

**NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY**

SSC1102

FACULTY OF APPLIED SCIENCES  
BACHELOR OF SCIENCE HONOURS DEGREE EXAMINATIONS  
DEPARTMENT OF SPORTS SCIENCE AND COACHING

**THEORY: SSC1102: ANATOMY I**

DECEMBER 2005

3 HOURS (100 MARKS)

**INSTRUCTIONS**

Answer **question one** and any **other two questions**. Where a question contains subdivisions, the mark value for each subdivision is given in brackets. Illustrate your answer where appropriate with large clearly labeled diagrams.

1. Fig 1 – 5 are anatomical structures of the human body. The following are the instructions to which you have to respond.
  - (i) Fig 1 is the arteries of the left lower limb, name those numbered. (6 marks)
  - (ii) Fig 2 is the human skeleton, name the bones indicated by arrows and numbers. What muscles insert on bone number 8 and number 9 and what actions do they perform. (15 marks)
  - (iii) Fig 3 is a cross section of the spinal cord and its covering. Name and explain the role played by the numbered parts. (7 marks)
  - (iv) Fig 4A shows the anterior view of human muscles. Name those numbered. Fig 4B is the body muscles as seen from the back. Name those numbered. Briefly explain the action accomplished by the muscles you name in fig 4A and 4B. (15 marks)
  - (v) Fig 5A and 5B are bones from the human body. Name them and the numbered parts. (7 marks)
2. a) Describe the various kinds of diarthrotic joints found in the human body. (13 marks)  
b) Write an essay on muscles that have their insertions and origins in the pelvic girdle. (12 marks)
3. a) Give an account of the organization of the human skin and its ability to accomplish its function. (13 marks)  
b) Write an essay on the anatomy of the lung. (12 marks)

Describe the anatomy of the kidney to the level of the nephron structure. (12 marks)

) Describe the structural arrangements and organization of the arteries and veins in the human body. (13 marks)

a) Describe the anatomy of the endocrine glands to cellular level. (12 marks)

b) Describe the layout of nerves in the human body. (13 marks)

**END OF EXAMINATION QUESTION PAPER**

**Figure 1**

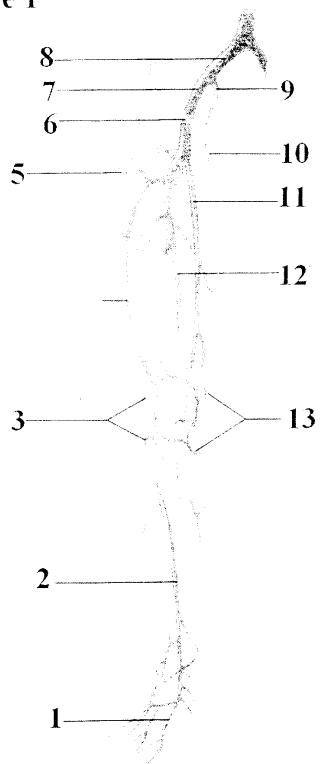
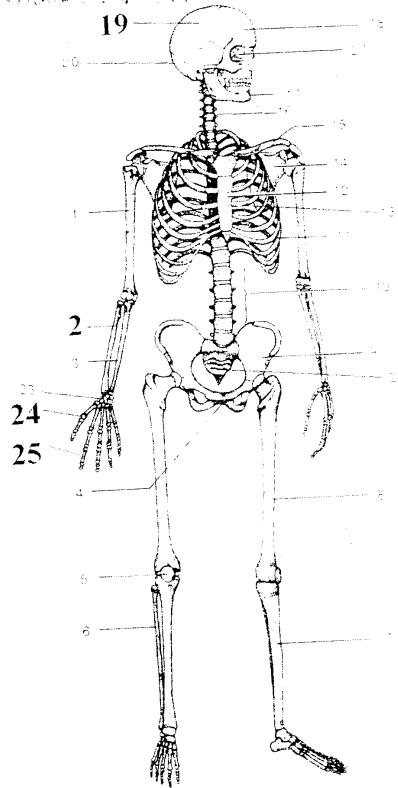


Figure 2



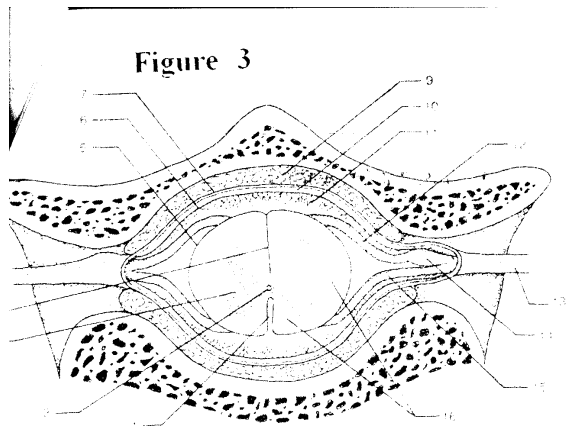


Figure 4 A

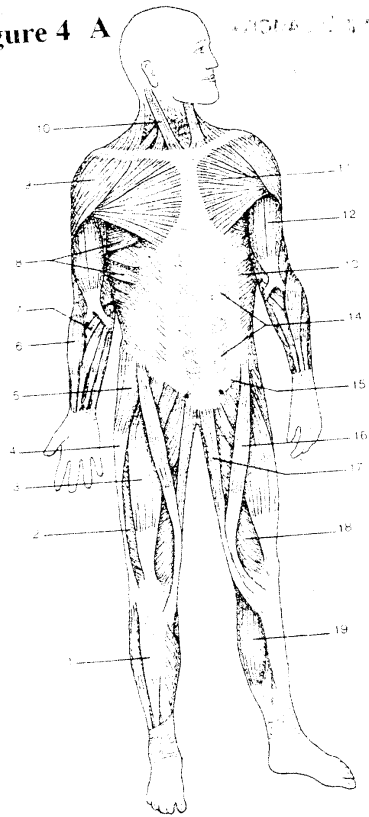


Figure 4 B

