



Rajiv Gandhi University of Health Sciences, Karnataka
I Year B.P.T. Degree Examination – 29-Nov-2023

Time: Three Hours

Max. Marks: 100 Marks

BIO-MECHANICS (RS - 5)

Q.P. CODE: 2734

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

LONG ESSAYS (Second Question choice)

2 x 10 = 20 Marks

1. Describe in detail about static and dynamic stability of shoulder joint.
2. What is the difference between power grip and precision grip? Describe any two types of Grip.

Or

What are the events in stance phase of Gait cycle? Analyze and write the lower extremity joint motion during stance phase.

SHORT ESSAYS (Question No.3 & 12 choice)

10 x 5 = 50 Marks

3. Describe the structure of Intervertebral Disc.

Or

Lumbo pelvic Rhythm.

4. Screw home mechanism of knee joint.
5. Explain in brief about kinetics and kinematics with example.
6. Length tension relationship of a muscle.
7. Describe the structure and function of radioulnar joint.
8. Analyze activity of standing to sitting.
9. Structure and function of temporomandibular joint.
10. Define lever and explain in detail about II order lever with example in human body.
11. Describe the structure and movements of Acromioclavicular joint.
12. Analyze the forces on the hip during bilateral stance.

Or

Define active and passive insufficiency. Explain any one.

SHORT ANSWERS

10 x 3 = 30 Marks

13. Carrying angle.
14. Define COG and LOG.
15. What is loose-packed position of a joint?
16. Stress and strain curve.
17. What is Genu recurvatum?
18. What are the movements of first Carpometacarpel joints?
19. Mention the uses of Pulleys.
20. Name the muscle contacting during normal breathing.
21. Spurt and shunt muscle.
22. Functional significance of palmar arches.
