THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222] FEBRUARY 2022 Sub. Code: 3902 (OCTOBER 2021 EXAM SESSION)

POST GRADUATE DIPLOMA IN BIOMECHANICS AND KINESIOLOGY IN SPORTS AND FITNESS (From 2018-2019 onwards)

PAPER II – KINESIOLOGY

Q.P. Code: 363902

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate notes on:

 $(2 \times 20 = 40)$

- 1. Types of muscle contraction with anatomy and physiology. Give a brief note on stabilizing and mobilizing functions of a muscle.
- 2. Explain the biomechanics and Pathomechanics of pinch and grasp hold.

II. Write Short Notes on:

(10x6 = 60)

- 1. Factors influencing Normal Running/jogging Gait.
- 2. Pathomechanics of muscles acting on the Lumbar Spine.
- 3. Noncontractile elements of the Ankle and Foot Complex.
- 4. Write about Ground reaction force.
- 5. Mechanics and Pathomechanics of Serratus anterior.
- 6. Describe Flat feet.
- 7. Significance of Thoraco lumbar fascia.
- 8. Explain Anatomical force-couple.
- 9. Exercising in Space.
- 10. Describe Scoliosis.
