UNIVERSITY OF JOHANNESBURG

FACULTY	: Health Sciences
DEPARTMENT	: Human Anatomy and Physiology
CAMPUS	: DFC
MODULE	: HAN01A1/HAN1AY1 ANATOMY 1
SEMESTER	: Second
EXAM	: June 2019

DATE	: 16 July 2019	**SESSION**	: 15:00 - 18:00
ASSESSOR(S)	: DR E BRUWER		
MODERATOR(S)	: DR P NKOMOZEPI		
DURATION	: 3 HOURS	**MARKS**	: 100

NUMBER OF PAGES: **4** PAGES

INSTRUCTIONS:

1. MARK ALLOCATION: **½ MARK PER FACT** UNLESS INDICATED OTHERWISE
2. ANSWER ALL 9 QUESTIONS

QUESTION 1

Briefly describe the anatomy of the following structures:

1.1 List, describe and provide an example of all the different types of bones. (6½)

1.2 Describe the structure of a thoracic vertebra. (6½)

1.3 Describe the structural and functional features of the atlas. (4)

[17]

QUESTION 2

Compare the Male pelvis and Female pelvis. Provide your answer in table format.

Make use of the following characteristics:

-Bone thickness.

-Acetabula.

-Sacrum.

-Pelvic inlet.

[10]

QUESTION 3

Concerning distal part of the humerus:

2.1 List and side the fossae on the anterior, posterior and inferior parts respectively. (3½)

2.2 Classify the type of the joint 1.1. (1)

2.3 Discuss three (3) factors influencing the stability of the joint in 2.2. (5)

[9½]

QUESTION 4

In a tabular format, compare (similarities) and contrast (differences) the three different types of muscle tissue using the following characteristics:

- Cell shape
- Nucleus number
- Nucleus location
- Striations
- Control
- Location in the body **[10½]**

QUESTION 5

Regarding the Cranial nerve III (oculomotorius) answer the following.

5.1 List the specific origin of NIII (1)

5.2 List the two types of fibers of NIII and name one clinical application of each. (2)

5.3 Provide a well-labelled diagram showing a cross section through the midbrain at the level of the origin of NIII. (6½)

[9½]

QUESTION 6

In a tabular format, compare (similarities) and contrast (differences) the Parasympathetic and Sympathetic nervous system using the following characteristics:

- The ganglia and corresponding cranial nerves.
- Length of fibers.
- Target organs including one example and associated function **[9]**

QUESTION 7

Briefly describe the anatomical structures / terms:

7.1 Corpus striatum. (5)

7.2 Red nucleus of the midbrain. (2)

7.3 Limbic system. (5)

7.4 Ependymal cells. (2)

7.5 Lens. (3)

7.6 Medial canthus of the eye (3)

7.7 Bony labyrinth of the ear. (2½)

[22½]

QUESTION 8

List and describe the partitions of the dura mater. **[5]**

QUESTION 9

9.1 List the bones of the medial, lateral, superior and inferior walls of the orbit respectively. (3½)

9.2 Provide a well-labelled diagram showing a cross section through the anterior view of the orbitum with eyeball. Indicate all the relevant structures of the lacrimal apparatus, the eyeball and medial canthus clearly. (8)

9.3 List the paranasal sinuses in relation to the orbit and give the clinical implications of each. (7)

[18½]

TOTAL: 100 MARKS
