

Q.P.Code 113014 (New Scheme)**Reg. No.:.....**

First Year BPT Degree Examinations , September 2015

(2012 - Scheme)**Biomechanics and Kinesiology****Time : 3 hrs****Max marks : 100**

- Answer all questions
- Draw diagrams wherever necessary

Essays:**(2x14=28)**

1. Name the components of shoulder complex. Explain the scapulo-humeral rhythm in detail. Add a note on dynamic stabilizers of the glenohumeral joint. (2+8+4=14)
2. Define gait. Explain in detail about the phases of gait cycle in walking. Add a note on Sagittal plane motion analysis. (2+8+4=14)

Short notes:**(4x8=32)**

3. Explain different planes of human joint motion. Add a note on angulation of femur in different planes.
4. Active insufficiency and passive insufficiency. Explain with appropriate examples.
5. Supination twist and pronation twist.
6. Role of disk in temporomandibular joint.

Answer briefly:**(10x4=40)**

7. Define linear displacement and angular displacement with example.
8. What are arthrokinematics and osteokinematics.
9. Pes cavus and pes planus.
10. Define torque.
11. Q- angle.
12. Young's modulus.
13. Ligament of bigelow.
14. Forward head posture.
15. Function of diaphragm in tidal breathing.
16. Atypical vertebrae of cervical spine.
