

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
GENERAL NURSING DEPARTMENT
FINAL EXAMINATION: DECEMBER 2010

COURSE TITLE: HUMAN ANATOMY
CORSE CODE; HSC 110
MARKS ALLOCATED 75
TIME ALLOWED: TWO (2) HOURS

INSTRUCTIONS:

- 1. THERE ARE TWO (2) SECTIONS IN THIS PAPER**
 - i) SECTION 1A IS MULTIPLE CHOICE**
 - ii) SECTION 1B IS MATCHING**
 - iii) SECTION 1C IS TRUE AND FALSE**
 - iv) SECTION 2 IS SHORT ANSWERS**
- 2. PLEASE ANSWER ALL SECTIONS**
 - i) SECTION 1 CARRIES 30 MARKS**
 - ii) SECTION 2 CARRIES 45 MARKS**
- 3. USE ANSWER SHEET FOR ALL YOUR ANSWERS**

**NB: DO NOT OPEN THE QUESTION PAPER UNTIL
PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR**

SECTION 1A
MULTIPLE CHOICE.

Please choose the most correct response and write it in your answer book.

1. Fascicle is:-
 - A. Overcoat that binds the muscle together
 - B. Wraps individual muscle fiber.
 - C. Epimysium
 - D. A bundle of muscle fibers

2. Perimysium is:-
 - A. Over that binds the muscle together
 - B. Connective tissue that binds together fascicles.
 - C. Endomysium
 - D. Perimysium

3. Sarcolemma is:-
 - A. Cell plasma membrane
 - B. Plasma membrane of skin cell
 - C. Plasma membrane of muscle fibers
 - D. None of the above

4. The largest and the most stable joint of the human body.
 - A. The coxal joint
 - B. The shoulder joint
 - C. The knee joint
 - D. The elbow joint

5. This joint is most susceptible to luxation
 - A. The coxal joint
 - B. The shoulder joint
 - C. The knee joint
 - D. The elbow joint

6. RICE is:-
 - A. Treatment for green stick fracture
 - B. Treatment for stretched ligaments or tendons.
 - C. Treatment for a break in the continuity of a bone.
 - D. Stable food in the Kingdom of Swaziland.

7. Smooth muscles are abundant in the:-

- A. Heart**
- B. Appendicular skeleton**
- C. Hollow visceral organs**
- D. Axial skeleton.**

8. The most abundant muscle in the human body is the:-

- A. Smooth muscle**
- B. Skeletal muscle**
- C. Cardiac Muscle**
- D. None of the above.**

9. Pronation is:-

- A. Turning of wrist to move radius around the ulna.**
- B. Turning of wrist to move ulna around the radius.**
- C. Moving the palm away from midline**
- D. Moving the hand towards midline.**

10. Rotation of the head is the function of the:-

- A. Axis**
- B. Atlas**
- C. Lumbar vertebra**
- D. Cervical vertebra number seven**

11. This Junctions help to prevent leakage of micro-organisms from the digestive tract to the circulatory system

- A. Desmosomes**
- B. Tight junctions**
- C. Gap junctions**
- D. Loose junctions**

12. Eccrine sweat glands produce:-

- A. 99% water**
- B. odorous smell**
- C. mucus**
- D. sebum**

13. Burns of the anterior trunk and the perineum are equivalent to ----% of the body
- A. 19%
 - B. 36%
 - C. 18%
 - D. 9%
14. Burns of the anterior right arms and anterior right leg are estimated at ---%
- A. 4.5%
 - B. 9%
 - C. 18%
 - D. 13.5%
15. The femur is an example of:-
- A. Short bone
 - B. Irregular bone
 - C. Endochondral ossification
 - D. Membranous ossification
16. The phalanges are :-
- A. Short bones
 - B. Long bones
 - C. Flat bones
 - D. Irregular bones
17. Volkamann's canal is the:-
- A. Cental canal
 - B. Ostein canal
 - C. Perforating canal
 - D. Both A and B
18. Bone remodelling occurs during which stage of bone repair?
- A. 1st stage
 - B. 2nd stage
 - C. 3rd stage
 - D. 4th stage

19. Asters are typical features of this mitotic phase

- A. Interphase**
- B. Prophase**
- C. Metaphase**
- D. Anaphase**

20. Which mitotic phase is characterized by v shaped chromosomes.

- A. Telophase**
- B. Metaphase**
- C. Anaphase**
- D. Prophase**

SECTION 1 B. MATCHING

Choose the most appropriate response in column two to the statements in column one and write the question number and alphabet in your answerer book.

COLUMN 1

- 1.... Body odour originates from this gland**
- 2.The smallest functional unit of the bone**
- 3. ...Striated and voluntary muscle**
- 4.It is housed in the organ of hearing**
- 5.....Striated and involuntary muscle**

COLUMN 2

- A. ceruminous gland**
- B. Cardiac muscle**
- C. apocrine gland**
- D. Osteon**
- E. Biceps brachii**

SECTION 1 C. TRUE AND FALSE.

Write TRUE (T) OR FALSE (F) against the statement below.

- 1.The trapezius muscle helps to raise, retract, rotate and stabilize the scapula.**
- 2.The rectus abdominis is the muscles used during sit-ups.**
- 3.The digastic muscle helps to open mouth and depress the mandible.**
- 4.The talus bone lies directly over the calcaneous bone.**
- 5. ...The Sphenoid is the keystone bone of the face.**

SECTION 11

SHORT ANSWERS

- 1. With the aid of a diagram describe the structure of the humerus. (10)**
- 2. Using Anatomical terms state the bones of the cranial vault and their immovable joints (10)**
- 3. Describe a typical macroscopic structure of long bones. (5)**
- 4. Using anatomist language briefly discuss the bones forming the body's thoracic cage. (10)**
- 5. State two types of muscle tissue and discuss briefly the special characteristics of muscle tissue. (10)**