

Q.P. Code: 123014

Reg. No.:.....

First Year BPT Degree Supplementary Examinations February 2020

Paper III – Biomechanics and Kinesiology

(2016 Scheme)

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

(2x15=30)

1. Define posture and postural control. Discuss the postural analysis.
2. Describe hip complex and explain the role of abductors in bilateral and unilateral stance with an example.

Short Essays

(4x10=40)

3. Discuss scapula humeral rhythm.
4. Explain the biomechanics of carpometacarpal joint of the thumb.
5. Explain the mechanical behavior of the tissues. Add a note on load deformation curve.
6. Discuss the kinetics and kinematics of lumbar spine.

Short Answers

(10x3=30)

7. Define coxa vara, coxa valga.
8. Joint lubrication and mention its types.
9. Open kinematic chain with an example.
10. Young's modulus of elasticity.
11. Describe the functional position of wrist and hand complex.
12. Describe the movements of the pelvis.
13. List the factors affecting muscle function.
14. Define supination and pronation twist.
15. What are the postural changes seen during pregnancy.
16. Define annular pulley with an example.
