

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SCIENCE AND ENGINEERING

DEPARTMENT: HEALTH SCIENCES

NOV 2024

PROGRAMME .BACHELOR OF SCIENCE HONOURS DEGREE IN NURSING EDUCATION

COURSE CODE: NS104 (1): HUMAN ANATOMY 1

DURATION: 3 HOURS

TOTAL MARKS: 100

INSTRUCTIONS TO CANDIDATES

Answer all questions. Each question carries 25 marks

SECTION A:

Answer all questions .This section carries 25 marks. Circle True (T) or false (F) against each of the statements given, on the question paper.

1. Indicate whether the following statements are true (T) or false (F)

- a) The dividing embryo on day 4 has 16 cells. (T) (F)
- b) Morula enters uterus, taking up fluid becoming blastocyst at day 4 of the embryonic stage (T) (F)
- c) The innermost layer of the primitive streak is called mesoderm (T)(F)
- d) Ectodermal development is called neurulation in regard to nervous tissue (T)(F)
- e) The ectoderm gives rise to the central nervous system only (T) (F)

2. Indicate whether the following statements are true (T) or false (F)
Regarding the upper arm:

- a) The borders of the axilla are made up of five sides (T)(F)
- b) Brachial plexus forms the peripheral nerves of the upper limb. (T)(F)
- c) The triangular area on the anterior view of the elbow is called the cubital fossa. (T)(F)
- d) Bifurcates of the brachial artery near the apex of the cubital fossa forms the radial artery (superficial) and ulnar artery (deeper) (T)(F)
- e) Pronator Teres muscle originates from the medial epicondyle

of the humerus.

(T)(F)

3. Indicate whether the following statements are true or false

- a) Styloglossus muscle is considered an extrinsic tongue muscle that retracts the tongue. (T) (F)
- b) The pinna of the ear is made up of hyaline cartilage. (T) (F)
- c) The smallest bones in the human body are the stapes, incus and hammer (T) (F)
- d) The masseter is a muscle of mastication (T) (F)
- e) The lens is a colourless biconcave structure that aids in focusing images clearly on retina (T) (F)

4. Indicate whether the following statements are true (T) or false (F)

- a) The axis, C2, forms the pivot on which the atlas rotates (T) (F)
- b) Injuries to the cervical spine are common at the level of the second cervical vertebrae making neurological injury very common. (T)(F)
- c) The atlas, C1, is the topmost vertebra. (T)(F)
- d) The clavicle only articulates with the humerus. (T) (F)
- e) The sternum articulates with all the ribs (T) (F)

5. Indicate whether the following statements are (T) true or false (F)

- a) Mature red cells blood lack a nucleus and organelles (T) (F)
- b) The average adult has a blood volume of roughly 3 litres. (T) (F)
- c) Plasma is a yellow fluid from which clotting proteins have been removed. (T)(F)
- d) Blood accounts for 15 % of the human body weight (T) (F)
- f) Erythrocytes last between 100 to 120days before being destroyed. (T) (F)

SECTION B

Answer all questions. Each question carries 25 marks.

1. a) Draw a cross section of the human eye (10 marks)
b) Outline any five clinical correlates of the cornea and iris (10 marks)
c) Explain the flow of aqueous humour (5 marks)

2. Describe the anatomy of:
a) The diaphragm (10 marks)
b) Lungs (15 marks)

3. Describe the structure of the heart. (25 marks)

END OF PAPER