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

[BPT 0921] SEPTEMBER 2021 Sub. Code: 6256 (FEBRUARY 2021 EXAM SESSION)

BPT DEGREE EXAMINATION

SECOND YEAR - (Regulations of 2004-2005 and 2006-2007 admitted candidates are merged with 2010-2011)

PAPER II – BIO-MECHANICS, APPLIED ANATOMY AND KINESIOLOGY O.P. Code: 746256

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(2 \times 20 = 40)$

1. Define gait and explain in detail about the pathomechanics of gait.

2. Describe the tissues present in human joints and mention general effects of injury and disease.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Structure and function of Plantar arches.
- 2. Differentiate coxa valga from coxa vara.
- 3. Explain about function of the cervical region.
- 4. Explain about pes planus.
- 5. Centre of gravity.
- 6. Concurrent force system.
- 7. Volar plate.
- 8. Lumbar pelvic rhythm.

III. Short answers on:

 $(10 \times 2 = 20)$

- 1. Moment arm of a force.
- 2. Shear force.
- 3. Grip.
- 4. Subacromial space.
- 5. Force vectors.
- 6. Joint Play.
- 7. H zone.
- 8. Intercalated segment.
- 9. Squeeze film lubrication.
- 10. Waddling gait.
