

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
GENERAL NURSING DEPARTMENT
FINAL EXAMINATION DECEMBER 2007

COURSE TITLE : ANATOMY

COURSE CODE: HSC 110

MARKS ALLOCATED 100

TIME ALLOCATED: THREE (3) HOURS

INSTRUCTIONS:-

1. THERE ARE TWO (2) SECTIONS IN THIS PAPER
 - I) SECTION ONE IS MULTIPLE CHOICE AND MATCHING
 - II) SECTION TWO IS SHORT ANSWERS
 2. PLEASE ANSWER ALL SECTIONS
 3. SECTIONS ONE CARRY 25 MARKS
SECTION THREE CARRY 75 MARKS
 4. USE ANSWER SHEET FOR ALL YOUR ANSWERS
- NB: DO NOT OPEN THE QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

SECTION 1

A. MULTIPLE CHOICE: Please write the most appropriate answer for the following questions. e.g. 1 = B

1. Which of the following is responsible for cell division?

- A. mitochondria
- B. plasma membrane
- C. cytoplasm
- D. nucleus

2. Osteoclast and Osteoblast are:-

- A. bone breakers
- B. bone generators
- C. remodelling units
- D. chondrocytes

3. The glistening membrane covering long bones is the:-

- A. peritoneum
- B. periosteum
- C. pericardium
- D. none of the above

4. Vertebrocondral ribs are:-

- A. true ribs
- B. floating ribs
- C. vertebral ribs
- D. false ribs

5. Anatomy is the...

- A. study of structural changes of the body through the life span.
- B. study of body tissues
- C. study of body structures using X-Ray and Scanners.
- D. study of the structure of body parts and their relationship to one Another

6. Which of the following is not the function of bones?
- A. hematopoiesis
 - B. digestion
 - C. locomotion
 - D. protection
7. Amongst tissue types which one has fingerlike projections called microvilli?
- A. muscle tissue
 - B. connective tissue
 - C. nervous tissue
 - D. epithelial tissue
8. Visceral organ of the abdomen are covered by the -----membrane.
- A. periosteum
 - B. peritoneum
 - C. visceral pericardium
 - D. visceral plurae
9. This cavity is formed by seven bones.
- A. cranial cavity
 - B. nasal cavity
 - C. orbital cavity
 - D. spinal cavity
10. This vertebra allows movement of the head left to right.
- A. C 1
 - B. C 2
 - C. T 1
 - D. T 2

11. The following are contents of the abdominal cavity.
- A. reproductive system viscera
 - B. digestive system viscera
 - C. respiratory system viscera
 - D. nervous system viscera
12. The elbow joint is formed by the:-
- A. olecranon and coronoid process
 - B. olecranon and syloid process
 - C. olecranon and coracoid process
 - D. olecranon and spinous process
13. This process forms attatchement for both neck and tongue muscles.
- A. anterior coronoid process
 - B. zygomatic process
 - C. syloid process
 - D. maistoid process
14. The temporomandibulla joint is in the -----region.
- A. tympanic
 - B. maistoid
 - C. pectrous
 - D. squamous
15. The sphenoid bone..
- A. formes part of the base of the skull
 - B. atticulates with all bones of the cranium
 - C. all of the above
 - D. none of the above

B). MATCHING:- Match the statement in column B with the most correct response in column A using the numbers in column A. e.g. 1.= 3 (10)

COLUMN A

COLUMN B

- | | |
|------------------------|------------------------------------------------------------------------------|
| 1. interstitial growth | ----- long bone growth in length |
| 2. appositional growth | ----- attaches muscle to bone |
| 3. muscles | ----- bone growth in diameter |
| 4 tendon | ----- it divides the nasal cavity to right and left |
| 5. perpendicular plate | ----- changes chemical energy ATP to mechanical energy |
| 6. gigantism | ----- it lines body cavities opening to the exterior |
| 7. osteoporosis | ----- due to excessive production of thyroid |
| 8. adduction | ----- extremely fragile bones where bone resorption outpaces bone deposition |
| 9. positive feed back | ----- movement of body part away from the midline |
| 10. mucus membrane | ----- when the response enhance the stimuli |

SECTION 2

SHORT ANSWERS:-

Please answer the following questions precise and briefly on your answer book.

QUESTION 1

- A Describe the structure of the **occipital bone** of the skull' including its' **formation, joints, main features** and **functions**. (10)
- B. Briefly state what happen in the five levels of structural organization of Human body, starting with the smallest living unit. (10)
- C. i) Define tissue (1)
ii) Briefly describe the four primary tissues in the human body. (4)

(25 marks)

QUESTION 2

- A. With the aid of a diagram, describe the structure of a typical vertebra. (10)
- B. Describe the structure of the ulna bone. (5)
- C. List five functions of the pelvic girdle. (5)
- D. Label the structural parts of the femur .see figure 1 below. (5)

(25 marks)

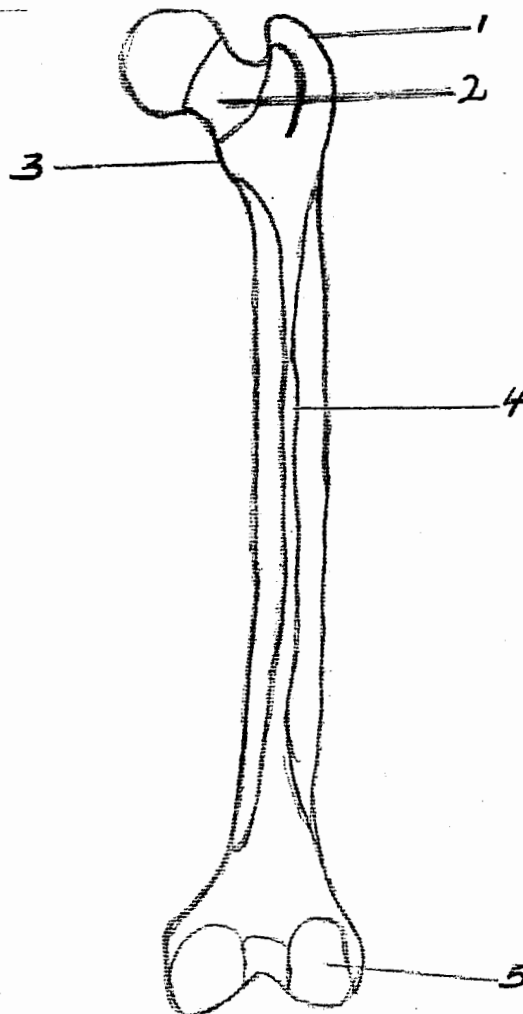


FIGURE: 1

QUESTION 3

- A.
- i) Define homeostasis (1)
 - ii) Identify the number one cause of homeostasis imbalances in the.-
 - a) intergumentary system (2)
 - b) skeletal system (2)
 - iii) Living organisms are made of different type of cells which is the first cell to be formed? (2)
 - iv) A young man visit the hospital for a DNA test, which part of the cell contains DNA? (2)
- B. Explain briefly which layer of the skin will be affected in :- (6)
- a) 1st degree burns
 - b) 2nd degree burns
 - c) 3rd degree burns
- C. When describing body structures we use regions, systems, shapes, etc.
- i) Identify **two** of the three most important regions of the cell. (2)
 - ii) Describe four major regions of the vertebral column. (8)

(25 marks)