First Year BPT Degree Examinations - September 2014

(2012 - Scheme)

Biomechanics and Kinesiology

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

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

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

1. Define lever. Explain different types of lever with examples. Add a note on muscles in various lever systems.   (2+6+6=14)

2. What is isotonic, isokinetic and isoinertial contraction. Describe isokinetic contraction in detail. Add a note on factors affecting active muscle tension.   (6+4+4=14)

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

3. Explain Newton's laws of motion with example.

4. Static and dynamic stabilizers of arches of foot.

5. Explain in detail on prehension of hand.

6. Osteokinematics and arthrokinematics of elbow complex.

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

7. Scoliosis.

8. Patella alta and patella baja

9. What is spring ligament.

10. Muscles of ventilation.

11. What is centre edge angle of acetabulum and its clinical significance.

12. Ataxic gait.

13. Acromio - clavicular motions.

14. Triangular fibro cartilaginous complex.

15. Tibial torsion.

16. Mention articulation of wrist complex.

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