

Rajiv Gandhi University of Health Sciences, Karnataka

I Year B.P.T. Degree Examination APRIL-2019

Time: Three Hours

Max. Marks: 100 Marks

BI -MECHANICS (RS - 5)

Q.P. CODE: 2734

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. Define muscle tension and explain the factors affecting muscle tension.. Add a note on length tension relationship of a muscle.
2. Define movement analysis and explain the analysis of lift Eng in detail.
3. Describe the structure of subtalar joint in detail and explain the significance of plantar arches of foot.

SHORT ESSAYS (Answer any Twelve)

12 x 5 = 60 Marks

4. Describe kinematics of elbow joint.
5. Deviation of posture in sagittal plane
6. Dynamic stability of shoulder joint
7. Trendelenberg gait
8. Structure of temporomandibular joint
9. Pump handle and bucket handle movement of ribs
10. Anatomical pulleys
11. Explain force velocity relationship of a muscle.
12. Classify synovial joints in detail.
13. Briefly explain concept of active and passive insufficiency.
14. Define end-feel and enumerate various types of end-feel.
15. Explain time and rate dependent properties of connective tissue,
16. Enumerate various power tips of hand.
17. Briefly explain determinants of gait in detail.

SHORT ANSWERS

10 x 2

18. Spurt and Shunt muscle
19. Cubitus valgus and varus
20. Importance of levers in physiotherapy
21. Pes cavus and pes planus
22. Q angle and its significance
23. Case packed and loose packed position
24. Define goniometer and mention different types of goniometer,
25. Concavo convex rule
26. Define isotonic contraction and its types.
27. Anteversion and retroversion