The Royal Australian and New Zealand College of Radiologists®

# e-Anatomy

# Paper 2 Exam

## Monday, 27 March 2017

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## CASE 1

**Question 1:**

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

**Question 2:**

**a)** Identify the structure labelled A **(1 mark)**

**b)** What are the attachments of A? **(2 marks)**

**c)** What branches arise directly from the sciatic nerve? **(3 marks)**

**d)** What is the innervation structure B? **(1 mark)**

**e)** What spinal segments contribute to structure labelled C? **(2 marks)**

**f)** Identify two variants of the sciatic nerve **(2 marks)**

**Question 3:**

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

## CASE 2

**Question 1:**

Label the structures 1-16. Be specific. There is NO need to determine the vertebral level.
**(each structure is worth 0.5 marks, total marks 8)**

**Question 2**

**a)** Name the structures labelled A, B, C and D **(2 marks)**

**b)** List the attachments of B **(3 marks)**

**c)** Describe the function of B **(2 marks)**

**d)** List the structures of the vertebral canal that have been removed to demonstrate the ligaments in the diagram (not including the spinal cord) **(5 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 3

**Question 1:**

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

**Question 2:**

**a)** What is the segment and lobe labelled A?
**(1 mark)**

**b)** What is the structure labelled B and what two structures does it separate? **(1 mark)**

**c)** What is the structure labelled C and what two structures does it separate? **(1 mark)**

**d)** What is the segment and lobe labelled D?
**(1 mark)**

**e)** Name the segments of the left upper lobe.
**(4 marks)**

**f)** Name the segments of the left lower lobe.
**(4 marks)**

**Question 3:**

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

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

## CASE 4

**Question 1:**

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

**Question 2:**

**a)** Name the nerve labelled A of the lumbar plexus. What are its roots? Which branch has a motor distribution and which 2 muscles does it innervate? **(3 marks)**

**b)** Name the nerve labelled B of the lumbar plexus. What are its roots? Where does it pass as it exits the pelvis? **(3 marks)**

**c)** Name the nerve labelled C of the lumbar plexus. Which muscles does it innervate? **(3 marks)**

**d)** Name the nerve labelled D of the lumbar plexus. What is its relationship to the common femoral artery in the femoral triangle? Name three muscles it innervates outside the quadriceps. **(3 marks)**

**Question 3:**

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

## CASE 5

**Question 1:**

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

**Question 2:**

**a)** What is the structure labelled A? Name three branches that arise from it to the right. What are the boundaries of its blood supply of the gut? **(5.5 marks)**

**b)** What is the structure labelled B? **(0.5 marks)**

**c)** What is the structure labelled C? Name three of its branches. **(4 marks)**

**d)** What is the structure labelled D? What does it anastomose with? **(2 marks)**

**Question 3:**

Name five common or important variants of the pancreatic ducts. **(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)** Identify structures A, B, C and D.
**(4 marks)**

**b)** Identify structure E. What structure crosses it medially? **(2 marks)**

**c)** Identify structure F. Name the muscle that attaches to it and its nerve supply. **(3 marks)**

**d)** Identify structure G. Name the muscle that attaches to it and its nerve supply. **(3 marks)**

**Question 3:**

Name five common variants of the Circle of Willis. **(5 marks)**

## CASE 7

**Question 1:**

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

**Question 2:**

**a)** Name the nerve labelled A. What space is it seen exiting? Which vessels exit with it? Which 2 muscles does it innervate? **(4 marks)**

**b)** What structure is labelled B? What nerve innervates it? **(2 marks)**

**c)** What space is labelled C? What vessels exit through it? **(2 marks)**

**d)** What structure is labelled D? What is its distal attachment? **(2 marks)**

**e)** Where does the axillary artery terminate? **(1 mark)**

**f)** What structure divides the axillary artery into three parts? **(1 mark)**

**Question 3:**

Name five 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 structures labelled A, B, C and D. **(2 marks)**

**b)** What are the contents of the parotid space? **(9 marks)**

**c)** Which nerve supplies structure D?
**(1 mark)**

**Question 3:**

List five osseous variants of the cervical spine. **(5 marks)**