

Second Year BPT Degree Supplementary Examinations
September 2018

Biomechanics

(2010 Scheme)

Time: 3 hrs

Max marks: 100

- Answer all questions
- Draw diagrams wherever necessary

Essays

(2x10=20)

1. Define lumbopelvic rhythm. Discuss in detail the normal rhythm during lumbar flexion
2. Explain the structure and function of the extensor mechanism of the hand

Short notes

(10x5=50)

3. Define moment arm. Explain how does it affect the ability of a force to rotate a segment
4. Discuss briefly the structure of a tendon
5. Explain the structure and function of meniscus in knee joint
6. Compare open chain with closed chain movements. Give example for each
7. Explain frontal plane analysis of posture
8. Describe the articulations of the chest wall
9. Explain precision grips
10. Describe the articulating surfaces of the hip joint
11. Explain the ligaments of the temporomandibular joints
12. Describe the movements of the scapula at the acromioclavicular joint

Answer briefly

(10x3=30)

13. Define angle of pull
14. Supination twist
15. What is coxa vara
16. Ulnar variance
17. Classify muscles
18. Anterior cruciate ligament
19. Describe the attachment of the plantar fascia
20. Define posture
21. Classify gait cycle
22. What is genu valgum