



**RANZCR Clinical Radiology Phase 1
Anatomy Examination
Sample Questions**

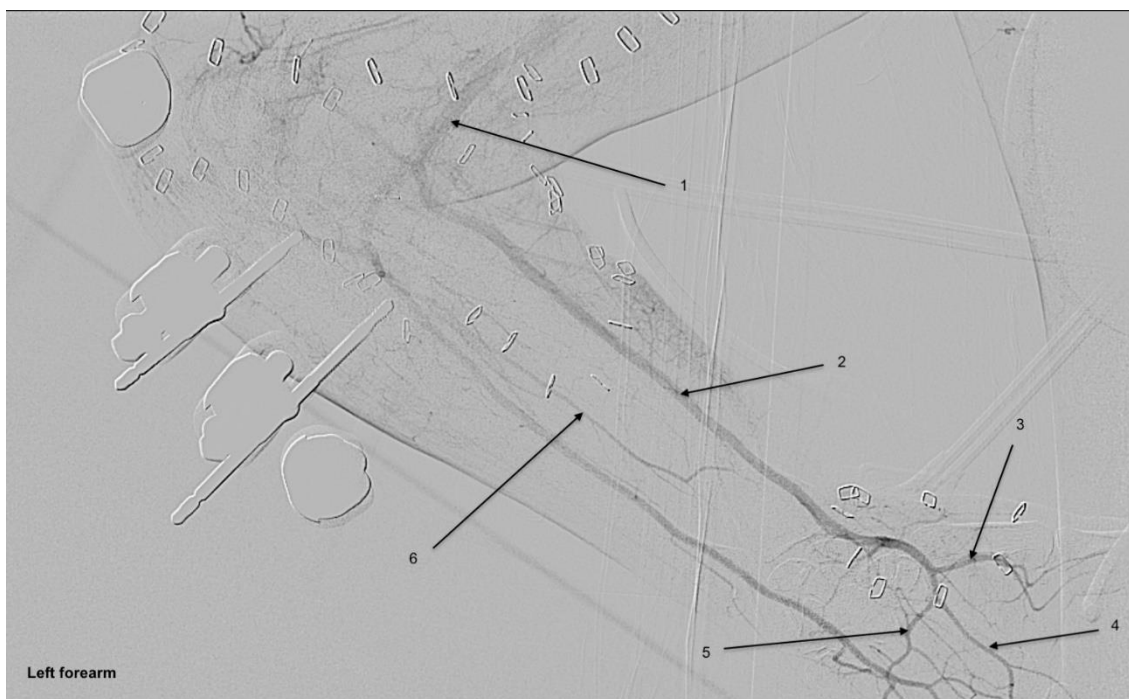
Diagram Labelling:

Each labelling question will have six labelling items worth 0.25 marks each. Each question is worth 1.5 marks. There will be a total of 120 labels in the examination, totaling 20 questions and 30 marks overall.

Sample questions:

1. Label the structures 1-6. Be specific (**each structure is worth 0.25 marks, total marks 1.5**).

Image: Forearm Angiogram



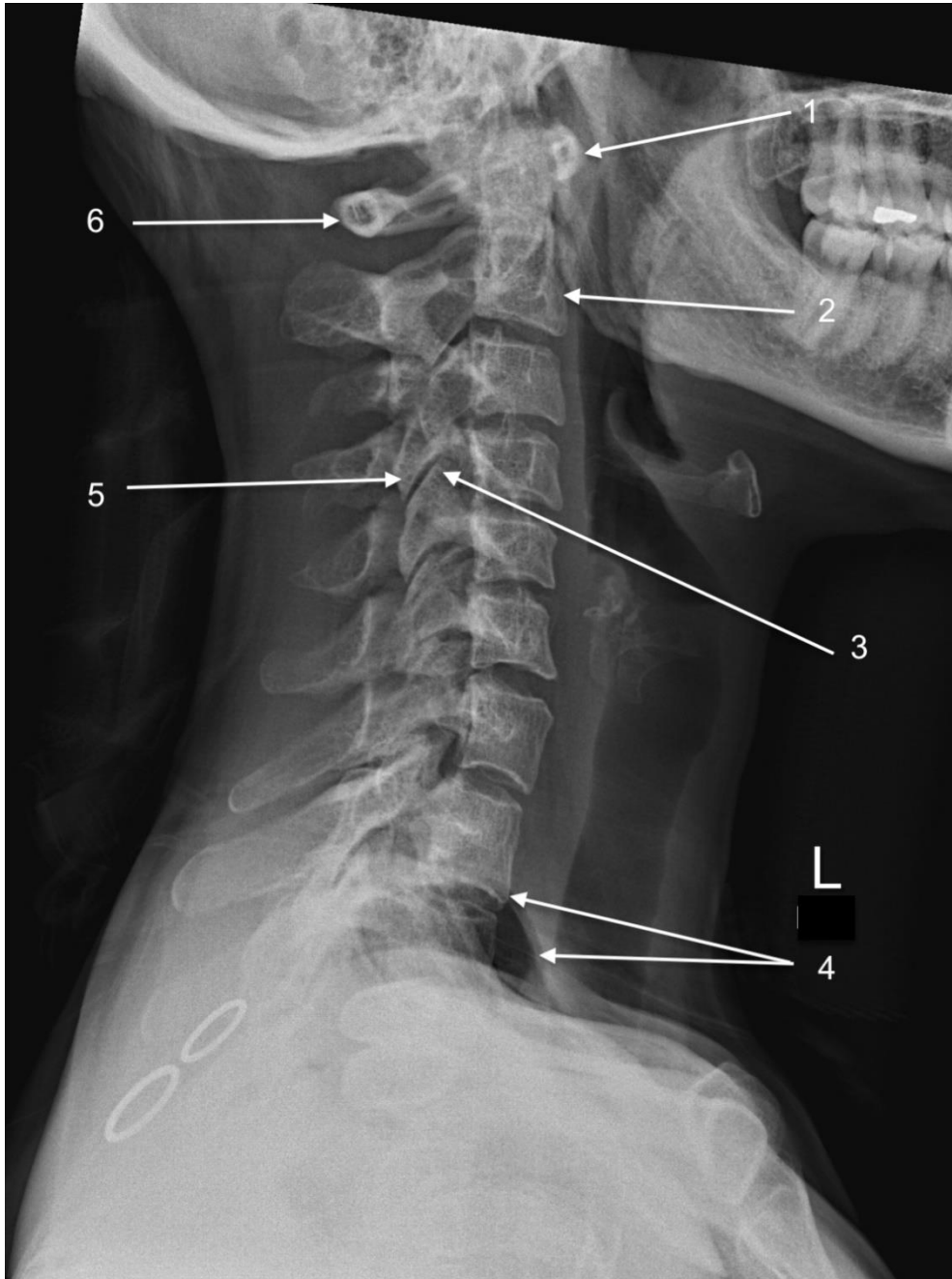
Answers:

1. *Brachial artery*
2. *Radial artery*
3. *Princeps pollicis artery*
4. *Radialis indicis artery*
5. *Superficial palmar arch*
6. *Interosseous artery (anterior or posterior)*



2. Label the structures 1-6. Be specific (**each structure is worth 0.25 marks, total marks 1.5**).

Image: Cervical spine lateral



Answers:

1. Anterior arch of C1
2. Vertebral body C2
3. Superior articular process C4
4. Cupola of lung (lung apex)
5. Inferior articular process C3
6. Posterior arch of C1

3. Label the structures 1-6. Be specific (**each structure is worth 0.25 marks, total marks 1.5**).

Image: Axial PV Upper



Answers:

1. *Splenic flexure*
2. *Spleen*
3. *Left diaphragmatic crus*
4. *Upper pole right kidney*
5. *D1/pylorus*
6. *Pancreatic neck*

Multiple Choice Questions (MCQ):

Each MCQ is worth one mark, with 60 questions in total. The MCQ section will be worth 60 marks total.

Sample Questions:

1. Which artery supplies the primary visual cortex?
 - a. Anterior cerebral artery
 - b. Anterior inferior cerebellar artery
 - c. Middle cerebral artery
 - d. Posterior cerebral artery
 - e. Posterior inferior cerebellar artery

Answer: D

2. Which wrist extensor compartment does the extensor indicis pass through?
 - a. 2nd
 - b. 3rd
 - c. 4th
 - d. 5th
 - e. 6th

Answer: C

3. The cisterna chyli is typically formed by the confluence of which structure with the left lymphatic trunk?
 - a. thoracic duct
 - b. preaortic trunk
 - c. intestinal trunk
 - d. aortocaval duct
 - e. right lymphatic trunk

Answer: C

Very Short Answer Questions (VSA):

Each VSA question is worth one mark, with 30 questions in total. The VSA section will be worth 30 marks total. Answers are very short, i.e. one word or one phrase, you are not required to provide sentences or extended responses to these.

Sample Questions:

1. On which nerve do postganglionic parasympathetic fibres hitchhike from the submandibular ganglion to the submandibular gland?

Answer: lingual nerve (CN Vc)

2. Which vertebra is known as the vertebra prominens?

Answer: C7

3. What structure separates segment II and VI in the liver?

Answer: left hepatic vein

ALTERNATE answer: LHV

Short Answer Questions (SAQ):

Each SAQ is worth three marks, with 20 questions in total. The SAQ section will be worth 60 marks total. Answers are long response so require more detail and depth than a VSA.

Sample Questions:

1. Describe the arterial supply of the midbrain
2. Describe the course of the internal carotid artery in the neck
3. List the muscles of the anterior compartment of the thigh

1. Describe the arterial supply of the midbrain (3 marks)

(a) mode of supply (1 mark)

- Bilateral, small, perforating branches (penetrating from surface)

(b) arteries of supply (1 mark for all 3 correct, ½ for only 2 correct)

- Basilar artery
- Posterior cerebral artery
- Superior cerebellar artery

(c) predominant area of distribution in midbrain, respectively from each (1 mark for all 3 correct, ½ for only 2 correct)

- Ventral midbrain - basilar
- Lateral midbrain – Posterior cerebral artery
- Dorsal midbrain – Superior cerebellar artery

2. Describe the relations of the cervical part of the internal carotid artery (3 marks)

Major features (1/2 mark each, maximum 2 marks):

- Passes posterior to external carotid artery
- Ascends in the carotid sheath medial to internal jugular vein
- Lies anteromedial to the vagus nerve in the carotid sheath
- Ascends on the pharyngeal wall
- Ascends on the pharyngobasilar fascia.

Minor features (1/2 mark each, maximum 1 mark)

- As it ascends, it is crossed laterally by (from inferior to superior):
 - pharyngeal branch of the vagus nerve (X)
 - glossopharyngeal nerve (IX)
 - stylopharyngeus muscles
 - styloglossus muscle
- Enters the carotid canal in the skull base anterior to the jugular vein entering the jugular foramen

3. List the muscles of the anterior compartment of the thigh (3 marks)

- Rectus femoris (Straight and reflected heads)
- Vastus medialis (proximal vertical fibres and oblique fibres)
- Vastus intermedius
- Vastus lateralis
- Sartorius
- Pectineus
- Genu articularis

(1/2 mark each, max 3 marks)