

## **DATA INTERPRETATION - time allowed 90 minutes.**

### **Question 1**

This is the ECG from a 22 year old female patient who has come to the A&E department complaining of palpitations and dizziness. There is no chest pain and her blood pressure is stable.

ECG shows narrow complex tachycardia rate 200 bpm (SVT)

**What is the rate? (Show your methodology)**

**What is your treatment in A&E?**

**What might you later notice on her resting ECG?**

### **Question 2**

This nine year old boy is brought into A&E after falling off his bike. He landed on his outstretched hand.

X-ray shows intra-articular fracture of distal radius

**Describe the injury in the X-ray**

**What is your treatment for the injury shown?**

**Describe the other four Salter-Harris Classifications**

### **Question 3**

Shown is the X-ray of a 29-year old asthmatic patient, who has a fever, and is complaining worsening shortness of breath and pleuritic chest pain.

CXR shows left mid-zone consolidation, prominent vascular markings, and *possibly* small right sided pneumothorax with rib injury.

**Describe the changes on X-ray**

**What are the 3 most important treatments in A&E?**

**What features in this patient would indicate admission to ITU?**

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#### Question 4

Shown is the photograph of a young boy.

Photo shows infant with erythematous rash affecting trunk & medial thighs. Consistent with target lesions of Erythema Multiforme.

**Describe this rash**

**Which body parts does this rash usually affect?**

**What is your diagnosis?**

**What are the systemic manifestations?**

**How is this rash known in its most severe form?**

#### Question 5

Photo A) shows tension pneumothorax

Photo B) shows patient with fractured ribs & clavicle, and a badly placed chest drain

**What are the abnormalities shown in photograph A?**

**What clinical signs would you expect to see from the end of the A&E trolley?**

**Describe the abnormalities shown in photograph B**

**What intervention in A&E may account for the findings in photograph A?**

#### Question 6

Not Asked - printing error of photograph.

(Possibly about Colles Fractures and their reduction)

### Question 7

This sixty-five year old female presented with a history of sharp chest pains. She has pain in the centre of her chest, which is worse on sitting up, and on deep inspiration.

ECG shows minimal changes. Unconvincing S-T segment changes, and septal Q-waves

**What is the diagnosis?**

**Describe the ECG abnormalities**

**What is the normal treatment for this?**

**What is heralded by a 'pericardial knock'?**

**What are the probable causes for this condition?**

### Question 8

Photograph of a patient being fitted with a Sager splint

**What is shown in the picture?**

**What are the indications for its use?**

**What analgesia can you use whilst it is being fitted?**

**Are there any contraindications to its use?**

**What are the benefits of using the splint in this patient?**

### Question 9

This young man has walked into the A&E department. He has been hit in the eye with a squash ball.

Picture shows injury to left eye. Some conjunctival injection, pupil circular, dark area infero-laterally. (?Hyphaema, ?Iris Detachment)

**What is shown?**

**What is your diagnosis?**

**What are your immediate management options?**

**What symptoms may the patient have?**

**What are the complications ?**

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### Question 10

This patient has fallen on a building site. He has landed astride a piece of scaffolding.

Picture shows gross scrotal swelling and bruising. There are bruises on his right thigh. There is also a smear of blood on his thigh, presumably from the urethral meatus.

Accompanying X-ray photo shows 'open-book' pelvic # with widened symphysis pubis and # line through right iliac crest.

**What signs can you see in the photograph?**

**What diagnosis do you suspect?**

**What investigation does he need in view of the above?**

**What do you see on the X-ray pelvis?**

**What is your management in A&E?**

**What intervention may need to be done by specialists before investigating further as in part (iii)?**

### Question 11

A mother brings her 5 year old child to see you. He has a 5 day history of malaise and fever. He has a single enlarged cervical lymph node on palpation. His temperature is now 40 degrees C. Photograph shows close up of kid sticking tongue out

**What sign is shown?**

**What is the diagnosis?**

**What other signs may you find?**

**What are the complications?**

### Question 12

Photo shows scene of a tram crashed into vehicles at a level crossing.

**What potential hazards can you identify in the picture?**

**Who is in overall control?**

**You are asked to attend from the hospital; who do you report to?**

**How do you identify the most senior fireman?**

**What is the difference between relative entrapment and absolute entrapment?**

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### Question 13

The ambulance crew have brought in a young male cyclist, who has been in collision with a car. He was wearing a helmet and has only *facial* injuries. His GCS score is 15. Initial inspection suggests he has a bilateral open mandible fracture.

Photograph shows man with crushed mandible.

**What are your management priorities?**

**What procedure must you be prepared for?**

**What are your landmarks for this procedure?**

**What is your plan for treatment in the A&E department?**

### Question 14

A manual labourer has attended A&E with the injury shown in photograph A.

Photo A shows nail through middle phalanx

**What structures may be damaged?**

**What is your management in A&E before removal of the nail?**

A patient who uses large amounts of alcohol presents to the A&E department with an injury which he says happened three weeks ago. His hand is shown in photograph B.

Photo B shows rotational deformity of little finger

**Describe the deformity**

**What is likely to have been the original injury?**

**What treatment would you provide in A&E now?**

### Question 15

Major incident preparation.

You are the registrar in a district general A&E on a night shift. You have three minor injury patients waiting for treatment, and three injured patients waiting for assessments. Eight of your twelve trolley spaces are occupied by patients who have been assessed and referred to specialities but awaiting beds.

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(Question 15 continued)

You receive the following message from switchboard:  
*"we have been informed of a major incident by ambulance control. Status - **major incident standby**"*

**a) Whoyagunna call?**

**b) What are you going to do in the A&E department?**

A short while later, a call is received from ambulance control:  
*"A coach has crashed on the M71 and caught fire. Estimate of fifty people injured. Major incident declared, activate plan."*

**c) What do you do in the A&E department?**

Patients begin to arrive in your department. Triage these six patients into the following triage categories...

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