SECTION - C

4. Discuss the kinematics and kinetics of lumbar spine flexion and extension from erect standing position.
   Discuss the physiological and anatomical factors limiting these movements.
   Add a note on normal lumbo-pelvic rhythm.

\[6 + 6 + 3 = 15\]

5. Discuss the principles of strength training.
   Discuss how a muscle can be strengthened from grade 1 to grade 5, using different techniques of strengthening with appropriate examples.

\[7 + 8 = 15\]

OR

5. Describe the different types of breathing exercises.
   Draw appropriate diagrams where indicated.
   What are the indications and contra-indications to breathing exercises?

\[(4+3+4+4)\]