

PROGRAM : BSC

**SUBJECT** : HUMAN ANATOMY I

CODE : HAN 1B20

<u>DATE</u> : NOVEMBER EXAMINATION

**11 NOVEMBER 2017** 

**DURATION** : 90 MINUTES

**WEIGHT** : 50:50

TOTAL MARKS : 50

**EXAMINER** : N JOOSTE

**MODERATOR** : E SWANEPOEL

**NUMBER OF PAGES** : 7 PAGES

**INSTRUCTIONS** : QUESTION PAPER MUST BE HANDED IN

**REQUIREMENTS** : 1 X EXAMINATION SCRIPT

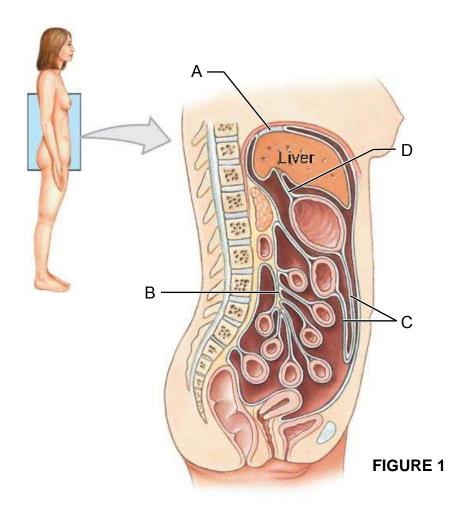
# **INSTRUCTIONS TO CANDIDATES:**

- 1. THIS PAPER CONSISTS OF 5 SECTIONS.
- 2. ALL SECTIONS MUST BE ANSWERED IN THE SEPARATE EXAMINATION SCRIPT 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: DIGESTIVE**

# **QUESTION 1**

Provide labels for structures A to D in Figure 1. Write only the letter and appropriate answer in your answer script (E.g. A – organ). [2]



# **QUESTION 2**

Make a labelled diagram of the tissue layers typically found in the wall of the digestive system. [5]

List the FOUR parts of the duodenum and the vertebral levels where they are found. [4]

**SECTION A SUBTOTAL: 11** 

# **SECTION B: URINARY**

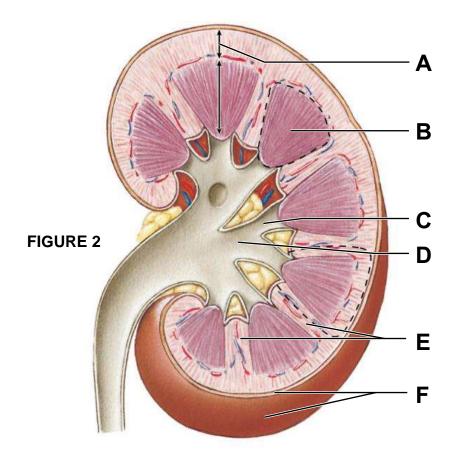
# **QUESTION 1**

Describe the histology of the filtration membrane of the renal corpuscle.

[3]

# **QUESTION 2**

Provide labels for structures A to F in Figure 2. Write only the letter and appropriate answer in your answer script (E.g. A – organ). [3]



# **QUESTION 3**

Describe the trigone of the bladder.

[3]

**SECTION B SUBTOTAL: 9** 

## **SECTION C: MALE REPRODUCTIVE**

# **QUESTION 1**

List the layers of the scrotum from external to internal.

[3]

# **QUESTION 2**

Describe the descent of the testis.

[3]

## **QUESTION 3**

Describe the location of the ductus deferent.

[3]

# **QUESTION 4**

Compare the corpus cavernosum to the corpus spongiosum.

[3]

**SECTION C SUBTOTAL: 12** 

# **SECTION D: FEMALE REPRODUCTIVE**

## **QUESTION 1**

List the four ligaments that stabilise the ovaries.

[2]

## **QUESTION 2**

Explain the difference between the following structures:

2.1. Corpus luteum and Corpus albicans

 $(1\frac{1}{2})$ 

2.2. Infundibulum and Isthmus of the uterine tubes

(2)

2.3. Cervix and Fornix

 $(2\frac{1}{2})$ 

[6]

**SECTION D SUBTOTAL: 8** 

# **SECTION E: MULTIPLE CHOICE QUESTIONS**

## **QUESTION 1**

The following statements about the esophagus are correct **EXCEPT**:

- A. Is posterior to the trachea
- B. Contains only skeletal muscle in the superior two-thirds
- C. Contains smooth muscle in the inferior third
- D. Is lined by stratified squamous epithelium
- E. Pierces the diaphragm at level T10

The gallbladder is associated with the \_\_\_\_\_ lobe of the liver:

- A. Quadrate
- B. Caudate
- C. Left
- D. Right
- E. Falciform

# **QUESTION 3**

The following cells are found in the stomach EXCEPT:

- A. Parietal cells
- B. Beta cells
- C. Simple columnar epithelium
- D. Goblet cells
- E. Chief cells

# **QUESTION 4**

The kidneys are found at vertebral level:

- A. L1 L3
- B. T10 L3
- C. T12 L3
- D. L2 L4
- E. L2 L5

## **QUESTION 5**

The vasa recta are associated with the:

- A. Nephron capsule
- B. Juxtaglomerular apparatus
- C. Cortical nephron
- D. Juxtamedullary nephron
- E. Collecting duct

The interstitial cells are:

- A. Found in the ovaries
- B. Provide attachment site for the spermatids
- C. The site where spermiogenesis is completed
- D. Secretes testosterone
- E. Is the spermatogonium

#### **QUESTION 7**

The following statements about the prepuce is correct EXCEPT:

- A. Can be removed during circumcision
- B. Known as the foreskin
- C. Produces smegma
- D. Covers the corpus cavernosum
- E. Covers the corpus spongiosum

## **QUESTION 8**

The functional zone of the endometrium:

- A. Undergoes cyclic changes
- B. Is external to the basilar zone
- C. Receives blood from the straight arteries
- D. Contains no glands
- E. Contains a thick smooth muscle layer

## **QUESTION 9**

The epithelium of the vagina is:

- A. simple squamous epithelium
- B. simple columnar epithelium
- C. stratified squamous epithelium
- D. stratified columnar epithelium
- E. transitional epithelium

The lactiferous duct:

- A. Is also known as the suspensory ligament
- B. Opens on the areola
- C. Expands to form the lactiferous sinus
- D. Is only found in lactating females
- E. Consists of adipose tissue

**SECTION E SUBTOTAL: 10** 

**TOTAL MARKS: 50**