

# Rajiv Gandhi University of Health Sciences, Karnataka

IV Semester Bachelor of Occupational Therapy Degree Examination – 28.05.2024

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 Lumber spine in detail
2. Define gait cycle. Discuss phases of gait cycle in details.
3. Describe in detail with diagram the biomechanics of the Knee Joint.

### SHORT ESSAYS (Answer any Ten)

**10 x 5 = 50 Marks**

4. Discuss the supination and pronation twist.
5. Movement of the knee joint
6. Biomechanics of the cervical spine
7. Common gait deviation
8. Bilateral stance force distribution of the hip joint
9. Explain Lumbopelvic rhythm
10. Function of the Knee joint
11. Movement and function in the Ankle joint
12. Discuss different transfer techniques used in rehabilitation
13. Explain the structure and function of intervertebral disc
14. Trendelenberg gait
15. Describe the movement of stair climbing.

### SHORT ANSWERS (Answer any Ten)

**10 x 3 = 30 Marks**

16. Function of patello-femoral joint
17. Quadriceps activity during weight bearing
18. Genu-recurvatum gait
19. Pes Cavus and Pes Planus
20. 2 point gait
21. Explain angle of torsion
22. Scoliosis
23. Anteversion-retroversion
24. High stepping gait
25. Ligaments of knee joint
26. Antalgic gait
27. Stride length

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