## PHYSICAL EDUCATION

## PAPER VI - KINESIOLOGY & BIOMECHANICS (2010 Admissions)

Time: Three Hours

Maximum: 75 Marks

Answer any five questions of which 3 from PART – A and 2 from PART – B including question No.8 which is compulsory.

All questions carry equal marks

## PART - A

- 1. Discuss in detail about the role of Kinesiology in Physical Education, Physical Medicine and daily life.
- 2. List down the murdes attached to
  - (a) Shoulder joint
  - (b) Hip joint
  - (c) Ankle joint
- 3. Mechanically analyze
  - (a) Walking
  - (b) Throwing
  - (c) Striking
- 4. Write notes on
  - (a) Electromyography
  - (b) Goniometry
  - (c) Stroboscopic photography
- 5. Explain the following:
  - (a) Force and its types
  - (b) Spin and its types
  - (c) Equilibrium and its types

## PART - B

- 6. Explain Newton's laws of motion and their application in sports? (1 x 15=15 Marks)
- 7. (a) Fill in the blanks:-
  - (i) Kneejoint is an example of ...... joint.

  - (iii) Boxer's muscle is ...... and Tailor's muscle is .....
  - (iv) The movements around ball and socket joints are ....., ....., .....,
  - (b) Differentiate between fundamental and anatomical standing positions.
  - (c) Structural classification of muscles.

 $(3 \times 5 = 15 \text{ Marks})$ 

- 8. Answer any five of the following.
  - (a) Stabilizers and Neutrolizers.
  - (b) Body levers
  - (c) Mass and Weight
  - (d) Angle of rebound
  - (e) Friction
  - (f) All or none law.
  - (g) Types of muscle contractions.
  - (h) Reciprocal Innervation and Inhibition.

 $(5 \times 3 = 15 \text{ Marks})$