

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

**EXAMINATION FOR THE AWARD OF DEGREE OF
BACHELOR OF SCIENCE IN NURSING**

NURS 114: HUMAN ANATOMY II

STREAMS: BSC (NURS)

TIME: 3 HOURS

DAY/DATE: MONDAY 13/04/2015

8.30 AM – 11.30 AM

INSTRUCTIONS:

- 1. Do not write anything on the question paper.**
- 2. Mobile phones and any other reference materials are NOT allowed in the examination room.**
- 3. Write your examination number on every sheet of paper written on**
- 4. The paper has three sections. Answer ALL questions.**
- 5. Write your answers legibly and use your time wisely**
- 6. All your answers for Section I (MCQs) should be on one page**
- 7. Each part should be started on a new page**
- 8. Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.**

PART A: MULTIPLE CHOICE QUESTIONS (20 MARKS)

- Purely endocrine organs include:
 - Pineal, thymus
 - Pancreas, thyroid
 - Parathyroid, pituitary
 - Pancreas, gonads
- Which of the following is TRUE concerning the parathyroid glands
 - They are two in number
 - Oxphil cells secrete parathyroid hormone
 - Has two lobes connected by an isthmus
 - Usual surrounded by a connective tissue capsule
- Accessory digestive organs include:
 - Teeth, stomach

- (b) Spleen, gall bladder
 - (c) Liver, tongue
 - (d) Liver, spleen
4. Concerning the small intestines:
- (a) They contain K-cells that secrete secretin
 - (b) They have circular folds that increase the surface area
 - (c) Its wall has three layers of smooth muscle
 - (d) Jejunum is the longest portion
5. Which of the following is TRUE concerning the tongue
- (a) Consists of longitudinal smooth muscles
 - (b) Has hypoglossus as its extrinsic muscle
 - (c) Has taste buds on the entire surface
 - (d) Has genioglossus as its intrinsic muscle
6. All of the following are TRUE concerning the structure of the lymphatic capillaries EXCEPT:
- (a) They are closed at one end
 - (b) They contain valves
 - (c) They are slightly wider than blood capillaries
 - (d) They are surrounded by a thick endothelium
7. Concerning the mitral valve:
- (a) It marks the boundary between the atria
 - (b) Its consists of two cusps
 - (c) It is a semilunar valve
 - (d) It is also called the tricuspid valve
8. Which of the following statements is TRUE concerning the heart:
- (a) Superior venacava opens into the right atrium
 - (b) The two pulmonary veins open into the left atrium
 - (c) Derives its blood supply from the coronary sinus
 - (d) Pulmonary trunk empties into the left ventricle
9. Concerning the plasma proteins
- (a) They are synthesized by the liver
 - (b) Constitutes 58% of the blood plasma
 - (c) Globulins are the most abundant
 - (d) Fibrinogen act mainly as carriers
10. Which of the following is correct concerning the leukocytes
- (a) They lack cytoplasmic organelles
 - (b) Basophils are the most abundant
 - (c) Monocytes are mainly phagocytic
 - (d) Neutrophils have 3-5 lobes

11. Paired laryngeal cartilages include:
- (a) Arytenoid, corniculate
 - (b) Cuneiform, thyroid
 - (c) Epiglottis, thyroid
 - (d) Cricoid, cuneiform
12. Conducting portion of the respiratory system include:
- (a) Alveolar duct, alveoli
 - (b) Nasal cavity, alveolar duct
 - (c) Trachea, larynx
 - (d) Larynx, respiratory bronchioles
13. Paranasal sinuses are found in which cranial bones:
- (a) Ethmoid, mandible
 - (b) Frontal, nasal
 - (c) Sphenoid, maxillary
 - (d) Maxillary, nasal
14. Injury to which lobe of cerebral cortex is likely to result in blindness:
- (a) Frontal
 - (b) Temporal
 - (c) Occipital
 - (d) Parietal
15. Which of the following organs are found anterior to the left kidney?
- (a) Stomach, pancreas
 - (b) Liver, duodenum
 - (c) Diaphragm, spleen
 - (d) Adrenal glands, pancreas
16. Concerning the male urethra:
- (a) External urethra is surrounded by the prostrate gland
 - (b) It is about 20 cm long
 - (c) Membranous urethra is the most dilated part
 - (d) Prostatic urethra is the shortest part

For question 17 and 18, indicate if the following statements are True (T) or False (F)

17. Concerning special senses:
- (a) _____ Olfactory receptors occupies an area of 5 cm²
 - (b) _____ Taste buds are located in the tongue only
 - (c) _____ Cones of the eye produce color vision
 - (d) _____ Rods are absent in the fovea centralis

18. Concerning the cranial nerves
- (a) _____ Facial nerve is a motor nerve
 - (b) _____ Accessory nerve supplies the eye muscles
 - (c) _____ Trochlear nerve supplies the eye muscles
 - (d) _____ Maxillary nerve is a branch of trigeminal nerve.

PART B: SHORT ANSWER QUESTIONS [40 MARKS]

- 1. State five types of synovial joints giving an example of each. [5 marks]
- 2. Describe briefly the structural organization of the stomach wall. [6 marks]
- 3. Briefly describe the pelvic diaphragm [6 marks]
- 4. Briefly describe the structure of the adrenal cortex as an endocrine organ [6 marks]
- 5. State five (5) differences between cortical and juxtamedullary nephrons [5 marks]
- 6. Describe the sympathetic motor pathway [6 marks]
- 7. Briefly describe the anatomical features of the left lung [6 marks]

PART C: LONG ANSWER / ESSAY QUESTIONS – 40 MARKS

- 1. (a) Draw a well labeled diagram of the female internal genitalia [7 marks]
 - (b) Describe the route followed by the sperm after it is released at the seminiferous tubule until it is released from the body. [13 marks]
 - 2. (a) With the aid of a well labeled diagram, describe the conducting system of the heart [12 marks]
 - (b) Describe the major anatomical differences between an artery and a vein. [8 marks]
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