SECOND YEAR / III & IV SEMESTER BPT EXAM PAPER II – BIOMECHANICS, APPLIED ANATOMY AND KINESIOLOGY

Q.P. Code: 746256

Time: Three hours Maximum: 100 marks

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

1. Describe in detail about the articulating structures kinematics of Tibiofemoral joint and related Pathomechnics.

2. Pathomechanics of gait.

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

- 1. Osteokinematics of hip joint
- 2. Winging of scapula
- 3. Locking and Unlocking of knee
- 4. Tensile forces
- 5. Centre of gravity and Line of gravity
- 6. Functions of hand
- 7. Talocalcaneo navicular joint
- 8. Trabecular system of hip joint

III. Short answers on: $(10 \times 2 = 20)$

- 1. Moment arm
- 2. Fibrous joint
- 3. Slow-twitch oxidative fibres
- 4. Lumbar-pelvic rhythm
- 5. Ballistic movement
- 6. Agonist and antagonist
- 7. Law of inertia
- 8. Cross eyed patella
- 9. Volar wrist musculature
- 10. Junctura tendinae
