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

[LM 6256] FEBRUARY 2018 **Sub. Code: 6256**

BPT DEGREE EXAMINATION
SECOND YEAR
PAPER II – BIOMECHANICS, APPLIED ANATOMY & KINESIOLOGY

Q.P. Code : 746256

Time: Three hours **Maximum: 100 Marks**

I. Elaborate on: **(2 x 20 = 40)**

1. Explain three orders of Levers with examples. Add a note on mechanical advantage.

2. Describe the relationship between the Zygapophyseal joints and the Interbody joints of vertebral column.

II. Write notes on: **(8 x 5 = 40)**

1. Describe dynamic stabilization of glenohumeral joint.
2. Explain the structure and function of the ligaments associated with proximal radioulnar joint.
3. Draw and explain the angulation of the femur.
4. Explain fixed support synergies with examples.
5. Differentiate isokinetic and isoinertial exercise and testing.
6. Explain the structure and function of plantar aponeurosis.
7. Explain the determinants of gait.
8. Write about the attachments and functions of cruciate ligaments of tibiofemoral joint.

III. Short answers on: **(10 x 2 = 20)**

1. What is synostosis?
2. What is a motor unit?
3. What is Bunnell's Sign?
4. What is dorsal inter-calated segmental instability?
5. Write the attachment of spring ligament.
6. What is Genu recurvatum?
7. State two functions of volar plate.
8. What is metatarsal break?
9. Draw the Feiss line.
10. Name two structures that maintain the palmar arch.

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