

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

[LR 1220]

**DECEMBER 2020
(AUGUST 2020 EXAM SESSION)**

Sub. Code: 6256

**BPT DEGREE EXAMINATION
SECOND YEAR**

**PAPER II – BIO-MECHANICS, APPLIED ANATOMY & KINESIOLOGY
Q.P. Code : 746256**

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the postural deviations from optimal alignment in the frontal plane.
2. Describe in detail the structure and function of Humeroulnar and Humeroradial joints.

II. Write notes on:

(8 x 5 = 40)

1. Explain the structure and function of scapulothoracic joint.
2. Describe the structure and function of thoracolumbar fascia.
3. Explain force velocity relationship.
4. Describe the layers and functions of joint capsule.
5. Write about the ligaments supporting the subtalar joint.
6. Explain the mechanism of finger flexion.
7. Compare running verses walking gait.
8. Describe the motions of patella with diagrams.

III. Short answers on:

(10 x 2 = 20)

1. State the six main ligaments associated with intervertebral and zygapophyseal joints.
2. What is normal sway envelope?
3. What is spodylolisthesis?
4. Draw the angle of wiberg.
5. What is patellar plica?
6. Define torque.
7. Write the attachment and function of Ligamentum Teres.
8. What is Hysteresis?
9. What are joint reaction forces?
10. What is Young's modulus?
