

2012 Scheme

Q.P.Code 113014

Reg. No.:.....

First Year BPT Degree Supplementary Examinations June 2025

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. Describe in detail about scapulohumeral rhythm and its clinical significance.
2. Define gait and explain the determinants of gait.

Short notes:

(4x8=32)

3. Define joint. Write a note on synovial joint.
4. Explain strategies to maintain postural balance.
5. Define lever and classify levers.
6. Classify different types of muscle contraction with examples.

Answer briefly:

(10x4=40)

7. Young's modulus.
8. Patella Alta and patella baja.
9. Pulley and enumerate various pulleys present in human body.
10. Muscles of vertebral column.
11. Movement analysis of sit to stand.
12. Motor unit.
13. Movement of thorax and ribcage.
14. Open kinematic chain.
15. Define force and its types.
16. Arches of foot.
