[LP 6177] AUGUST 2019 **Sub. Code: 6177**

BOT DEGREE EXAMINATION
(New Regulations for the candidates admitted from 2014-2015 onwards)
SECOND YEAR
PAPER III – BIOMECHANICS, APPLIED ANATOMY AND APPLIED PHYSIOLOGY

Q.P. Code: 786177

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

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

1. What is Kinetics and Kinematics? Describe in detail the Kinematic variables.

2. Explain the biomechanics of hip joint.

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

1. What are all the muscles that cross both hip and knee joint?
2. Write the contribution of scapula for the shoulder movement.
3. Explain patella as an anatomic pulley.
4. Phases of gait cycle.
5. Draw elbow joint.
6. Describe the prehension skills in the hand.
7. Describe the role of menisci in the knee joint.
8. Intervertebral disc prolapse.

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

1. Active insufficiency.
2. Action of lumbricals.
3. Gravity vecto
4. Newton’s second law.
5. Function of synovial fluid.
6. Saddle joint.
7. Contractile unit of a skeletal muscle.
8. Define leve
9. Types of equilibrium.
10. Center of gravity.

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