

THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[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 x 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 x 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 x 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.
