

UNIVERSITY OF ESWATINI
FACULTY OF HEALTH SCIENCES
GENERAL NURSING SCIENCE DEPARTMENT
FINAL EXAMINATION: MAY 2019

COURSE TITLE; HUMAN ANATOMY AND PHYSIOLOGY 11
COURSE CODE: GNS 116
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. TRUE AND FALSE
 - ii) SECTION 2 IS SHORT ANSWERS AND ESSAYS
2. PLEASE ANSWER ALL SECTIONS
 - ii) SECTION I CARRIES 40 MARKS
 - ii) SECTION 2 CARRIES 35 MARKS
3. USE ANSWER BOOKLET FOR ALL YOUR ANSWERS

SECTION 1

A. MULTIPLE CHOICE QUESTIONS.

(20 MARKS)

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

e.g. 1 = C

1. Today you are taking your final examination for semester two. Which of the following will help you remember information learned during the first week of the semester?
 - A. Anterograde memory
 - B. Retrograde memory
 - C. Anterograde amnesia
 - D. Retrograde amnesia

2. Which of the following divisions is responsible for digestion?
 - A. The parasympathetic division
 - B. The sympathetic division
 - C. The D. division
 - D. Both A and C

3. Which division is responsible for the body's response to emergencies?
 - A. The D division
 - B. The E division
 - C. The B division
 - D. The C division

4. Which of following structure house the photo receptors?
 - A. Iris
 - B. Cornea
 - C. Retina
 - D. Pupil

5. Which receptor is highly sensitive to colour vision?
 - A. Cones
 - B. Rods
 - C. Retina
 - D. Iris

6. Which type of corrective lenses does a myopic individual need?
 - A. Concave
 - B. Convex
 - C. Bifocal lances
 - D. Light sensitive

7. Blockage of aqueous humour leads to which of the following condition?
A. Glaucoma
B. Compression of the optic nerve and retina
C. Blindness
D. Cataract
8. The process of urine formation includes the following steps **except**...
A. Filtration
B. Reabsorption
C. Secretion
D. Osmosis
9. Which is the smallest functional unit of the kidney?
A. Neuron
B. Cell
C. Nephron
D. Nerve
10. Five minutes before entering the examination room you were reciting the cranial nerves, ten minutes later; you cannot remember even one nerve. Which is the most appropriate diagnose for this condition?
A. Amnesia
B. Anterograde amnesia
C. Retrograde amnesia
D. Anosmia
11. Which cranial nerve is responsible for vision?
A. The optic nerve
B. The olfactory nerve
C. The facial nerve
D. The retina
12. Ovulation occurs on which day of the menstrual cycle?
A. The 1st day
B. The 3rd day
C. The 14th day
D. The 28th day
13. The major problem experienced by clients with prostate enlargement is...
A. Pain
B. Developing cancer
C. Inability to pass urine
D. Importance

14. Females are prone to urinary tract infection because ...
- A. The urethra is short
 - B. The proximity of the anal orifice to the urethra
 - C. Poor hygiene
 - D. Both A and B
15. Cranial ventricles are filled with ...
- A. Cerebrospinal fluid
 - B. Plasma
 - C. Peritoneal fluid
 - D. Intracellular fluid
16. The cardiac ventricles are filled with...
- A. Perilymph
 - B. Blood
 - C. Peritoneal fluid
 - D. Intracellular fluid
17. Which nerve is crucial when giving intramuscular injection?
- A. Pudendal nerve
 - B. Femoral nerve
 - C. Sciatic nerve
 - D. Both A and B
18. When the visualized object falls behind the retina, the individual is.
- A. Myopic
 - B. Hyperopic
 - C. Having glaucoma
 - D. Having strabismus
19. Which is the most important accessory organ for chemical digestion?
- A. Stomach
 - B. Liver
 - C. Gallbladder
 - D. Pancreas
20. Absolute refractory period is...
- A. Period between -55Mv and + 30Mv
 - B. At 70Mv
 - C. Period between +30 Mv and - 90M
 - D. At threshold.

(20 MARKS)

SECTION 1 B

MATCHING

(TOTAL MARKS 7)

SENARIO 1

You are from a family of four.

- A. Your father John is blood group O
- B. Your mother Mary is blood group AB
- C. Your sister Thuli is blood group A-
- D. You are T.K. your blood group is B

Based on scenario 1, answer question 1-5 below using the alphabets A-D on the scenario. E g 1= D

1. Which of the following family members is a universal donor?
2. Which of the members is a universal recipient?
3. Who can safely donate blood for TK?
4. Who can safely donate blood for Mary?
5. Which family member/s are likely to have problems finding a donor?
Explain your response. (2)

SECTION TRUE AND FALSE

(13 MARKS)

Read the statement and write T for true and F for false in your answer book.

1. The brain is protected by membranes called meninges.
2. The membrane closer to the brain is the Dura mater
3. The membrane that is further away from the brain is called the Pia mater.
4. Cerebrospinal fluid is housed in the sub arachnoid space.
5. Cerebrospinal fluid reduces the weight of the brain by 97%
6. The toughest of the meninges is the Dura mater.
7. Chemical digestion of proteins takes place in the stomach.
8. The main organ of respiration is the diaphragm.
9. Fats are emulsified by bile in the duodenum.
10. The main accessory organ of chemical digestion is the liver.
11. The ileum is the main site for absorption.
12. The Endocrine glands secrete hormone that stimulate target cells.
13. The smallest functional unit of the nervous system is the neuron.

SECTION 2 SHORT ANSWER AND ESSAYS (TOTAL MARKS 35)

QUESTION 1

(15 MARKS)

- 1.1 During lunch, you ate deep fried potatoes and chicken. Explain chemical digestion of the potatoes from mouth to the duodenum (6)
- 1.2 Briefly discuss the physiology of the large intestine. (6)
- 1.3 State three enzymes produced by the pancreas. (3)

QUESTION 2

(10 MARKS)

2.1 Define the following anatomical terms (two marks each).

- i) Salpingitis
- ii) Hysterectomy
- iii) Haematopoiesis
- iv) Oogenesis
- v) Orchitis

QUESTION 3

(10 MARKS)

- 3.1 State four functions of the kidney. (4)
- 3.2 List the three layers of the cardiac muscles and three muscular layers of the uterus. (6)

