

UNIVERSITY OF SWAZILAND  
FACULTY OF HEALTH SCIENCES  
GENERAL NURSING DEPARTMENT  
FINAL EXAMINATION: DECEMBER, 2016

COURSE TITLE;           HUMAN ANATOMY AND PHYSIOLOGY 1  
COURSE CODE:           GNS 115  
TIME ALLOCATED:       TWO (2) HOURS  
MARKS ALLOCATED:     75  
TOTAL NO. OF PAGES:   6

INSTRUCTIONS:

1. THERE ARE TWO SECTIONS IN THIS PAPER.
  - i) SECTION 1
    - A. MULTIPLE CHOICES
    - B. MATCHING
    - C. FILL IN THE BLANK
  - ii) SECTION 2 IS SHORT ANSWERS AND ESSAYS
2. PLEASE ANSWER ALL SECTIONS
  - i) SECTION 1 CARRIES   35 MARKS
  - ii) SECTION 2 CARRIES   40 MARKS
3. USE ANSWER BOOK FOR ALL YOUR ANSWERS
4. DO NOT OPEN YOUR QUESTION PAPER UNTIL PERMISSION HAS BEEN GRANTED BY INVIGILATOR.

SECTION 1

A. MULTIPLE CHOICE QUESTIONS:-

( 15 MARKS)

For each of the following questions /statements choose the most appropriate response and write it in your answer book. e.g. 1 = C

1. Which of the following skin cancers is the least common but spread very fast?

- A. Melanoma
- B. Basal cell carcinoma
- C. Squamous cell carcinoma
- D. Both A and C

2. The extent of burns is measured using ...

- A. Degrees
- B. Percentages
- C. Using the rule of nine in percentages
- D. The depth of the burn in degrees

3. Using the rule of nine, burns of the posterior trunk will be equivalent to how many percentages?

- A. 36
- B. 9
- C. 4 1/2
- D. 18

4. Which alphabets represent the cardinal signs of melanoma?

- A. BCDEF
- B. ABCDE
- C. ABCD
- D. Both A and B

5. It is recommended for every nurse to use a deodorant because of body glands that secrete substance that becomes odorous after some time. Which of the following gland secretions are odorous?

- A. Apocrine
- B. Sebaceous
- C. Ceruminous
- D. Eccrine

6. Which of the following degrees angle would represent a male pelvic?

- A. 80
- B. 90
- C. 50
- D. 85

7. Which of the following degrees is typical of a female pelvic angle?

- A. 50
- B. 55
- C. 60
- D. 90

8. Which is the strongest pelvic bone?

- A. Acetabulum
- B. Ischium
- C. ilium
- D. Pubic

9. Which bone of the foot forms the heel?

- A. Talus
- B. malleolus
- C. Calcaneus
- D. Cuboid

10. Which joint in the human body is the least supported in its cavity?
- A. Knee
  - B. Elbow
  - C. Shoulder
  - D. Hip
11. In which bone is the greater sciatic notch located?
- A. Femur
  - B. Ilium
  - C. Ischium
  - D. Pubic
12. Which is the longest and strongest bone of the human body?
- A. Humerus
  - B. Tibia
  - C. Fibula
  - D. Femur
13. Which pigment is responsible for the formation of normal colour of skin in human beings?
- A. Carotene
  - B. Melanin
  - C. Oxygen
  - D. Carbon dioxide
14. The physiology of bones include all of the following **except**.
- A. Protection
  - B. Blood cell formation
  - C. Stores sodium
  - D. Movement
15. The following is true about ribs **except**.
- A. Seven vertebra sternal ribs.
  - B. Three vertebral ribs
  - C. Two vertebra chondral ribs
  - D. Two floating ribs



**SECTION 2 SHORT ANSWER AND ESSAYS (TOTAL MARKS 40)**

**QUESTION 1 (10 MARKS)**

- 1,1 Using a table, differentiate between the following anatomical terms.
- 1.1.1 Meiosis and mitosis
  - 1.1.2 Scoliosis and kyphosis
  - 1.1.3 Fracture and dislocation
  - 1.1.4 Perimysium and epimysium
  - 1.1.5 Endocrine gland and Exocrine gland

**QUESTION 2 (10 MARKS)**

- 2.1 Define homeostasis (1)  
2.2 Describe the three (3) different types of muscle tissue. (9)

**QUESTION 3 (10 MARKS)**

- 3.1 Joints of the cranium are formed of fibrous joints which eventually fuse together; to form the protection of the brain. State the joints of the skull and the bones they connect. (10)

**QUESTION 4 (10 MARKS)**

- 4.1 The local newspaper reported last week Monday that a factory employee that works with heavy machinery was injured at work. He lost three of his lateral fingers. The employee's son who is taking high school biology reported to family members that his father has only two remaining phalanges. Is the son's report correct? Support your answer. (10)