

SEAT NO: _____

GANPAT UNIVERSITY
B.TECH. 3rd SEM. BIOMEDICAL AND INSTRUMENTATION ENGINEERING
REGULAR EXAMINATION NOVEMBER/DECEMBER 2012
2BM304: Human Anatomy and Physiology – I

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 Write a note on buffer system.
 - B Write a note on immunodeficiency.
 - C Explain the functions of the lymphatic system.

OR

- Que.1 Write answers of the following questions. 12
- A Explain the cell cycle.
 - B Write a note on cartilage tissue.
 - C Explain the mechanism of blood coagulation (clot).

- Que.2 Write answers of the following questions. 11
- A Explain the functions of the blood.
 - B Write a note on immunoglobulins.

OR

- Que.2 Write answers of the following questions. 11
- A Write a note of feedback systems
 - B Write a detailed note on lymph node.

- Que.3 Write answers of the following questions. 12
- A Explain the homeostasis in erythropoiesis.
 - B Write a note on immunological memory.
 - C Explain the tissue which helps in preventing insensible loss of water from the body.

SECTION – II

Que.4 Write answers of the following questions. 12

- A Describe the anatomy of pharynx with functions and applied anatomy.
- B How does gas exchange take place in the body?

OR

Que.4 Write answers of the following questions. 12

- A Describe all pulmonary volumes and pulmonary capacities. Describe Helium Dilution method.
- B Write a note on artificial respiration.

Que.5 Write answers of the following questions. 11

- A Describe the properties of heart.
- B Define blood pressure. How is it controlled?

OR

Que.5 What is the integumentary system? Describe the structure of skin and its functions. 11

Que.6 Write short notes 12

- A ECG
- B Heart Sounds
- C Pericardium
- D Lungs

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