

**Second Year Bachelor of Occupational Therapy Supplementary
Examinations April 2025
Biomechanics, Applied Anatomy and Applied Physiology**

Time: 3 Hours

Total Marks: 100

- *Answer all questions to the point neatly and legibly • Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space*
- *Answer all parts of a single question together • Leave sufficient space between answers*
- *Draw table/diagrams/flow charts wherever necessary*

Elaborate on

(2x20=40)

1. Normal mechanism of static and dynamic stability of the glenohumeral joint.
2. Define gait. Write in detail about biomechanical phases of the gait cycle with distance and time variation.

Write notes on

(8x5=40)

3. Discuss about types of motion and planes of motion.
4. Classify joints and write a short note on joints present in human body.
5. Factors affecting the active muscle tension.
6. Lumbar pelvic rhythm.
7. Menisci of knee joint.
8. Locking and unlocking of knee joint.
9. Functions of the intervertebral disc.
10. Anti-deformity positioning.

Short Answers

(10x2=20)

11. Define force.
12. Newton's law of reaction.
13. Bursae.
14. Define isokinetic exercise.
15. Define passive insufficiency.
16. Name the rotator cuff muscles.
17. Angle of torsion of head of femur.
18. Define posture.
19. Functional position of hand.
20. Plantar aponeurosis.
