

Rajiv Gandhi University of Health Sciences, Karnataka

I Year BPT Degree Examination – Aug 2013

Time: Three Hours

Max. Marks: 80 Marks

BIO-MECHANICS (RS-3) Q.P. CODE: 2704

Your answers should be specific to the questions asked
Draw neat labeled diagrams wherever necessary

LONG ESSAYS (Answer any Two)

2 x 10 = 20 Marks

1. Explain the kinetics and Kinematics of gait
2. Discuss the biomechanics of cervical spine
3. Discuss the biomechanics of shoulder complex and explain the dynamic stability in detail

SHORT ESSAYS (Answer any Eight)

8 x 5 = 40 Marks

4. Discuss the plantar arches
5. Write a short on tonic and phasic muscles
6. Analyse the movement of pulling
7. Explain the movements of scapulothoracic joint
8. What is base of support? Explain it in relation to mobility and stability
9. Explain the structure and function of intervertebral disc
10. Explain lumbopelvic rhythm
11. Explain young's modulus in relation to stress and strain
12. Types of muscle contraction. Give example
13. Explain Length – tension relationship

SHORT ANSWERS

10 x 2 = 20 Marks

14. Carrying angle
15. Pivot joint with example
16. Define Dynamic friction
17. Define Double support time
18. Prime movers
19. Scoliosis
20. Hallux valgus
21. Define energy
22. Explain tibial torsion
23. Define Inertia
