

Rajiv Gandhi University of Health Sciences, Karnataka

IV Semester Bachelor of Occupational Therapy Degree Examination – 19-May-2025

Time: Three Hours

Max. Marks: 100

BIOMECHANICS (LE) and ERGOTHERAPEUTICS - (OS/RS)

Q.P. CODE: 3424

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 biomechanics of knee joint in detail
2. Define gait cycle. Discuss phases of gait cycle in details.
3. Describe in detail with diagram the different crutch and cane used in rehabilitation

SHORT ESSAYS (Answer any Ten)

10 x 5 = 50 Marks

4. Discuss the supination and pronation twist
5. Movement of the hip joint
6. Lumbo pelvic rhythm
7. Discuss in detail about forces acting around hip joint in unilateral stance
8. Stand Pivot transfer
9. Running gait
10. Purpose of walking aids
11. Discuss type of Crutch in details
12. Discuss different transfer techniques used in rehabilitation
13. Explain atypical vertebrae
14. Arches of the foot and their Deformity
15. Describe the movement of stair climbing

SHORT ANSWERS (Answer any Ten)

10 x 3 = 30 Marks

16. Function of Patello-femoral joint
17. Scissoring gait
18. convex-concave rule
19. Cruciate ligament
20. Describe plantar arches and its significance.
21. Advantages of Cane
22. Tripods
23. Coxa Vara and Coxa Valga
24. Double Support gait
25. Spring ligament
26. Osteoarthritis of the hip
27. Car transfer
