


SCHHS-METRO NORTH MOCK FELLOWSHIP SAQ EXAM 2019.1

Instructions to Candidates:

1. Examination time is 3 hours
2. Answer questions **in the spaces provided**. Write your full name on the front page of each booklet.
3. Question paper is divided into three booklets:
 - Booklet One: Questions 1-9
 - Booklet Two: Questions 10-18
 - Booklet Three: Questions 19-27
4. All images are located in the Props Booklet
5. After the examination is completed, please leave **all** the materials in the room



Candidate name: _____

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BOOKLET ONE

QUESTIONS 1-9

Question 1 (18 marks)

An 81-year-old man is brought in by ambulance to your tertiary emergency department with a reduced level of consciousness. Neighbours broke into his home after not seeing him for 2 days to find him in bed, unresponsive and incontinent of urine.

On assessment his airway is patent, respiratory rate is 17 breaths/minute, saturations are 95% on 2L oxygen, heart rate is 93 bpm, BP is 117/85mmHg and temperature is 36.4 degrees Celsius. Neurological assessment reveals a Glasgow Coma Scale of 6 (E1 V2 M3); pupils are 2mm and sluggish, there is left-sided hemiplegia. His bedside glucose is 7.1

A non-contrast CT brain is performed. Two slices from CT are shown in the Props Booklet (Figures 1a and 1b):

- a. List two positive and two negative findings on this single slice CT scan (4 marks)

- b. Provide a unifying diagnosis (1 mark)

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You learn that he has no significant past medical history and takes no regular medications. He lives alone and up to now has been independent in his activities of daily living.

The patient's brother and sister arrive and would like to know what happened to him and what his prognosis is.

- c. List important information that should be included in your discussion with his relatives (5 marks)

Following your discussion, a decision is made to palliate the patient who seems to be comfortable and shows no signs of distress. He is accepted for admission under the palliative care team who ask you to complete his medication chart, including dose he may require on a 'as needed' (p.r.n.) basis.

- d. List the 'as needed' (p.r.n.) medications that should be charted for this patient with a indication for each and a dosing regimen. (8 marks)

Indication	Medication	Dosing regime

Question 2 (18 marks)

An acutely aggressive 24-year-old man is brought into your emergency department by ambulance and police after being found alone on a bridge.

- a). Give a stepwise approach to managing this aggressive patient with specific examples. (5 marks)

- b). Complete the following table for the components of a mental state examination. For each component give an example of what specifically should be assessed (8 marks)

Component	What to assess



c). List 10 risk factors that are associated with a high risk for suicide (5 marks)

Question 3 (12 marks)

Your registrar asks for your advice about the clinical decision rules for imaging in paediatric head injury management. They have just seen an 18-month old girl who has been brought in by her mother after she fell off a couch and hit her head on the coffee table one hour ago. The mother is concerned because she seems quieter than normal and has vomited once on the way in to hospital. On assessment, the child is alert, and is happily playing with her Mum's phone. She has a small frontal haematoma, equal reactive pupils and no focal neurology.

a). Detail the main differences between research evidence behind the PECARN , CHALICE and CATCH clinical decision rules. (4 marks)

After taking a detailed history and completing your assessment, you decide that the child does NOT require a CT brain.

b). The mother is asking for a CT scan of her daughter's head as she is worried about concussion. List the important facts that should be mentioned in this conversation (4 marks)

d. State your management plan for this patient (4 marks)

Question 4 (12 marks)

A 74-year-old man is brought in by ambulance to your regional emergency department after falling down three steps onto his right hand. It is a closed and isolated injury. His right wrist x-rays are shown in the Props Booklet (Figures 2a and 2b).

- a) List the abnormalities seen (3 marks).

- b) List two short-term and two long-term potential complications of this injury (4 marks).

Short-term complications	Long-term complications

- c) List your management priorities (3 marks)

- d) What other factors need to be considered in this patient prior to discharge? (2 marks)

Question 5 (12 marks)

A 3-year-old boy is brought in by his mother after ingesting an unknown quantity of liquid paracetamol. He had been playing quietly in his room for 10 minutes and was found with the empty bottle that previously was around three quarters full. The time of ingestion was 30 minutes prior to presentation. The entire 200ml bottle of paracetamol contains 10g of paracetamol. The child weighs 14kg.

a). What is your approach to decontamination of this child? (1 mark)

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As part of your risk assessment you calculate the possible dose of paracetamol ingested.

b). What is the threshold ingested dose of paracetamol (in mg/kg) at and above which a serum paracetamol level should be measured? (1 mark)

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You decide this child DOES require a paracetamol level to be checked.

c). How long after ingestion will you check a paracetamol level in this child? (1 mark)

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The child's parents are appropriately concerned for their child and want to ensure there is no further risk to the child from accidental ingestions in the home. They ask you more questions about dangerous ingestions in children.

d). List 4 medications that may be life threatening if a small child ingested one or two pills. (4 marks)

After completing the appropriate testing, you have decided this child needs treatment with N-acetylcysteine. Soon after commencing the appropriate first infusion, the child develops wide spread erythematous flushing and wheeze.

e). List 5 steps in your immediate management. (5 marks)

Question 6 (12 marks)

A 23-year-old male is brought to your urban district Emergency Department. He has been unwell for the last two weeks with fever and a cough, which began after working in flood clean up on the North Queensland coast. He has a background of well controlled asthma and has no allergies.

A senior registrar has commenced therapy but has called for your assistance. The patient is currently receiving a nebuliser. He is alert but intermittently combative with the nebuliser.

His initial vital signs are:

Pulse 130 bpm

BP 100/65 mmHg

Cool peripheries

SaO₂ 73% on 6L oxygen via Nebuliser Mask

Temp 38.5

BSL 6.9

Auscultation reveals bilateral crackles and minimal wheeze. A CXR is performed and is shown in the Props Booklet (Figure 3)

- a). List and justify four (4) potential anti-infective choices based on potential microbiology for this patient. (4 marks)

Despite initial therapy, the patient fails to improve. You are concerned he has developed Acute Respiratory Distress Syndrome (ARDS).

- b). List six (6) non-respiratory causes of ARDS in any patient. (3 marks)



c). State your escalating approach to oxygenation in this patient. (5 marks)

Question 7 (12 marks)

A 70-year-old woman presents to your Emergency Department with sudden loss of vision in her left eye. This happened 2 hours prior to her presentation and is painless. There is no history of trauma. She is assessed by one of your junior doctors who is concerned about a possible vascular cause. She asks you to help her differentiate a retinal vein occlusion from a retinal artery occlusion.

a). Compare and contrast the two conditions by filling in the table below. For each condition, provide two (2) risk factors/causes, the expected fundoscopy findings and name two (2) investigations that would be performed or initiated in the ED. (10 marks)

Condition	Central Retinal Artery Occlusion	Central Retinal Vein Occlusion
Major Risk Factors/Causes		
Fundoscopy findings		
ED investigations		

b). List two other causes of painless unilateral vision loss.

(2 marks)

Question 8 (12 marks)

A 36-year-old lady is brought in by her husband who is concerned that she is 'not herself'. Her GP has been investigating her for irritability, weight loss, palpitations and fatigue. The following tests are available:

TSH 0.2mIU/L (0.4-5mIU/L)
T4 20mcg/dL (5-11mcg/dL)

a). Provide a diagnosis and list four (4) possible aetiologies . (5 marks)

On assessment she appears restless and anxious. A set of vital signs are performed; her heart rate is 160 bpm, BP 91/57 mmHg, temperature 38 degrees Celsius.

b). List six (6) differential diagnoses that must be considered. (3 marks)

You conclude that her current symptomatology is caused by her thyroid disorder.

c). List and prioritise the medical treatments required, with a justification (4 marks)

Treatment	Justification

Question 9 (12 marks)

A 34-year-old female, primigravida at 34/40 gestation presents to your ED. She has been having regular painful contractions for the past hour, occurring at 3-minute intervals. She reports ruptured membranes about 30 minutes ago and is feeling the need to push. Your hospital does NOT have an obstetric or neonatal service. The nearest tertiary centre is 220 km away.

a). Complete the table below listing three (3) medications and three (3) pieces of equipment you will prepare to manage this patient in your ED. (6 marks)

Medications	Equipment

A male infant is born shortly after arrival by an uneventful delivery. At 1 minute, his APGAR score is 6.

APGAR SCORE	
Appearance	Peripheral cyanosis only
Pulse rate	> 100
Reflex irritability	Grimace, weak cry when stimulated
Tone	Some flexion
Respiration	Slow irregular breathing

b). List 6 measures that will need to be instituted in the immediate post-delivery period for this neonate. (6 marks)
