Q.P. Code: 201014 (Old Scheme)   Reg. No.:…………………

Second Year BPT Degree Supplementary Examinations March 2019

Biomechanics

(2010 Scheme)

Time: 3 hrs   Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays   **(2x10=20)**

1. Define gait. Classify gait cycle and its sub phases. Discuss movements of the ankle joint during stance phase of the gait cycle

2. Explain forces on the hip joint during unilateral stance

Short notes   **(10x5=50)**

3. Discuss postural analysis in the sagittal plane

4. Describe the articulation of the transverse tarsal joints

5. Explain the role of patella in knee extension

6. Define passive insufficiency. Give one example

7. Discuss movements of the pelvis

8. Explain structure of the radioulnar joints

9. Explain arches of the hand and its function

10. Describe the articulating surfaces of the elbow

11. Explain the ligaments of the glenohumeral joint

12. Describe the motions at the temporomandibular joints

Answer briefly   **(10x3=30)**

13. Define pes cavus

14. Pronation twist

15. What is Q angle

16. What are the attachments of the transverse carpal ligament

17. Define closed kinematic chain

18. What is an isometric l exercise

19. What are parallel forces

20. Define power grips

21. Centre edge angle of the acetabulum

22. Lateral ligaments of the ankle joint

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