# Rajiv Gandhi University of Health Sciences, Karnataka

**III Semester Bachelor of Occupational Therapy Degree Examination – 06-Nov-2026**

**Time: Three Hours** **Max. Marks: 100**

## BIOMECHANICS (GENERAL & UE) and ERGOTHERAPEUTICS (OS/RS)

## Q.P. CODE: 3420

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 Force. Discuss different types of force. Determine resultant forces in concurrent force system
2. What is lever? Describe the different lever systems with suitable examples. Describe the lever systems in the human body
3. Discuss biomechanical aspect of Sterno clavicular joint

**SHORT ESSAYS (Answer any Ten)** **10 x 5 = 50 Marks**

4. Different type of displacement
5. Palmer arches of the hand
6. Describe biomechanics of wrist joint
7. Explain the dynamic stabilization of the Gleno humeral joint
8. Discuss different type of displacement
9. Define Center of Mass, Line of Gravity, and Stability
10. Discuss Newton's law of Acceleration with example
11. Joints in the shoulder complex
12. Discuss ligaments around elbow joint
13. Different Grasp pattern in hand
14. Normal and abnormal curvature of the Spine
15. Discuss muscle and movement produced by wrist joint

**SHORT ANSWERS (Answer any Ten)** **10 x 3 = 30 Marks**

16. Linear Force System
17. Action of Lumbricals
18. Mechanical advantages
19. Functional position of the wrist and hand
20. Colles fracture
21. Discuss movement around Shoulder joint
22. Describe kinematic variables.
23. Force couple.
24. Scoliosis and kyphosis.
25. Nursemaid's elbow.
26. Froment's sign
27. Rotator Cuff.

*******