AMREF INTERNATIONAL UNIVERSITY

SCHOOL OF MEDICAL SCIENCES

DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES

BACHELOR OF SCIENCE IN NURSING

END OF SEPTEMBER-DECEMBER TRIMESTER 2022 EXAMINATIONS

Course Unit: BSN 122 HUMAN ANATOMY II

Date: 28ᵀᴴ November, 2022

Time: 2 Hours   **Start: 9:00AM**   **Finish: 11:00AM**

Instructions

1) This paper has three sections: Section A, Section B and Section C
2) Answer **ALL** questions in Section A and Section B and C
3) Use the University examination booklets provided
4) Do Not write anything on the question paper -use the back of your booklet for rough work if need be

1. A tumor in the thyroid gland is MOST likely to present with _____ as a result of pressure on the surrounding structures.
    - A. Night sweats
    - B. Hypothyroidism
    - C. Difficulty is swallowing
    - D. Elevated levels of thyroxine

2. A pheochromocytoma is an adrenaline secreting tumor. This tumor arises from the _____ of the adrenal gland.
    - A. Zona reticularis
    - B. Zona fasciculate
    - C. Chromaffin cells
    - D. Zona glomerulosa

3. Pancreatic cells that secrete insulin hormone are the:
    - A. Beta cells
    - B. Delta cells
    - C. Alpha cells
    - D. Acinar cells

4. The layer of the heart that forms a smooth, protective lining of the heart chambers and valves is the:
    - A. Epicardium
    - B. Myocardium
    - C. Endocardium
    - D. Parietal pericardium

5. The direct branches of the aortic arch include the:
    - A. Vertebral artery
    - B. Coronary arteries
    - C. Pulmonary arteries
    - D. Common carotid artery

6. The components of Fallot's tetralogy include:
    - A. Aortic stenosis
    - B. Ventricular septal defect
    - C. Tricuspid valve stenosis
    - D. Left ventricular hypertrophy

7. The two lobes of the left lung are separated by the:
    - A. Carina
    - B. Lung hilum
    - C. Oblique fissure
    - D. Horizontal fissure

8. The lymphoid aggregation termed adenoids when inflamed is:

A. Tubal tonsil
B. Palatine tonsil
C. Lingual tonsil
D. Pharyngeal tonsil

9. Abnormal septation of the foregut may result in:
    A. Pulmonary agenesis
    B. Tracheoesophageal fistula
    C. Accessory lobe of the lung
    D. Respiratory distress syndrome of the newborn

10. The thin respiratory membrane lacks the:
    A. Surfactant layer
    B. Interstitial tissue
    C. Alveolar epithelium
    D. Capillary endothelium

11. When food reaches the stomach, the gall bladder contracts to release bile. This bile is released into the:
    A. Colon
    B. Jejunum
    C. Stomach
    D. Duodenum

12. The pyloric sphincter is found between the:
    A. Ileum and caecum
    B. Esophagus and stomach
    C. Stomach and duodenum
    D. Duodenum and jejunum

13. The _____ delivers blood rich in nutrients to the liver from the intestines.
    A. Portal vein
    B. Portal artery
    C. Hepatic vein
    D. Hepatic artery

14. The congenital anomaly of the digestive system that presents with a defect in the anterior abdominal wall is:
    A. Omphalocele
    B. Pyloric stenosis
    C. Meckel's diverticulum
    D. Malrotation of the midgut

15. The juxtaglomerular apparatus is formed by the afferent arteriole and the:
    A. Distal convoluted tubule
    B. Proximal convoluted tubule

C. Thin ascending loop of Henle
D. Thick descending loop of Henle

16. A _____ is a congenital malformation of the kidney where the inferior poles fuse in the pelvis
    A. Pelvic kidney
    B. Renal duplex
    C. Horseshoe kidney
    D. Polycystic kidney

17. There is/are _____ opening(s) in the urinary bladder.
    A. 1
    B. 2
    C. 3
    D. 4

18. The penile urethra lies within the substance of:
    A. Tunica albuginea
    B. Corpus cavernosum
    C. Corpus spongiosum
    D. Seminiferous tubules

19. The organ that produces the largest volume of semen is:
    A. The testis
    B. Prostate gland
    C. Seminal vesicles
    D. Bulbourethral gland

20. The _____ secretes hormones in the ovary after ovulation
    A. The oocyte
    B. Corpus luteum
    C. Cumulus oophorous
    D. Interstitial cells of Leydig

SECTION B: SHORT ANSWER QUESTIONS   [30 Marks]

1. Name the parts of the pituitary gland and indicate the hormones secreted by each. (5 marks)

2. State five (5) histological characteristics of cardiac muscle cells   (5 marks)

3. State five (5) congenital malformations of the respiratory system   (5 marks)

4. Use a labelled diagram to illustrate the components of the biliary tree   (5 marks)

5. Outline the parts and functions of each part of the nephron   (5 marks)

6. Describe the structure and functions of the ovary   (5 marks)

SECTION C: LONG ANSWER QUESTIONS   [20 Marks]

1. Describe the foetal circulations and the cardiovascular changes at birth   (10 marks)

2. Describe the different varieties of the Mullerian duct malformations   (10 marks)