

[LM 6177] FEBRUARY 2018 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:  $(2 \times 20 = 40)$ 

1. Describe the structure and function of thumb musculature and its role in hand function.

2. Describe the structure and function of vertebral column.

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

- 1. Effects of gravity on posture.
- 2. Characteristics of motor unit.
- 3. Nervous control of respiration.
- 4. Pelvic tilts.
- 5. Inversion and eversion of foot.
- 6. Functions of the arches.
- 7. Carrying angle and its significance.
- 8. Effects of exercise on respiration.

## III. Short answers on:

 $(10 \times 2 = 20)$ 

- 1. Gait.
- 2. Grasp.
- 3. Voluntary control.
- 4. Lumbricals.
- 5. Hyaline cartilage.
- 6. Reaction forces.
- 7. Properties of connective tissue.
- 8. Reflex arc.
- 9. Muscles of inspiration.
- 10. Angular velocity.

\*\*\*\*\*