The Royal Australian and New Zealand College of Radiologists®

Anatomy

Paper 2 Exam

Monday, 10 September 2018

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

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CASE 1

Question 1:

Label the structures 1-16. Please be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2: Portal venogram.

a. Name structures A, B and C **(1.5 marks)**

b. What is the structure labelled D and describe its origin. **(3.5 marks)**

c. Describe the relations of structure D in the hepatoduodenal ligament. **(2 marks)**

d. Describe the most common branching pattern of structure D in the liver. **(5 marks)**

Question 3:

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

CASE 2

Question 1:

Label the structures 1-16. Please be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2:

a. Name structures A and B **(1 mark)**

b. What are the anterior, posterior and inferior boundaries of the transverse pericardial sinus? **(3 marks)**

c. List the pericardial recesses that arise from the transverse pericardial sinus? **(3 marks)**

d. What are the anterior, posterior and superior boundaries of the oblique pericardial sinus? **(3 marks)**

e. Which pericardial recess arises from the oblique pericardial sinus? **(0.5 marks)**

f. List the pericardial recesses that arise from the pericardial cavity proper? **(1.5 marks)**

Question 3:

a. Name three (3) common or important variants of the lung fissures. **(3 marks)**

b. Name two (2) common or important variants of the major bronchi. **(2 marks)**

CASE 3

Question 1:

Label the structures 1-16. Be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2: Frontal selective thoracic spinal angiogram with the catheter in the left T12 branch.

a. Name the vessel labeled A and what side and level does it typically arise from? **(3 marks)**

b. Name the vessel labeled B. **(1 mark)**

c. Which part of the spinal cord does the posterior spinal arteries supply? **(1 mark)**

d. Describe the origin and course of the anterior spinal artery. **(2 marks)**

e. Which arteries give rise to the segmental medullary and radicular arteries? **(5 marks)**

Question 3:

Name five (5) common or important variants of lumbosacral segmentation **(5 marks)**

CASE 4

Question 1:

Label the structures 1-16. Be specific **(each structure is worth 0.5 marks, total marks 8)**

Question 2:
Transverse T2 MR prostate.

- **a.** Name structures A and B **(1 mark)**
- **b.** Describe the zonal anatomy of the prostate gland. **(8 marks)**
- **c.** Describe the arterial supply of the prostate gland. **(3 marks)**

Question 3:

Name five (5) common or important variants of the male gonads and their development. **(5 marks)**

CASE 5

Question 1:

Label the structures 1-16. Please be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2:

a. Name structures A and B **(1 mark)**

b. Describe the origin and termination of the structure B **(4 marks)**

c. Name the branches of structure B **(4 marks)**

d. Describe the relationship of structure B in the popliteal fossa compared to structure A **(3 marks)**

Question 3:

a. Name five (5) common or important variants of the deep veins of the lower limb **(5 marks)**.

CASE 6

Question 1:

Label the structures 1-16. Be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2:

a. Name the foramen labelled A and what passes through it. **(3 marks)**

b. Name the foramen labelled B and what passes through it. **(3 marks)**

c. Name the foramen labelled C and what passes through it **(4 marks)**

d. Name the foramen labelled D and what passes through it. **(2 marks)**

e. What enters the skull with the internal carotid artery? **(1 mark)**

Question 3:

Name four (4) common or important variants of the persistent carotid-vertebrobasilar anastomoses **(4 marks).**

CASE 7

Question 1:

Label the structures 1-16. Please be specific **(each structure is worth 0.5 marks, total marks 8).**

Question 2: Frontal right elbow radiograph in a young patient.

a. List the average age at which each of the secondary ossification centers appear in order.
(6 marks)

b. List six structures that originate from the structure labeled A.
(6 marks)

Question 3:

Name five (5) common or important variants of the brachial artery (
(5 marks)

CASE 8

Question 1:

Label the structures 1-16. Be specific **(each structure is worth 0.5 marks, total marks 8)**.

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 it's 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 three common or important variants of the thyroid gland (excluding vascular variants). (**3 marks)**

b. Name two common or important variants of the parathyroid glands (excluding vascular variants). **(2 marks)**