



**PROGRAM** : BSC

**SUBJECT** : HUMAN ANATOMY I

**CODE** : HAN 1B10

**DATE** : NOVEMBER EXAMINATION  
11 NOVEMBER 2017

**DURATION** : 90 MINUTES

**WEIGHT** : 50 : 50

**TOTAL MARKS** : 50

---

**EXAMINER** : N JOOSTE

**MODERATOR** : E SWANEPOEL

**NUMBER OF PAGES** : 9 PAGES

---

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

---

**REQUIREMENTS** : 1 X EXAMINATION SCRIPT

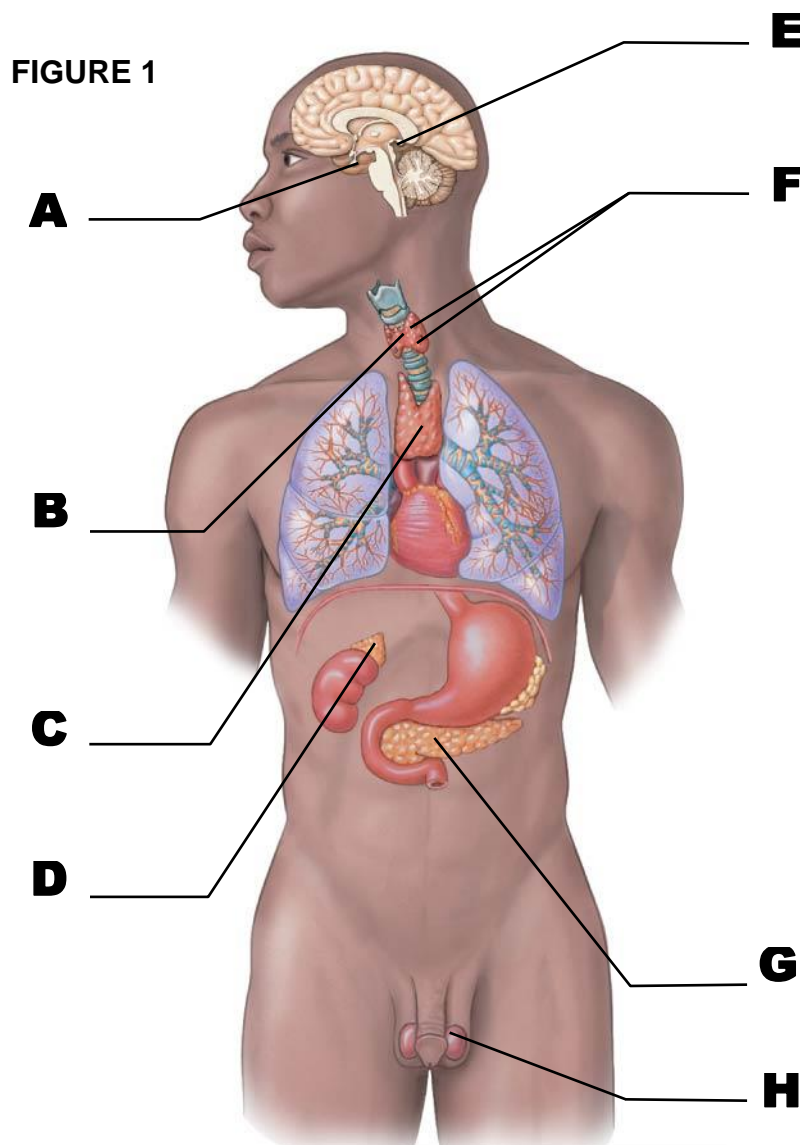
---

**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: ENDOCRINE****QUESTION 1**

Provide labels for endocrine glands A to H in Figure 1. Write only the letter and your answer in the answer script (i.e. A – organ).

**[4]**

**QUESTION 2**

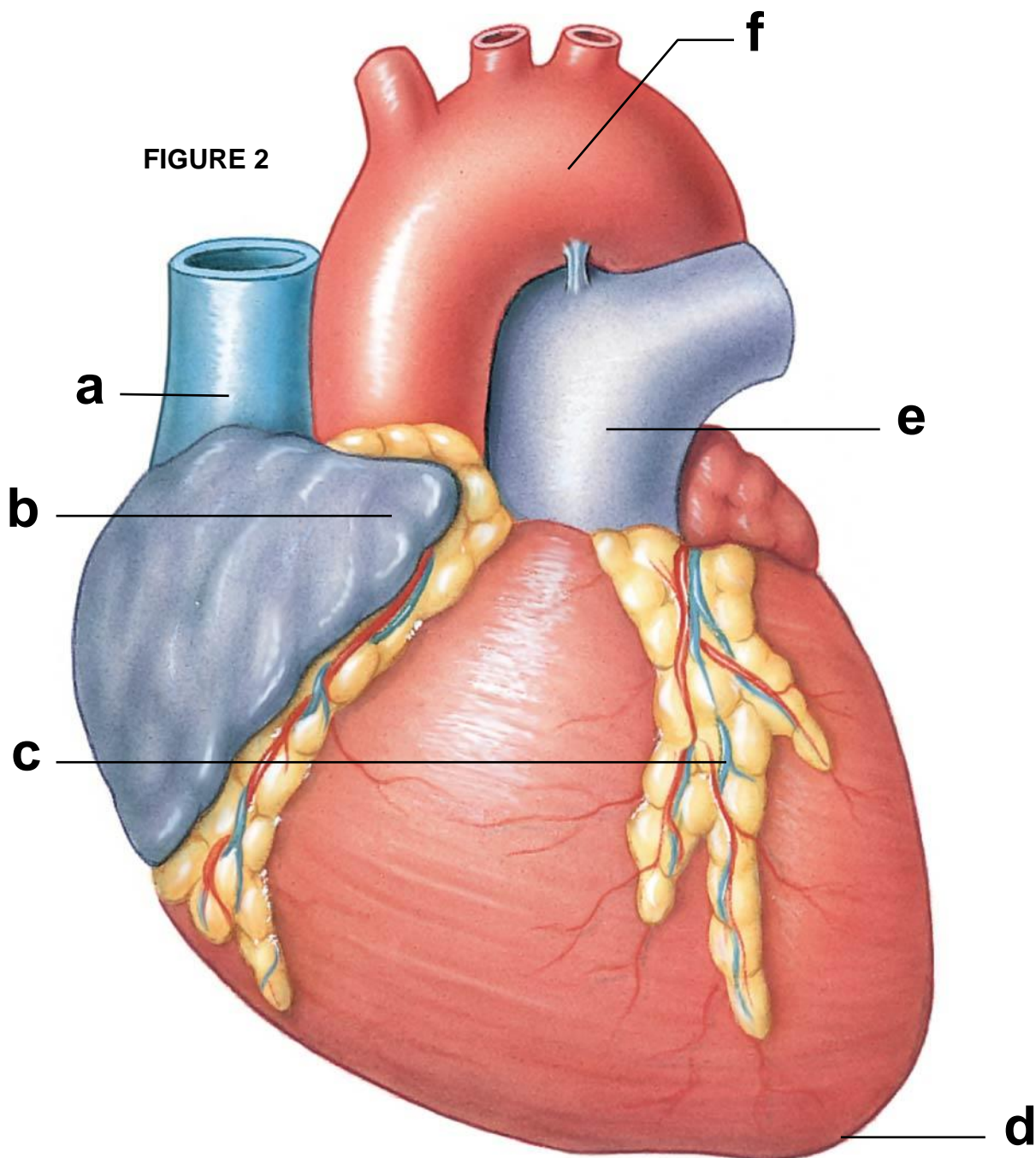
Describe the anatomy (macroscopic and microscopic) of the pancreas.

**[4]****QUESTION 3**

Name the cells of the thyroid gland.

**[1]****SECTION A SUBTOTAL: 9****SECTION B: CARDIOVASCULAR****QUESTION 1**

Provide labels for structures a to f in Figure 2. Write only the letter and your answer in the answer script (i.e. A – organ).

**[3]**

**QUESTION 2**

Describe the macroscopic anatomy of the right atrium.

**[4½]**

**QUESTION 3**

Compare and contrast the anatomy (micro- and macroscopic) of a typical artery and vein. **[3]**

---

**SECTION B SUBTOTAL: 10½**

---

**SECTION C: RESPIRATORY****QUESTION 1**

Differentiate between the vocal and vestibular folds.

**[2]**

**QUESTION 2**

Describe the tissue composition changes that occur in the tracheobronchial tree.

**[3½]**

**QUESTION 3**

Refer to Figure 3 and answer the following questions:

3.1. Label structures a to f.

**(3)**

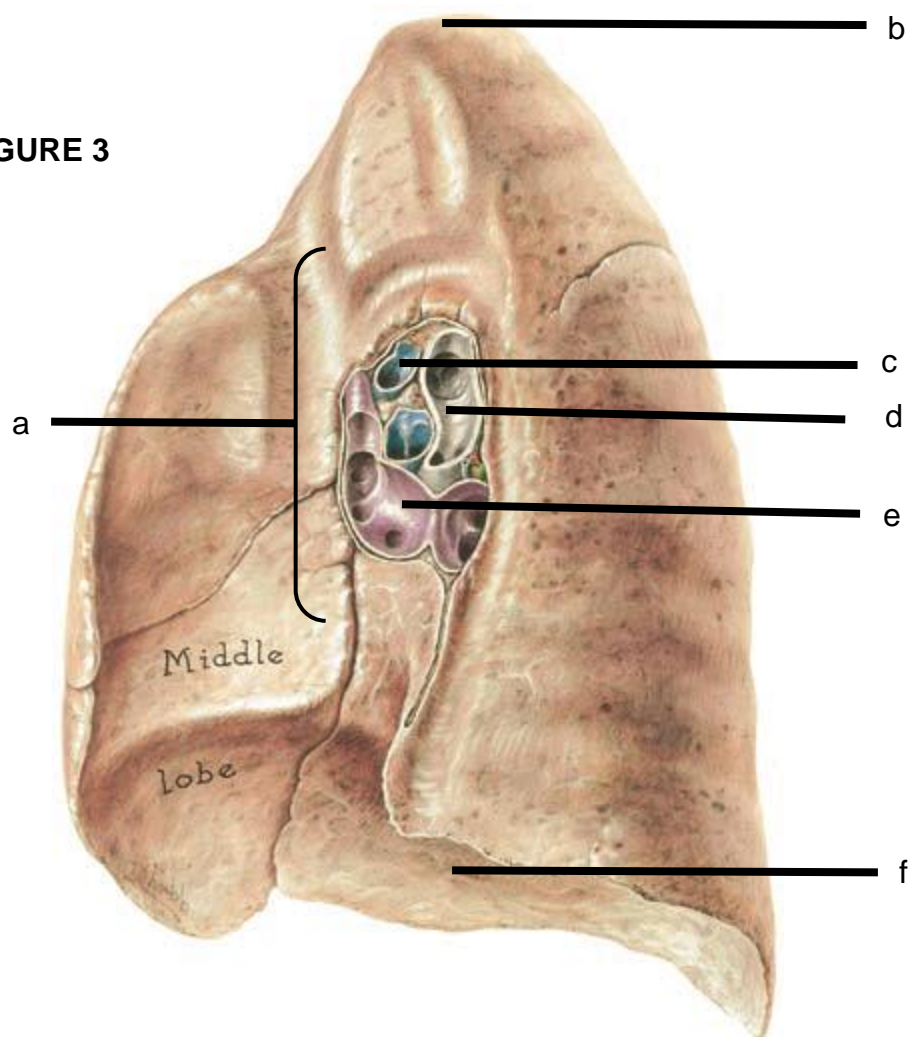
3.2. Provide the side of the body that this lung belongs to.

**(½)**

3.3. Provide three reasons for your answer in 3.2.

**(1½)**

**[5]**

**FIGURE 3**

SECTION C SUBTOTAL: 10½

**SECTION D: LYMPHATIC****QUESTION 1**

Name the lymphatic ducts and briefly describe their drainage areas.

**[5]****QUESTION 2**

Provide a flow diagram representing the flow of lymph through the appropriate structures of a typical lymph node.

**[2½]****QUESTION 3**

Describe the histology of the thymus.

**[2½]**

SECTION D SUBTOTAL: 10

---

**SECTION E: MULTIPLE CHOICE QUESTIONS****QUESTION 1**

The calcium salts found in the pineal gland are called:

- A. Pineal grit
- B. Pineal sand
- C. Otoliths
- D. Pineal calcium
- E. Pineal stones

**QUESTION 2**

The \_\_\_\_\_ functions as a storage site for hormones produced in the hypothalamus.

- A. Median eminence
- B. Infundibulum
- C. Posterior lobe
- D. Anterior lobe
- E. Pars tuberalis

**QUESTION 3**

The enteroendocrine cells are located in the:

- A. Gastrointestinal tract
- B. Heart
- C. Skin
- D. Placenta
- E. Kidney

**QUESTION 4**

Blood flows from the heart to the thigh in the following order:

- A. Aorta; common iliac a; internal iliac a; femoral a
- B. Aorta; common iliac a; external iliac a; femoral a
- C. Aorta; internal iliac a; common iliac a; external iliac a; femoral a
- D. Aorta; external iliac a; common iliac a; internal iliac a; femoral a
- E. Aorta; common iliac a; internal iliac a; external iliac a; femoral a

**QUESTION 5**

The myocardium is thicker in the left ventricle than the right ventricle because;

- A. The left ventricle pumps a larger volume of blood
- B. The right ventricle pumps a larger volume of blood
- C. The left ventricle exerts higher pressure
- D. The right ventricle exerts higher pressure
- E. The myocardium in the left and right ventricle is equally thick.

**QUESTION 6**

The following statement is **FALSE**:

- A. The right primary bronchus is shorter than the left
- B. The right primary bronchus is more vertical than the left
- C. The right primary bronchus is wider than the left
- D. The right primary bronchus is more horizontal than the left
- E. The right primary bronchus branches three times

**QUESTION 7**

The following are paranasal sinuses **EXCEPT**:

- A. Frontal sinus
- B. Sphenoidal sinus
- C. Maxillary sinus
- D. Superior sagittal sinus
- E. Ethmoidal sinus

**QUESTION 8**

The connective tissue framework of the lymphoid organs is:

- A. Reticular connective tissue
- B. Elastic connective tissue
- C. Adipose tissue
- D. Haematopoietic tissue
- E. Bone

**QUESTION 9**

The following are examples of lymphatic trunks **EXCEPT**:

- A. Lumbar
- B. Intestinal
- C. Cisterna chyli
- D. Bronchomediastinal
- E. Subclavian

---

**QUESTION 10**

An example of a lymphoid follicle found in the small intestine is:

- A. Appendix
- B. Pharyngeal tonsil
- C. Tubal tonsil
- D. Peyer's patches
- E. Intestinal crypts

---

**SECTION E SUBTOTAL: 10**

---

**TOTAL MARKS: 50**

---