

UNIVERSITY OF SWAZILAND
FACULTY OF HEALTH SCIENCES
GENERAL NURSING SCIENCE DEPARTMENT
RE-SIT EXAMINATION
JULY 2018

COURSE TITLE:	HUMAN ANATOMY AND PHYSIOLOGY II
COURSE CODE:	GNS 116
MARKS ALLOCATED	75
TIME ALLOWED	TWO (2) HOURS

INSTRUCTIONS:

1. THERE ARE TWO SECTIONS IN THIS PAPER.
 - i) SECTION 1A IS MULTIPLE CHOICE
 - ii) SECTION 1B IS MATCHING
 - iii) 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 BOOK FOR ALL YOUR ANSWERS.

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

SECTION I

A.MULTIPLE CHOICE

(20 MARKS)

Please choose the most appropriate response and write it in your answer book. E.G. 1= C

1. The study of hormones and endocrine organs is;
 - A. Neurology
 - B. Ophtalmology
 - C. Endocrinology
 - D. Dermatology

2. The tympanic cavity is ;
 - A. Air filled cavity of the lungs
 - B. Fluid filled cavity of the eye
 - C. Fluid filled cavity of the heart
 - D. Air filled cavity of the ear.

3. Blockage of the cerebro-spinal fluid in new born causes;
 - A. Anacephaly
 - B. Hydrocephaly
 - C. Tumors
 - D. Fever

4. The functional unit of the kidney is the;
 - A. Neuron
 - B. Neuphron
 - C. Glomerulus
 - D. Bowman's capsule

5. Grand Mal epilepsy is signified by;
 - A. Loss of consciousness
 - B. Incontinence of urine
 - C. Paleness
 - D. Both A and B

6. Stupor is;
 - A. Fainting
 - B. Syncope
 - C. Semi- consciousness
 - D. Coma

7. REM sleep is associated with;
- A. Difficulty to arouse
 - B. Dreaming
 - C. Easy arousal stage
 - D. Flat EEG
8. This condition is a result of spinal trauma in the cervical region.
- A. Hemiplegia
 - B. Paraplegia
 - C. Quadriplegia
 - D. Paralysis
9. This nerve controls the functioning of the heart, lungs, liver, kidney and stomach.
- A. Glossopharyngeal nerve
 - B. Accessory nerve
 - C. Abducens nerve
 - D. Vagus nerve
10. Cholinergic fibers release
- A. Neurotransmitters
 - B. Acetylcholine
 - C. Adrenaline
 - D. Atropine
11. The innermost layer of the meninges is the...
- A. Pia mater
 - B. Dura mater
 - C. Arachnoid mater
 - D. Subcutaneous membrane
12. Hunger and thirst are regulated by;
- A. Cerebellum
 - B. Medulla
 - C. Hypothalamus
 - D. Epithalamus

13. The most primitive diagnostic procedure to assess the functioning of the CNS is;
- A. Knee jerk
 - B. MRI
 - C. CT
 - D. PET
14. Premature babies are kept in an incubator because;
- A. They are born before nine months.
 - B. They are sensitive to cold
 - C. Their hypothalamus is immature
 - D. They have reached maximum brain weight.
15. The functions of the Thalamus is or are ;
- A. Relay station
 - B. Cross over bridge
 - C. Proper routing to cortex and association area
 - D. Both A and C.
16. Elderly people complain of constipation mainly because of;
- A. Decrease fluid intake
 - B. Lack of exercises
 - C. Eating processed food
 - D. Decreased efficiency of the autonomic nervous system.
17. Which of these is not the function of the sympathetic division of the autonomic nervous system?
- A. Bronchodilator
 - B. Heart rate of 90 beats/ minute in adults
 - C. Diarrhoea
 - D. Depressed gastro intestinal activities.
18. Insufficient Iodine in the body results in ;
- A. Exophthalmos
 - B. Weight loss
 - C. Goiter
 - D. Diabetes mellitus

B. MATCHING**(10 MARKS)**

Choose the most appropriate response from column 2 to the statement in column 1.

COLUMN 1**COLUMN 2**

- | | |
|----------------------------------------------------------------------|----------------------------------|
| 1. Unmyelinated axon transfer their messages through. | A Saltatory conduction |
| 2. Vagotomy is used to treat that do not respond to medication. | B. Artist |
| 3. The gustatory and vestibular areas are in the... | C. Meningitis
D. Ulcers. |
| 4. The right hemisphere is dominant. | E. Microglia |
| 5. Myelinated axon transfer information through... | F Schwan cells |
| 6. Inflammation of the meninges | G. Continuous
Conduction |
| 7. It serves the muscles of the tongue | H. Vagus nerve |
| 8. Responsible for coordination of the body | I. Facial nerve |
| 9. Produce myelin sheath | J. Cerebellum |
| 10. Digest bacteria in the CNS | K. Insula
L. Trigeminal nerve |

SECTION 2
SHORT ANSWER QUESTIONS

QUESTION 1

(20 MARKS)

1:1 Describe the difference between meiosis and mitosis. (10)

1.2 State ten functions of the hypothalamus. (10)

QUESTION 2

(25 MARKS)

2:1 Describe the functions of the E and the D division of the Autonomic Nervous system. (10)

2:2 State five normal characteristics of urine. (5)

2:3 With the aid of a diagram, describe the structural classification of neurons. (5)

2:4 TRUE AND FALSE

Answer the following question using true (T) or false (F)
Propagation of action potential is positively affected by which of the following factors?

- i. Myelin fiber.
- ii. Unmyelinated fibers
- iii. Large diameter of axon
- iv. Increase in temperature
- v. Decrease in temperature.