Rajiv Gandhi University of Health Sciences, Karnataka I Year B.P.T. Degree Examination - 05-Jun-2024

Time: Three Hours Max. Marks: 100 Marks

BIO-MECHANICS (RS - 5) O.P. CODE: 2734

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

LONG ESSAYS (Second Question choice)

 $2 \times 10 = 20 \text{ Marks}$

- 1. Describe articulations of hip joint and explain the motions of pelvis on femur.
- 2. Define posture. Explain posture analysis in frontal plane.

Or

Name the joints of shoulder complex. Explain the biomechanics of gleno-humeral joint

SHORT ESSAYS (Question No.3 & 12 choice)

 $10 \times 5 = 50 \text{ Marks}$

3. Write a note on scapula humeral joint.

Or

List the types of joint and describe synovial joint.

- 4. Classify and explain equilibrium with example.
- 5. Describe bucket-handle and pump handle movement.
- 6. Describe the Static stability of hip joint.
- 7. Explain the Bio mechanics of elbow complex.
- 8. Explain the different types of axis and planes.
- 9. Explain Lumbo-pelvic rhythm.
- 10. Describe the classification of joints.
- 11. Describe the characteristics of type I and type II muscle fibers.
- 12. Describe the precision pinches.

Or

Explain torque and moment arm with an example.

SHORT ANSWERS 10 x 3 = 30 Marks

- 13. Define step length.
- 14. Define concave-convex rule.
- 15. What is patella Baja.
- 16. Functions of Meniscus.
- 17. Good and bad posture.
- 18. Name the ligaments of shoulder joint.
- 19. Types of Equilibrium.
- 20. Define Cadence.
- 21. Define Q Angle.
- 22. Types of Motion.
