2012 Scheme

First Year BPT Degree Supplementary Examinations January 2023

Biomechanics and Kinesiology

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

- *Answer all questions to the point neatly and legibly   •   Do not leave any blank pages between answers   •   Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together   • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

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

1. Define posture. Add a note on static and dynamic posture and explain about postural control

2. Define stability of hip joint and explain about various forces acting on hip joint in unilateral and bilateral stance

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

3. Linear force systems and concurrent force system

4. Explain the phases of gait cycle

5. Newton's law of motion

6. Kinetics and kinematics of knee joint

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

7. Torque and momentum

8. Q- angle

9. Analysis from sit to stand

10. Functions of menisci

11. Muscles of mastication

12. Young's modulus

13. LOG, COG and BOS

14. Scoliosis

15. Stabilizers of shoulder joint

16. Carrying angle

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