

**CENTRE FOR DISTANCE AND ONLINE EDUCATION
SRI SRI UNIVERSITY, CUTTACK**

MASTER OF ARTS (YOGA)

TUTOR MARKED ASSIGNMENT

Course Code: MSY-SCT-203

Course Name: Biomechanics and Kinesiology

Semester: 2nd

Exam: July 2026

Session: August 2025

Total Marks: 100

A. Answer any eight questions (essay type). Answer in about 350-500 words each.

(10 X 8 = 80)

1. What is kinesiology? Explain its importance in understanding human movement in Yoga.
2. Define basic biomechanical terms such as force, velocity, acceleration, and energy with simple examples from Yoga.
3. Explain the difference between kinematics and kinetics with examples from Yoga postures.
4. Describe the concepts of planes, axes, and centre of gravity, and explain their role in maintaining balance during Yoga practice.
5. Explain the types of movements at joints and how they are applied in Yoga asanas.
6. Describe the concept of lever systems in the human body and explain their role in Yoga movements.
7. Explain the structure and function of skeletal muscles and how muscle contraction helps in Yoga practice.
8. Describe the concept of work, power, and energy in the body during Yoga practices.
9. Explain how centre of gravity and body alignment affect stability and posture in Yoga.
10. Describe the basic idea of angular movement and body positioning in Yoga with simple examples.

B. Write short notes on any four. Answer in about 150-200 words each.

(5 X 4 = 20)

1. Newton's laws of motion in Yoga
2. Types of muscle contraction
3. Equilibrium and balance
4. Role of gravity in body movement
5. Reciprocal inhibition
6. Importance of posture in Yoga