



The Royal Australian and New Zealand
College of Radiologists®

Anatomy

Paper 2 Exam

Monday, 25 March 2019

Please write your answers in the books provided, starting each question on a new page.



CASE 1

Question 1:

Label the structures 1-16. Please be specific **(1/2 mark each)**.

Question 2:

- a. What is the arterial supply of A? **(0.5 marks)**
- b. What is structure B and what is its arterial supply? **(3.5 marks)**
- c. What is structure C and what is its arterial supply? **(3.5 marks)**
- d. What is the distribution of descending and ascending fibers in this part of structure C. **(3 marks)**
- e. What is structure D and what is its arterial supply? **(1.5 marks)**

Question 3:

List five (5) common or important variants of the calvarial sutures. **(5 marks)**

CASE 2

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2:

- a. Name the structure labelled A and what is it composed of? **(2 marks)**
- b. Name the barium filled space labelled B and what are its lateral and anterior borders. **(3 marks)**
- c. Which muscle of the pharynx causes the impression labelled C? **(1 mark)**
- d. Describe the innervation of the 3 constrictor muscles. **(3 marks)**
- e. What structure is located in the trachea-esophageal groove? Where does it originate? What is its function? **(3 marks)**

Question 3:

- a. Name five (5) common or important variants of the paranasal sinuses. **(5 marks)**

CASE 3

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2:

- a. What type of vertebra is this? **(1 mark)**
- b. What is structure A and what does it form when several vertebrae articulate with each other? **(2 mark)**
- c. What is structure B and what articulates with it? **(2 marks)**
- d. What is structure C and what articulates with it? **(2 marks)**
- e. What is structure D and what articulates with it? **(2 marks)**
- f. Describe the differences between the spinous processes of the typical cervical, thoracic and lumbar vertebrae. **(3 marks)**

Question 3:

- a) List the vertebral levels of the conus medullaris in the fetus, neonate and adult **(3 marks)**
- b) Which side and level does the artery of Adamkiewicz most commonly arise? **(2 marks)**

CASE 4

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2:

- a. Name the pulmonary segments labeled 1 - 4. **(4 marks)**
- b. What vascular structures accompany segmental bronchi? **(2 marks)**
- c. Describe the relationships of the pulmonary vessels to the bronchi in the right and left hila. **(6 marks)**

Question 3:

Name five (5) common or important variants of the coronary arteries **(5 marks)**.

CASE 5

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2

- a. What is structure A and what does it drain? **(3 marks)**
- b. What is structure B and what are its lateral and anterior relations? **(2.5 marks)**
- c. What is structure C where does it originate? **(2 marks)**
- d. What is structure D and what are its anterior and posterior relations. **(4.5 marks)**

Question 3:

Name five (5) common or important variants of the pancreatic ducts. **(5 marks)**

CASE 6

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2:

- a. Label structures A, B, C and D. **(2 marks)**
- b. List the 2 principle arteries that supply C and D and state their usual origins. **(4 marks)**
- c. List the contents of the spermatic cord. **(4 marks)**
- d. What is the female equivalent of the spermatic cord in the inguinal canal and where does it attach? **(2 marks)**

Question 3:

Name five (5) common or important variants of the ureters. **(5 marks)**

CASE 7

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**.

Question 2

- a. Name structures A, B, C and D. **(2 marks)**
- b. What are the attachments, innervation and actions of muscle C? **(6 marks)**
- c. What are the other two muscles in the same muscular compartment as structure C? **(2 marks)**
- d. What is the innervation structure B? **(1 mark)**
- e. Where does structure D begin proximally? **(1 mark)**

Question 3:

Name five (5) common or important variants of the arterial supply of the hand. **(5 marks)**

CASE 8

Question 1:

Label the structures 1-16. Be specific. **(1/2 mark each)**

Question 2:

- a. What is structure A and which ligament attaches to it? **(2 marks)**
- b. What is structure B and which tendon attaches to it? **(2 marks)**
- c. What is structure C and which tendon attaches to it? **(2 marks)**
- d. What is structure D and which tendons attach to it? **(2 marks)**
- e. What is structure E and which tendon attaches to it? **(2 marks)**
- f. What is structure F and which tendon passes immediately medial to it? **(2 marks)**

Question 3:

Name five (5) anatomical variants of popliteal artery branching **(5 marks)**.