

#### AMREF INTERNATIONAL UNIVERSITY

## SCHOOL OF MEDICAL SCIENCES

## DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES

# BACHELOR OF SCIENCE IN NURSING

END OF SEMESTER EXAMINATIONS MAY-AUGUST 2023

COURSE CODE AND TITLE: BSN 112 HUMAN ANATOMY

Date: 1<sup>ST</sup> AUGUST 2023

**Time: 2 Hours** 

Start: 9 A.M.

Finish: 11:00 A.M.

#### 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) Re-writing the questions on your answer sheet is unnecessary

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

- 1. A haploid cell has: -
  - A. 23 pairs of chromosomes
  - B. 22 autosomes and one sex chromosome
  - C. 22 autosomes and one X chromosome
  - D. 22 autosomes and one Y chromosome
- 2. The coronal plane divides the body into \_\_\_\_\_ and \_\_\_\_ parts: -
  - A. Anterior; posterior
  - B. Superior; inferior
  - C. Right; left
  - D. Medial; lateral
- 3. The epithelial type correctly matched with its occurrence is: -
  - A. Stratified squamous tongue
  - B. Simple columnar corneal epithelium
  - C. Transitional epithelium Fallopian tube
  - D. Pseudostratified columnar the vocal cords
- 4. During oogenesis: -
  - A. 1<sup>st</sup> meiosis is arrested in the prophase stage
  - B. Several oocytes attain maturity every month
  - C. 2<sup>nd</sup> meiosis is completed during ovulation
  - D. Changes occur only in the oocyte
- 5. Implantation: -
  - A. Usually occurs in lower uterine segment
  - B. Starts around day 9 after fertilization
  - C. Commonest ectopic site is ovary
  - D. Syncitiotrophoblast invades, ingests and digests endometrium
- 6. The day implantation commences in a normal menstrual cycle is: -
  - A. Day 14
  - B. Day 20
  - C. Day 26
  - D. Day 9
- 7. Meckel's diverticulum is due to persistence of: -
  - A. Allantois
  - B. Vitello-intestinal duct
  - C. Left umbilical vein
  - D. Ductus venosus
- 8. Type IV collagen is mainly found in: -
  - A. Bone
  - B. Cartilage
  - C. Spleen
  - D. Basement membranes

- 9. One of the following structures is at the proximal end of the humerus: -
  - A. Olecranon fossa
  - B. Lateral epicondyle
  - C. Trochlea
  - D. Greater tubercle
- 10. One of the following bones articulates at a tarsal-metatarsal joint: -
  - A. Calcaneus
  - B. Cuboid
  - C. Talus
  - D. Navicular
- 11. Costochondral joints are between: -
  - A. Costal cartilages of ribs VII to X
  - B. Bodies and cartilage of the floating ribs
  - C. Costal cartilage and thoracic vertebrae
  - D. Costal cartilage and bodies of ribs
- 12. Mr. A suffered muscle pain after carrying heavy planks of wood on his shoulder. The most likely affected muscle is: -
  - A. Latissimus dorsi
  - B. Deltoid
  - C. Levator scapula
  - D. Supraspinatus
- 13. One of the following is a muscle of the forearm: -
  - A. Thenar eminence
  - B. Branchialis
  - C. Palmaris longus
  - D. Adductor pollicis
- 14. The following is the odd one out in the plantar fascia, it: -
  - A. Runs along the sole of the feet
  - B. Has a long and a short head
  - C. Fastens the distal ends of the tibia and fibula
  - D. Fastens the calcaneus to the phalanges of the toes
- 15. The primary sensory cortex is located in: -
  - A. Post central gyrus
  - B. Precentral gyrus
  - C. Brodmann's area 44
  - D. Precentral sulcus

- 16. The main commissural fiber in the brain is: -
  - A. Corpus callosum
  - B. Anterior commissure
  - C. Posterior commissure
  - D. Hippocampal commissure
- 17. The hindbrain consists of: -
  - A. Occipital lobe and cerebellum
  - B. Cerebellum and diencephalon
  - C. Spinal cord, medulla and cerebellum
  - D. Medulla oblongata, pons and cerebellum
- 18. The following is a nerve of the cervical plexus: -
  - A. Phrenic nerve
  - B. Musculocutaneous nerve
  - C. Ulnar nerve
  - D. Median nerve
- 19. The source of nutrients to the fibula is: -
  - A. Posterior tibial artery
  - B. Peroneal artery
  - C. Anterior tibial artery
  - D. Femoral artery
- 20. Pulmonary surfactant increases: -
  - A. The surface tension of the fluid lining alveolar walls
  - B. Lung compliance
  - C. Ineffectiveness as the lungs are inflated
  - D. In amount when the pulmonary blood flow is interrupted

## SECTION B: SHORT ANSWER QUESTIONS

1.	<ul><li>State the following about the yolk sac.</li><li>a. Functions</li><li>b. Fate</li></ul>	(3 marks) (2 marks)
2.	State the; a. Three (3) layers of the trilaminar embryonic disc (week 3).	(3 marks)
	b. Fetal and maternal component of the placenta.	(2 marks)
3.	Using a diagram, describe the anatomy of the elbow joint.	(5 marks)
4.	Use a labeled diagram to illustrate the frontal anatomy of the eye	(5 marks)
5.	a. State three (3) superficial veins of the upper limb.	(3 marks)
	b. State the main nerve of:	(2 marks)
	i. Anterior arm compartment	
	ii. Posterior forearm	
6.	State five (5) anatomical features that distinguish the right lung from the left	one. (5 marks)

### SECTION C : LONG ANSWER QUESTION

#### (20 MARKS)

- 1. The central nervous system comprises the brain and spinal cord that collect, interpret, and direct body impulses.
  - a) Draw a well-labeled diagram of the surface anatomy of the brain, indicate the role of each part labeled. (10 marks)
  - b) Draw a cross-sectional diagram of the spinal cord at the level of T7. Include the spinal nerve attachments. (10 marks)