

Q.P. Code: 201014 (Old Scheme)

Reg. No.:.....

**Second Year BPT Degree Supplementary Examinations
September 2019**

Biomechanics

(2010 Scheme)

Time: 3 hrs

Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays

(2x10=20)

1. Define gait and gait cycle. Explain in detail the determinants of gait.
2. Enumerate the classification of joints and explain in detail with examples.

Short notes

(10x5=50)

3. Sternoclavicular joint movements.
4. Explain active insufficiency with an example.
5. Define equilibrium. Discuss types of equilibrium with examples.
6. Write extensor mechanism of hand and add a note on its functions.
7. Explain the concept of stability in hip joint.
8. Movements of rib cage during breathing. Add a note on muscles of breathing.
9. Compare lumbo pelvic rhythm with scapula humeral rhythm.
10. Biomechanics of lumbar vertebrae.
11. Stress strain curve.
12. Arches of foot and its functions.

Answer briefly

(10x3=30)

13. Line of gravity and center of gravity.
14. Adverse effects of immobilization.
15. Genu valgum and genu varum.
16. Name the tarsal bones
17. Muscles of mastication
18. Pulley
19. Define axis and plane
20. Stride length
21. Define good and bad posture.
22. Accessory muscles of ventilation.
