

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

[BOT 0921]

**SEPTEMBER 2021
(FEBRUARY 2021 EXAM SESSION)**

Sub. Code: 6177

BOT DEGREE EXAMINATION

SECOND YEAR - (Regulations for the candidates admitted from 2014-2015 onwards)

PAPER III – BIOMECHANICS, APPLIED ANATOMY AND APPLIED PHYSIOLOGY

Q.P. Code : 786177

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. Describe the classification of Joints in the human body.
2. Describe the biomechanics of Knee joint. Explain the structures that contribute for the stability of Knee joint.

II. Write notes on:

(8 x 5 = 40)

1. Describe biomechanics.
2. How does center of gravity affect balance?
3. Describe the properties of skeletal muscle.
4. Lung volumes and capacities.
5. Describe the structure of lumbar vertebrae.
6. Describe the ligaments around the hip joint.
7. Write the deformities occur at the ankle joint.
8. Provide an example of third class lever system in body and explain.

III. Short answers on:

(10 x 2 = 20)

1. Define Inertia.
2. Force couple.
3. Tail bone.
4. Carrying angle in females.
5. Functional position of hand.
6. Define flexion.
7. Action of latissimus dorsi.
8. Carpal tunnel syndrome.
9. Painful arc syndrome.
10. Coxa valga.
