



PROGRAM : BSc (*SCIENCE STUDENTS ONLY*)

MODULE : Human Anatomy I

CODE : HAN1A10/HAN1A20/ANASCA2

DATE : JULY EXAMINATION
17 JULY 2018

DURATION : 180 MINUTES (Sec A: 90 Min; Sec B: 90 Min)

WEIGHT : 50 : 50

TOTAL MARKS : 100 Marks (Sec A: 50 marks; Sec B: 50 Marks)

EXAMINER : A. CHAUMETON

MODERATOR : E. SWANEPOEL

NUMBER OF PAGES : 5 PAGES

INSTRUCTIONS : QUESTION PAPER MUST BE HANDED IN

REQUIREMENTS : 2 X EXAMINATION SCRIPTS

INSTRUCTIONS TO CANDIDATES:

1. THIS PAPER CONSISTS OF 2 SECTIONS.
 2. EVERY SECTION MUST BE ANSWERED IN A SEPERATE EXAMINATION ANSWER SCRIPT, WHICH ARE PROVIDED.
 3. THIS QUESTION PAPER MUST BE RETURNED WITH ALL YOUR EXAMINATION ANSWER SCRIPTS.
 4. MARK ALLOCATION: ½ MARK PER FACT UNLESS INDICATED OTHERWISE
-

SECTION A: (HAN1A10/ANASCA2)

QUESTION 1

Write short notes on the anatomy of the **scapula** under the following headings:

- 1.1 Classification and brief description. (1)
 - 1.2 Position in the body. (1)
 - 1.3.1 Names of the two associated joints (1)
 - 1.3.2 Classification of joints provided in 1.3.1 (1)
 - 1.3.3 One action produced at each joint provided in 1.3.1. (1)
 - 1.4 Names of the ligaments that attach to the coracoid process. (1)
- [6]**

QUESTION 2

Define the following anatomical terms. Include in your answer a sentence utilising the words in brackets to reflect the meaning of the associated anatomical term:

- 2.1 Distal (Radial head ; Ulnar head) (1)
 - 2.2 Lateral (Greater trochanter ; Femoral head) (1)
 - 2.3 List and define the three body planes. (3)
- [5]**

QUESTION 3

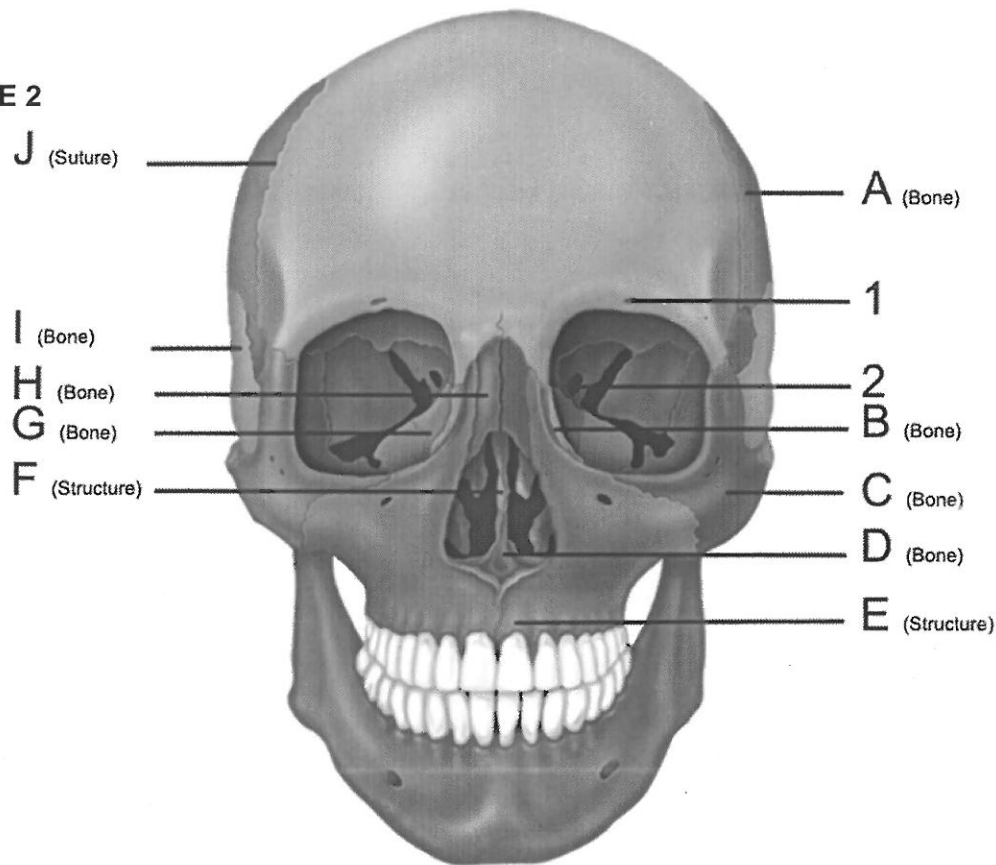
List the anatomical structure/s directly related to the following features found on the **humerus**:

- 3.1 Intertubercular sulcus/bicipital groove. (½)
 - 3.2 Surgical neck. (1½)
 - 3.3 Radial groove. (1)
 - 3.4 Medial epicondyle. (½)
- [4]**

QUESTION 4

Refer to Figure 2 and answer the following questions:

FIGURE 2



- 4.1 Provide labels for structures A to J. (5)
- 4.2 Name the structure that traverses (runs through) area 1. (½)
- 4.3 Name the structure that traverses (runs through) area 2. (½)
- [6]**

QUESTION 5

Tabulate the differences between the male and female pelvis and give a reason why the female pelvis is structurally different to the male pelvis.

[9½]

QUESTION 6

- 6.1 List the functions of epithelial tissue. (3)
- 6.2 Name the three types of cartilage and give one location of each. (3)
- 6.3 Name and describe the three modes of secretion of glandular epithelium. (3)

[9]

QUESTION 7

Shape is a feature used for the classification of epithelial tissue. Name and briefly describe the shape of the nucleus of each epithelial cell and give one example of where each cell type can be found.

[4½]

QUESTION 8

8.1 List the six characteristics of epithelium. (3)

8.2 Describe polarity. (3)

[6]

SECTION A SUBTOTAL: 50

SECTION B: (HAN1A20/ANASCA2)

QUESTION 1

Draw a cross-section through the midbrain at the level of the superior colliculus.

(Do not forget to orientate and label your drawing.)

[5]

QUESTION 2

2.1 Write short notes on interoceptors. (2)

2.2 Name the three divisions of the trigeminal nerve and the foramina through which they each respectively exit the skull. (3)

[5]

QUESTION 3

3.1 Name the cranial nerve and its number, responsible for smell. (1)

3.2 Classify the type of epithelium and the three main cell types involved in smell. (2)

3.3 Give two disorders of smell and briefly describe each one. (3)

[6]

QUESTION 4

Tabulate the extrinsic eye muscles under the following headings:

4.1 Name of muscle (3)

4.2 Action (3)

4.3 Name and number of controlling cranial nerve (6)

[12]

QUESTION 5

Briefly describe the following anatomical structures / terms:

5.1 Basal forebrain nuclei - diencephalon (4)

5.2 Conjunctiva (2)

5.3 Retinal layer (3)

5.4 Basal ganglia/nuclei (4)

5.5 Cerebellum (7)

5.6 Astrocytes (2)

[22]

SECTION B SUBTOTAL: 50

TOTAL MARKS: 100
