

SEAT NO: \_\_\_\_\_

**GANPAT UNIVERSITY**  
**B.TECH. 4<sup>th</sup> SEM BIOMEDICAL AND INSTRUMENTATION ENGINEERING**  
**CBCS REGULAR EXAMINATION MAY/JUNE 2013**  
**2BM404: Human Anatomy and Physiology – II**

**TIME: 3 Hours**

**Total marks: 70**

**INSTRUCTIONS:**

1. Use separate answer sheets for the two sections
2. Figures on the right side indicate marks
3. Please explain with the help of diagram wherever it is necessary
4. Each sub-question carries equal marks

**SECTION – I**

**Que.1 Write answers of the following questions. 12**

- A Explain the functions of the kidney.
- B Explain the anatomy and physiology of stomach.

**OR**

**Que.1 Write answers of the following questions. 12**

- A Explain the mechanism of control of glomerular filtration rate.
- B Explain the layers of the digestive tract.

**Que.2 Write answers of the following questions. 11**

- A Explain the signal transmission at the neuromuscular junction.
- B Write a detailed note on vertebral column.

**OR**

**Que.2 Write answers of the following questions. 11**

- A Explain the role of bone in calcium homeostasis.
- B Explain the functions of the muscular system.

**Que.3 Write short notes 12**

- A Functions of saliva
- B Antidiuretic hormone
- C Synovial joints



**SECTION – II**

**Que.4 Write answers of the following questions. 12**

- A Describe cerebrum.
- B Define synapse. Describe its anatomy and provide classification.

OR

**Que.4 Write answers of the following questions. 12**

- A Describe the internal and external structure of spinal cord.
- B Describe the physiology of neuron.

**Que.5 Write answers of the following questions. 11**

- A Describe the structure of eye.
- B Describe the physiology of sight.

OR

**Que.5 Write answers of the following questions. 11**

- A Describe the structure of ear.
- B Write the physiology of hearing.

**Que.6 Write short notes (any three) 12**

- A Cerebellum
- B Physiology of smell
- C EEG
- D Ventricles

-----END OF THE PAPER-----