

[LP 6256] AUGUST 2019 Sub. Code: 6256

BPT DEGREE EXAMINATION SECOND YEAR

PAPER II - BIOMECHANICS, APPLIED ANATOMY & KINESIOLOGY

Q.P. Code: 746256

Time: Three hours Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Discuss the Kinematics and Kinetics of Patella Femoral Joint adding note on applied anatomy also.

2. Discuss in detail the Kinematic variables that describe the motion of Scapulothoracic and Glenohumeral joint.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Frontal plane deviations from optimal vertebral alignment.
- 2. Properties of tendon.
- 3. Flexor mechanism of hand.
- 4. Analysis of sitting posture.
- 5. Types of muscle fibers and its function.
- 6. Abnormal gait due to muscle paralysis.
- 7. Muscles and movements of Radioulnar joint.
- 8. Ligaments of knee.

III. Short answers on:

 $(10 \times 2 = 20)$

- 1. Intercalated segment.
- 2. Squeeze film lubrication.
- 3. Step width.
- 4. Campers chiasma.
- 5. Counternutation.
- 6. Function of metatarsophalangeal joint.
- 7. Ligamentum teres.
- 8. Latissimus Dorsi.
- 9. Muscle spindle.
- 10. Joint play.
