Q.P.Code 113014 (2012 - Scheme) **Reg. No.:……**

First Year BPT Degree Examinations - September 2013

(2012 - Scheme)

Biomechanics and Kinesiology

Time : 3 hrs **Max marks : 100**

- **Answer all questions**
- **Draw diagrams wherever necessary**

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

1. Describe the kinetics and kinematics of standing posture.
2. Discuss the structure and functions of the arches of foot.

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

3. Explain how creep affects the joint structure and function
4. Kinematics of gait cycle
5. Explain the dynamic stabilizers of shoulder joint.
6. Explain the pathomechanical changes of thorax in scoliosis

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

7. Prime movers and stabilizers with examples
8. Gait deviation in gluteus medius weakness
9. Repetitive strain injuries.
10. Lumbopelvic rhythm
11. Planes and axis of human joint movements.
12. Postural sway
13. Passive insufficiency
14. Factors affecting the normal joint range of motion.
15. Anatomical pulleys
16. Muscular control of temporomandibular joint (TMJ) and add a note on TMJs relationship with cervical spine.

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