

**VINAYAKA MISSION'S RESEARCH FOUNDATION  
(Deemed to be University), SALEM**

**BACHELOR OF PHYSIOTHERAPY DEGREE EXAMINATION N  
OCTOBER - 2021  
Fourth Semester**

**Biomechanics - II**

Time: Three hours

Maximum : 100 marks

**I. Write Essays on:**

**(2 x 15 = 30)**

1. Explain structure and Function of Knee joint & note about Locking and Unlocking?
2. Define Gait and Explain the Phases of Gait Cycle?

**II. Write short Essays on:**

**(8 x 5 = 40)**

3. Kinematics of Ribcage
4. Pelvic Tilt
5. Effects of Injury and disease in Tibiofemoral Joint.
6. Q angle and its importance.
7. Arches of foot.
8. Optimal posture in Sagittal plane.
9. Pathological gait.
10. Muscles of Hip Joint.

**III. Write Short Answers on:**

**(3 x 10 = 30)**

11. Cadence & stride length.
12. Postural deviations
13. Subtalar joint
14. Pesplanus & Pescavus
15. Menisci
16. Valgus & varus of Knee joint
17. Angle of Torsion
18. Inversion & Eversion of Ankle
19. Muscles of Respiration
20. Gravitational moments.