



UNIVERSITY OF EMBU

2017/2018 ACADEMIC YEAR

TRIMESTER EXAMINATIONS

**FIRST YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE
(NURSING)**

HNS 131: HUMAN ANATOMY III

DATE: AUGUST 3, 2018

TIME: 2:00-5:00PM

INSTRUCTIONS :

Answer:

All MCQs in Section A;

All Short-answer Questions in Section B

All Long-answer Questions in Section C

Cancelled work should be done neatly by crossing with a single line in the essay and by use of X in the MCQs

SECTION A: MULTIPLE CHOICE QUESTIONS (TOTAL: 20 MARKS)

Choose (CIRCLE/TICK) only one correct answer from the following questions

1. Conducting portion of the respiratory system consists of:
 - a) Larynx, alveoli
 - b) Nose, respiratory bronchioles
 - c) Terminal bronchioles, respiratory bronchioles
 - d) Larynx, terminal bronchioles

2. A club shaped paired laryngeal cartilage that supports the vocal folds is:
 - a) Corniculate
 - b) Arytenoid
 - c) Cuneiform
 - d) Epiglottis

Reg No.

3. Features of the right lung include the:
 - a) Horizontal fissure
 - b) Oblique fissure
 - c) Cardiac notch
 - d) Two lobes
4. Paranasal sinuses are associated with which of the following cranial bones:
 - a) Maxillae
 - b) Nasal
 - c) Vomer
 - d) Zygomatic
5. Concerning the internal nose:
 - a) Consists of hyaline cartilage
 - b) Lined mainly by olfactory epithelium
 - c) Contains conchae and meatuses
 - d) Opens into the Eustachian tube
6. The testes produce hormones testosterone and inhibin. Testosterone is produced by which cells:
 - a) Sertoli
 - b) Sustentacular
 - c) Spermatogenic
 - d) Leydig
7. Concerning the epididymis:
 - a) It is 6 cm long
 - b) Consists of pseudostratified columnar epithelium
 - c) Site of fertilization
 - d) Passes through the spermatic cord
8. The female homolog of the spongy urethra is:
 - a) Labia minora
 - b) Labia majora
 - c) Clitoris
 - d) Vestibule

9. Which of the following features is seen in a lactating breast:
- a) Abundant connective tissue
 - b) Squamous cells with fewer organelles
 - c) Prominent and functional myoepithelial cells
 - d) Constricted and attenuated blood vessels
10. The fallopian tubes consist of four main parts. The part that passes into the uterus is the:
- a) Ampulla
 - b) Intramural
 - c) Interstitial
 - d) Infundibulum
11. Peritoneal fold associated with the small intestines is the:
- a) Greater omentum
 - b) Lesser omentum
 - c) Mesentery
 - d) Mesocolon
12. Intrinsic muscles of the tongue include:
- a) Genioglossus, styloglossus
 - b) Genioglossus, transverse linguae
 - c) Styloglossus, verticularis linguae
 - d) Transverse linguae, verticularis linguae
13. Enteroendocrine cells associated with the small intestines include all of the following **EXCEPT:**
- a) S cells
 - b) K cells
 - c) I cells
 - d) G cells
14. The following salivary gland is located in between the skin and masseter and produces watery saliva mainly:
- a) Submandibular
 - b) Parotid
 - c) Lingual
 - d) Lesser lingual

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15. Concerning the myenteric plexus:
- a) Regulates gastric secretion
 - b) Located in the submucosal layer of esophagus
 - c) Supply the smooth muscle of the stomach
 - d) Lacks stretch/ chemoreceptors
16. Afferent arterioles of the nephrons:
- a) Arise from the interlobular arteries
 - b) Give rise to peritubular capillaries
 - c) One supply several nephrons
 - d) Is narrower than the efferent arteriole
17. The following is true concerning the juxtamedullary nephrons:
- a) More numerous
 - b) Lacks vasa recta
 - c) Has renal corpuscle in the cortex
 - d) Has extensive thin segments
18. The mucosa of the urinary bladder consists of which of the following epithelium:
- a) Transitional
 - b) Simple squamous
 - c) Non keratinized stratified squamous
 - d) Pseudostratified columnar
19. Aldosterone regulated sodium reabsorption occurs mainly in the:
- a) Proximal convoluted tubule
 - b) Distal convoluted tubule
 - c) Loop of Henle
 - d) Collecting duct
20. The following part of the nephron is associated with the medulla:
- a) Proximal convoluted tubule
 - b) Distal convoluted tubule
 - c) Loop of Henle
 - d) Collecting duct

SECTION B: Answer ALL the questions in this section (40 marks; Use the answer booklet provided)

1. Describe the three (3) portions of the pharynx (6 marks)
2. Describe the histology of the tracheal wall (5 marks)
3. List the four (4) cell types found in the alveoli of the lungs and state one function of each (4 marks)
4. Describe three (3) ligaments that support the uterus (6 marks)
5. Describe the route of flow of bile from the liver into the duodenum (5 marks)
6. Discuss the two (2) capillary networks associated with the nephron (4 marks)
7. Explain the three (3) layers of tissue that support the kidneys (6 marks)
8. State four features of the proximal convoluted tubule cell that aid in its functions (4 marks)

SECTION C: Answer ALL the questions in this section (40 marks; Use the answer booklet provided)

1.
 - a) Using a well labelled diagram, describe the main components of the male reproductive system (14 marks)
 - b) Describe the three (3) portions of the male urethra (6 marks)
2.
 - a) Describe in details the structural organization of the wall of the small intestines. (12 marks)
 - b) Compare and contrast small and large intestines (8 marks)

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