

**Rajiv Gandhi University of Health Sciences, Karnataka**  
**III Semester Bachelor of Occupational Therapy Degree Examination – 06-Dec-2024**

**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 lever System. Discuss different Classes of lever with example with human body
2. Define vicarious movement. Discuss different type of Vicarious Movement in details
3. Discuss biomechanics of Elbow Joint in details with diagram

**SHORT ESSAYS (Answer any Ten)**

**10 x 5 = 50 Marks**

4. Describe the Biomechanics of wrist joint and its Contribution in hand function
5. Define center of gravity and explain assessment of Center of gravity of human body
6. Describe in detail the structure and function of the extensor mechanism
7. Explain the dynamic stabilization of the Gleno humeral joint
8. Discuss the various injury in elbow joint
9. Discuss the peripheral nerve lesion in upper extremity in trick movement
10. Different type of displacement
11. Determining resultant forces in linear force
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. Trades off
17. Concurrent force
18. Kyphosis
19. Functional position of the wrist and hand
20. Osteokinematics and arthrokinematics
21. Rebound phenomena
22. Tenodesis affect
23. Center of mass
24. Write muscle work in hook grip
25. Effects of aging on posture
26. Eccentric contraction
27. Good and Bad Posture

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