

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

**[BPT 0324]**

**MARCH 2024  
(FEBRUARY 2024 EXAM SESSION)**

**Sub. Code: 6277**

**BACHELOR OF PHYSIOTHERAPY DEGREE COURSE  
SECOND YEAR - (Regulations from 2017-2018 onwards)  
PAPER II – BIO-MECHANICS, APPLIED ANATOMY & KINESIOLOGY**

*Q.P. Code: 746277*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(2 x 15 = 30)**

1. Explain the biomechanical analysis in walking and running of human locomotion.
2. Describe the kinetics and kinematics of Knee Joint. Add a note on its applied Anatomy.

**II. Write notes on:**

**(10 x 5 = 50)**

1. Anatomical pulley.
2. Muscle work in squat lifting.
3. Stress and strain.
4. Gravity and its uses in therapeutics.
5. Supination and Pronation.
6. Isokinetic exercise.
7. Tennis elbow.
8. Tonic muscle.
9. Function of cervical region.
10. Coxa valga and coxa vara.

**III. Short answers on:**

**(10 x 2 = 20)**

1. Ataxic gait.
2. Ovoid joint.
3. Extensor expansion.
4. Angle of wiberg.
5. Chondrocytes.
6. Hallux rigidus.
7. Enthesis.
8. Articular cartilage.
9. Gait cycle.
10. Alar ligament.

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