



Second Year BPT Degree Supplementary Examinations - October 2015

**BIOMECHANICS
(2010 Scheme)**

Time : 3 hrs

Max marks : 100

- Answer all questions
- Draw diagrams wherever necessary

Essays

(2x10=20)

1. What are the components of the shoulder complex. Explain about the scapula humeral rhythm.
2. Define gait and mention the phases of gait cycle. Describe the kinetics and kinematics of stance phase of gait cycle

Short notes

(10x5=50)

3. Ligaments of wrist complex
4. Angulation of femur
5. Define stress and strain and add a note on load deformation curve
6. Lumbo-pelvic rhythm
7. Isotonic contraction
8. Biomechanical role of inter vertebral disc
9. Movements of sacro-iliac joint
10. The function of meniscus in the knee joint
11. Biomechanics of throwing
12. Planes and axis

Answer briefly

(10x3=30)

13. Postural control
14. Carrying angle
15. Closed chain exercise
16. Movements of the TMJ joint
17. Angle pull of a muscle
18. Anatomical pulley
19. Forward head posture
20. Q-angle
21. Genu varum
22. Define elasticity