C 64985   (Pages : 2)   Name.....................................

Reg. No.................................

SECOND YEAR B.P.E. DEGREE EXAMINATION, AUGUST 2014

Paper VI – KINESIOLOGY AND BIOMECHANICS

Time : Three Hours   Maximum : 75 Marks

Answer any **three** *questions from Part A and any* **two** *questions from Part B including* **Question 8**, *which is* **compulsory**.

Part A

1. Describe the structure of shoulder Joint. Write the attachments and actions of the muscles acting on it.

    (15 marks)

2. Explain briefly :

    (a) The scope of Biomechanics in sports training and competitions.

    (b) Contribution of Leonardo Da Vinci.

    (c) The role of Kinesiology in Physical Medicine.

    (3 × 5 = 15 marks)

3. Describe the following :

    (a) Types of muscle contractions.

    (b) The function of the cerebrum.

    (c) The general principles in moving one's own body.

    (3 × 5 = 15 marks)

4. Write short notes on the major actions of the following muscles :

    (a) Deltoid.

    (b) Sub Scapularis.

    (c) Quadriceps.

    (3 × 5 = 15 marks)

5. Explain briefly :

    (a) The extension of the knee joint.

    (b) The exercises for strengthening muscles.

    (c) The muscular analysis of walking.

    (3 × 5 = 15 marks)

Turn over

Part B

6. Describe the mechanical and muscular analysis of throwing.

(15 mark

7. Explain briefly :

   (a) The angle of projection.

   (b) The biomechanical analysis in sports.

   (c) The principles of equilibrium and their application in sports.

(3 × 5 = 15 mar

8. Write short notes on any *five* :

   (a) Equilibrium.

   (b) Electromyography.

   (c) Isokinetic exercises.

   (d) Sagittal Axis.

   (e) Stretch Reflex.

   (f) Ankle Joint.

   (g) Pronation.

   (h) Antogonists.

(5 × 3 = 15 ma