### FELLOWSHIP EXAMINATION

# WRITTEN EXAMINATION - PART B SHORT ANSWER QUESTIONS PAST PAPERS

The following is provided in relation to the Short Answer Questions:-

- Question Paper Cover Sheet
- Past Papers

From 2003 the post examination report from the Chair of the Fellowship Examination Committee, which includes general comments from the Examiners and performance of each question, was made available to all candidates who sat the examinations and to DEMTs Australasia wide. These reports are not confidential and can be obtained from your DEMT.

## FELLOWSHIP EXAMINATION

# WRITTEN EXAMINATION - PART B SHORT ANSWER QUESTIONS

READING TIME: 10 MINUTES

EXAMINATION TIME: 2 HOURS

#### **DIRECTIONS TO CANDIDATES**

- 1. All questions must be attempted.
- 2. All questions are of equal value.
- 3. Answer each question in a separate book.
- 4. DO NOT write your name on the examination answer book.
- 5. Enter your examination number and question number only on each book.
- 6. Use both sides of the pages in the answer book.
- 7. If you use more than one book per question, ensure that your examination number and the question number appear on the cover of the additional answer book(s). Place the additional answer book(s) inside the first answer book for that question.
- 8. THIS QUESTION PAPER MUST BE RETURNED AT THE COMPLETION OF THIS SECTION OF THE EXAMINATION.

#### 1986

- A 24 year old female who is 4 months pregnant persists with recurrence of severe asthma. Outline the assessment and management of the patient.
- 2. List the complications of local anaesthesia.
- Outline the management of diarrhoea and vomiting in infants
- Describe the assessment of blood loss in a multitrauma victim who was a passenger in a motor vehicle accident at high speed.
- 5. Summarise the management of an elderly female patient who presents to the Emergency Department by ambulance after a fall. She has a large triangular shaped laceration over the front of the tibia but no other injuries.
- 6. Describe the assessment and management of the causes and metabolic disturbances of diabetic ketoacidosis.

#### 1987

- Describe the clinical manifestations and diagnosis of intussusception in children.
- 2. Describe the clinical features which distinguish croup from epiglottitis in children.
- 3. Describe the pathophysiology and management of hydrocarbon ingestions (eg. petrol, kerosene, benzene).
- 4. Describe the causes, diagnosis and treatment of pulmonary complications in burn patients (in the first four hours after injury).
- 5. Describe the clinical and radiological assessment and initial management of a patient with a bilateral facet dislocation of cervical vertebrae six (C6) on cervical vertebrae seven (C7).
- 6. A 24 year old woman is admitted following an overdose of benzodiazepines. Her medical recovery is uncomplicated. How would you assess the risk of her completing suicide following discharge from hospital?
- 7. An adult patient is found unconscious and cold. The rectal temperature is 28 degrees Celsius.
  - (a) List the possible causes of hypothermia.
  - (b) List the laboratory evaluation.
  - (c) List the initial hospital treatment.
- 8. An adult patient with severe pulmonary oedema is brought to the hospital. Treatment is initiated with mask oxygen (6 litres/minute) and intravenous frusemide.

- (a) What factors determine the decision not to intubate?
- (b) List the treatment indicated.

 During treatment repeat arterial blood gas results are:

 Time 0645 hrs 0730 hrs
 O2 flow 61/min 0.03
 pH occ 2 pO2 pO2 pO2 stand bicab.
 stand bicab.
 base excess pase excess pose occ section of the pose occ section occ

(c) Discuss the interpretation of these results.

#### 1988

- Describe the assessment, investigation, treatment and disposal of patients presenting to the Emergency Department with an acute knee injury.
- 2. An elderly woman is brought to the Emergency Department by relatives who say she has "gone off" over the previous 24 hours and becomes confused. List the likely diagnoses and describe the assessment and investigation of the patient.
- 3. You receive a telephone call from a distraught girl stating that her boyfriend swallowed a whole packet of paracetamol tablets after an argument. He refuses to come to hospital. Outline your telephone strategy and your method of resolving the problem.

- A 9 month old child presents with a 2 day history of diarrhoea and vomiting. Discuss the assessment of hydration of this patient.
- 5. A one year old child presents with a short history of fever and a generalised convulsion lasting 5 minutes. On examination in the Emergency Department the child is drowsy, the temperature 39 degrees Celsius. Describe the assessment, investigation, treatment and disposal of the patient.
- 6. Discuss the instructions given to junior medical staff (interns and junior residents) in the Emergency Department concerning patients who are sent to hospital by their local doctor with a referral letter for admission (for example, a patient with a suspected myocardial infarction).
- Describe the assessment, investigation, treatment and disposal (in the first eight hours following injury) of a patient with burns to the trunk and both arms.
- 8. Discuss the rationale for the use of MAST (military antishock trousers) in the traumatised patient.

#### 1989

- 1. A 72 year old lady who has been on Warfarin for the past 3 months for a deep venous thrombosis presents with a 12 hour history of epistaxis. She is on Nifedipine 10mg twice daily for hypertension. Examination reveals a pulse of 90 beats per minute and a blood pressure of 110/45 mm mercury. Discuss your assessment, investigation, treatment and disposal.
- Discuss the use of sodium bicarbonate in cardiopulmonary resuscitation.
- 3. A 2 year old female is brought to your department because her mother says that she has been walking with a limp for the past 2 days. Describe your assessment, investigation, treatment and disposal.
- 4. Discuss the toxic effects and treatment in patients with organophosphate poisoning.
- 5. Write brief notes on the assessment, treatment and disposal of a patient following near drowning.
- Discuss the value of plain radiography in the assessment of abdominal pain.
- 7. (Omitted in error.)
- 8. A 46 year old carpenter presents with a painful, swollen left hand and gives a history that 36 hours ago he thinks that he completely removed a large splinter from the palm of his hand.
  - (a) Describe the features of an infected hand.
  - (b) What are the likely pathways of infection involved in its spread?
  - (c) What is the optimum treatment regime?
  - (d) What organisms are likely to be involved and what empirical antibiotic choice would you make?

- 1. What are the clinical features of infective endocarditis? What tests would you do if you suspected it, and what results would you expect?
- 2. There is a patient in your department who is comatose following an antidepressant overdose. She is intubated and ventilated and it will be some time before she is admitted to Intensive Care. What regular observations should be done and what physiological monitoring is required?
- 3. What would make you suspect that a child was a victim of regular physical abuse?
- 4. Discuss the treatment and complications of Colles fracture in the elderly.
- 5. Describe how you would manage a patient presenting with a history of continuous fitting over a period of 30

- minutes, with no return of consciousness. The patient is blue and hyporeflexic with bilateral dilated but reactive pupils.
- A drunk labourer is brought in by friends after a fight, having been stabbed in the right upper quadrant of his abdomen. Outline your assessment and treatment.
- Discuss the initial management of complete heart block associated with hypotension.
- 8. What are the issues that you should consider when dealing with the aggressive patient demanding immediate treatment and who has been triaged as having a minor ailment and told there will be a long waiting time?

#### **SEPTEMBER 1990**

- A 45 year old obese truck driver presents with a history
  of sudden onset of severe epigastric pain radiating to his
  back following a bout of heavy drinking. On
  examination he has a temperature of 37 degrees Celsius,
  a pulse rate of 120 beats per minute and a blood pressure
  of 90/60 mm mercury. He has a rigid abdomen and
  auscultation of his chest reveals bilateral basal
  crepitations.
  - Initial investigations reveal a serum amylase of 300 international units per litre (normal 23-65).
  - (a) Describe the acute treatment of this patient.
  - (b) What other investigations would you order? Discuss their relative prognostic implications.
- 2. A 75 year old woman presents to the Emergency Department after "collapsing" at a luncheon at a local club. She was unconscious for one or two minutes and had a brief seizure, according to onlookers. She has a history of ischaemic heart disease and hypertension and currently takes Digoxin, Frusemide, potassium supplements and Prazosin.
  - Discuss the possible diagnoses, investigation and management of this patient.
- You are the Director of an Emergency Department when a resident medical officer comes to you requesting help in the interpretation of an X-ray of a patient's cervical spine.

Please outline to him:

- (a) The indications for the performance of a cervical spine X-ray.
- (b) What X-ray views would constitute a cervical spine series?
- (c) What guidelines would you offer in order to correctly interpret the X-rays?
- A mother brings in her unwell 7 year old child with a 24 hour history of fever, nausea, vomiting and abdominal pain.
  - (a) How would you assess this patient?
  - (b) List common non-surgical conditions associated with such presentations.
- 5. A patient runs to the triage desk in the Emergency Department where you are standing. The patient has a black snake attached to the index finger of his right hand. he snake promptly lets go of the finger and slithers to the floor in the waiting room, whilst simultaneously the patient collapses to the floor.
  - Discuss the initial, then subsequent management.
- 6. A 15 year old girl presents with a three hour history of pain in the right lower quadrant of her abdomen.
  - (a) What are the differential diagnoses?
  - (b) What investigations would you perform?
  - (c) What clinical or investigative findings would indicate a need for urgent surgical intervention?

- 7. You have arrived by ambulance at the scene of a motor vehicle accident. A 25 year old male patient, apparently the driver of a car which left the road and skidded into a tree, is being attended by ambulance officers. He has a scalp laceration, facial bruising and seat belt bruising to his chest and abdomen. His Glasgow coma score is 15/15 but he denies any recall of the accident. He smells very strongly of alcohol and he vehemently refuses any treatment or transport to hospital. Discuss your management of this man.
- Discuss the transport requirements of patients with spinal cord injuries.

#### **MARCH 1991**

- 1. You are called to the triage desk of the Emergency Department where a heroin addict is demanding to be seen immediately. He is complaining of abdominal pain accompanied by sweatiness and is requesting a prescription for Oxazeman to "settle his nerves". He is on a Methadone programme and his last dose of 80 milligrams was twenty-four hours previously. He claims to be withdrawing and is unable to reach his dispenser that day.
  - Discuss the issues involved in the management of this patient.
- 2. A three year old girl is transported to the Emergency Department following a head injury. She is in a cervical collar, making incomprehensible sounds, thrashing about and has an extensor response with no eye opening to pain. Her vital signs consist of a pulse rate of 90 beats per minute, a blood pressure of 130/65 mm mercury and respiratory rate of 8 breaths per minute.
  - (a) Discuss your management.
  - (b) How is the assessment of this child different to that of an adult?
- 3. A six week old full term infant (his birth weight was 2500 grams) presents with a two week history of recurrent vomiting despite initially feeding well with a good appetite. At times, the vomitus contained partially digested milk and his motions were less regular. Examination revealed a lethargic infant with decreased skin turgor. His weight is 2650 grams. His vital signs are a pulse rate of 160 beats per minute, blood pressure of 70/50 mm mercury, and respiratory rate of 24 breaths per minute. The abdomen is distended and a peristaltic wave is observed.
  - (a) Propose a plan of investigations and their likely results
  - (b) How would you treat this infant?
  - (c) Estimate the baby's fluid requirements over the next twenty-four hours.
- 4. A 48 year old female with rheumatoid arthritis presents with a sudden onset of severe pain and swelling in the right knee. Her current treatment is Aurothioglucose 50 milligrams weekly and Prednisone 5 milligrams daily. Examination reveals the right knee to be painful in all movements with palpable crepitus and a positive patellar tap. She has a temperature of 38 degrees celsius. What are:
  - (a) The differential diagnoses;
  - (b) The investigations which would confirm these diagnoses; and
  - (c) Their initial treatment.
- A 40 year old man is brought to the Emergency Department after taking an overdose of prescribed medication.

Describe:

- (a) The factors influencing your estimation of suicide risk;
- (b) The indications, both absolute and relative for hospitalisation;
- (c) What legal considerations there are in your management decision.
- A 30 year old woman presents to your Emergency Department with a history of increasing vaginal discharge, pelvic pain and dysuria commencing four days after menstruation.

#### Describe:

- (a) Your differential diagnoses;
- (b) The investigations you would order;
- (c) The indications for hospitalisation;
- (d) Your initial treatment.
- 7. A 55 year old known alcoholic presents with progressive confusion. He has a temperature of 37.5 degrees Celsius, a pulse rate of 115 beats per minute and a blood pressure of 90/70 mm mercury. He is drowsy, jaundiced and has ascites with peripheral oedema.
  - Discuss your management.
- 8. A 55 year old lady presents with dyspnoea. She is known to have chronic airways limitation and is on home oxygen at 2 litres per minute. At examination she is febrile 37.4 degrees Celsius, with a respiratory rate of 30 breaths per minute. Her pulse rate is 120 beats per minute and blood pressure 100/70 mm mercury. She is centrally cyanosed, sweaty and auscultation reveals poor air entry with widespread coarse crepitations. Outline the:
  - (a) Initial assessment;
  - (b) Investigations;
  - (c) Treatment;
  - (d) Disposal.

#### SEPTEMBER 1991

- 1. A 54 year old woman presents with severe lumbar back pain. There is a history of mitral valve replacement and she is on Warfarin 4 milligrams daily. Examination reveals multiple bruises throughout the body.
  - (a) What factors may alter prothrombin time in this patient?
  - (b) What management regime would you initiate in the event of confirmed overdosage?
- 2. A 28 year old man presents with recurrent fever, headache and night sweats after returning from the Philippines. Examination reveals a temperature of 38.5 degrees Celsius. There are multiple purpuric spots over his body and 2 centimetres splenomegaly.
  - (a) What are the possible diagnoses?
  - (b) What investigations would you perform to confirm or exclude these diagnoses?
  - (c) What clinical or investigative findings would indicate a need for hospital admission?
- You are requested to give a lecture to junior medical officers in relation to the indications, precautions, procedure and complications of the insertion of peripheral intravenous cannulae. Outline your points of emphasis.
- 4. A two year old child has sustained a 7 centimetre laceration to the medial aspect of the left elbow. Outline your treatment and the factors involved in the determination of your treatment.
- A 38 year old woman presents with periumbilical pain.
   There is a history of multiple surgical interventions many years ago including cholecystectomy, appendicectomy and right sided oophorectomy.
  - (a) What are the differential diagnoses?

- (b) Justify the relevant investigations which you would request to determine the cause.
- (c) What are the indications for hospital admission?
- (d) How would you manage her pain.
- A 78 year old woman presents to the Emergency Department at 7.30 pm with an acute confusion state.
  - (a) How would you assess this patient? What precipitating factors are you aware of?
  - (b) How would you differentiate between an acute confusional state and dementia?
  - (c) How would you dispose of this patient?
- A six month old infant presents with acute onset of wheezing.
  - (a) What are the indicators of the severity of respiratory distress?
  - (b) Describe and discuss your initial treatment regime.
  - (c) What factors will determine the need for admission? If the infant is discharged, what advice would you give to the parents?
- You are in charge of a country hospital Emergency
  Department which sees 20,000 patients per year. You
  have been requested to replace an outdated defibrillator
  monitor.
  - Outline the factors which would guide your choice in determining a suitable replacement.

- During the resuscitation of an intravenous drug user, a member of staff suffers a needle stick injury.
  - (a) What immediate measures would you institute?
  - (b) Outline your advice in relation to hepatitis B and human immuno-deficiency virus prophylaxis.
  - (c) What follow-up would you arrange?
- A 45 year old man presents with a Glasgow coma score of 5 following a head injury. A resident medical officer has sought your advice in intubating this man. Outline:
  - (a) The indications for intubation and the factors which you would suggest a difficult intubation.
  - (b) The technique of intubation.
  - (c) The potential complications of intubation.
- 3. A 4 year old child presents with an attack of asthma.
  - (a) Outline the clinical and investigative indicators of severity.
  - (b) Outline the admission criteria.
  - (c) If the child has a peak expiratory flow rate of 50 litres per minute (normal value: 100 litres per minute), what management plan would you institute?
- A 3 year old boy has ingested an unknown quantity of Digoxin.
  - (a) Outline the potential complications of this ingestion.
  - (b) Outline the management plan of this patient.
- 5. A 37 week pregnant woman presents with a history of severe headache accompanied by abdominal pain. Examination reveals a blood pressure of 180/120 mm mercury. There is tenderness and guarding over the right hypochondrium. She is afebrile.
  - (a) What is the provisional diagnosis? How would you confirm this?
  - (b) Outline your management plan.
- 6. A 27 year old man collapses following a 14 kilometre fun run. Examination reveals a core temperature of 40 degrees Celsius. He is sweaty and disoriented. During the examination, he begins to fit.
  - (a) What immediate resuscitative efforts are indicated?
  - (b) List the other life threatening complications which may occur and outline the management of two of these complications.

- A 65 year old presents with a history of vomiting and dizziness. Examination reveals nystagmus.
  - (a) Outline the clinical features which would distinguish between a central and a peripheral cause.
  - (b) Discuss the treatment options if the cause was a peripheral one.
- 8. An 82 year old demented female is referred from a nursing home with a history of anorexia and "looking unwell". Examination reveals a rigid abdomen.
  - (a) What are the important differential diagnoses?
  - (b) How would you assess and manage this patient?

#### **SEPTEMBER 1992**

- A 6 month old child is found by his parents to be cyanosed and unresponsive in bed. He is brought to the Emergency Department where he dies despite extensive resuscitative efforts. The parents are anxiously awaiting the outcome.
  - (a) Outline the possible causes of death.
  - (b) Outline your management of this situation, in particular your advice to the parents.
- Describe a trauma scoring system, other than the Glasgow coma score, with which you are familiar. Outline its application, including its strengths and limitations.
- 3. A 40 year old man with a past history of hypertension presents with a progressive onset of right sided weakness over one hour. He also complains of a headache. The man is disoriented in time and place but responds appropriately to command. His blood pressure is 240/140 mm of mercury.
  - Outline your management and the rationale behind it.
- An acutely distressed 25 year old man attempts to cut his wrists.
  - (a) What clinical features would you seek to confirm a psychotic state?
  - (b) Compare and contrast the psychotropic agents available to treat an acutely psychotic patient.
- 5. A 45 year old unconscious man is brought to a district Emergency Department after being rescued from a house fire in which he had been trapped for 30 minutes. He has no significant external burns.
  - (a) Outline your initial management and the rationale behind your management.
  - (b) Describe the circumstances and timing under which hyperbaric therapy would be indicated.
- 6. An elderly woman was found in a pool of urine on the floor of a unit where she was last seen 48 hours previously. Examination in the Emergency Department revealed her to be semi-conscious with a temperature of 34 degrees Celsius, pulse rate of 130 beats per minute and a systolic blood pressure of 90 mm mercury. Her eyes were sunken and her skin turgor decreased. A palpable closed fracture of the midshaft of the right femur was detected.
  - Outline the immediate management of this case and the rationale behind it.
- You have been approached by a member of the junior medical staff regarding the principles of tetanus immunoprophylaxis.
   Outline your advice.
- 8. A 21 year old male presents with unilateral scrotal pain.
  - (a) Outline the possible diagnoses and the indicators (by either history, examination or investigations) which would support these diagnoses.
  - (b) Outline the management strategies of the non-surgical conditions mentioned.

#### **MARCH 1993**

- 1. A 3 year old child presents with gastroenteritis.
  - (a) What clinical features could distinguish between a bacterial and a viral infection?
  - (b) What bacterial causes of gastroenteritis would require antibiotic therapy? Describe an appropriate regime for each cause.
- A woman presents with a one day history of vaginal bleeding. Her last menstrual period occurred 5 weeks previously.
  - (a) What are the clinical features suggestive of a threatened miscarriage?
  - (b) What are the clinical features suggestive of an ectopic pregnancy?
  - (c) Discuss the utility of ultrasound in this clinical setting.
- 3. A 70 year old woman slips and falls onto her right outstretched arm. X-ray confirms a Colles fracture.
  - (a) What are the radiological features of a Colles fracture?
  - (b) A closed reduction is indicated. List the alternative regional anaesthetic techniques and their potential complications.
  - (c) Outline the instructions that you would give the patient on discharge after reduction.
- 4. An elderly woman presents with a fever of 38.5 degrees Celsius and a swollen right knee.
  - (a) What are the major differential diagnoses?
  - (b) What factors would predispose an elderly patient to septic arthritis?
  - (c) Outline your management of this patient.
- 5. You are in charge of an Emergency Department. You receive a telephone call from Ambulance Control stating that a bomb has exploded in a crowded gathering in a nearby mosque. You are requested to prepare the department for an influx of 50 patients.
  Outline your response.
- 6. A 60 year old man with a past history of hypertension presents with epistaxis.
  - (a) Outline your approach to this case.
  - (b) Describe your follow-up arrangements.
- 7. A young woman delivers a baby of 36 weeks gestation in a taxi outside the Emergency Department. The baby is cyanosed with a pulse of 90 beats per minute, is limp, with slow irregular respirations and does not respond to stimulation.
  - Outline the steps that you would take in resuscitating this newborn infant.
- 8. A 2 year old child has ingested an unknown quantity of eucalyptus oil.
  - (a) Outline the potential complications of this ingestion.
  - (b) Outline the management plan for this patient.

#### **OCTOBER 1993**

- 1. You are working at a rural hospital where a 30 year old man presents with an amputated right hand at the level of the wrist following a farm accident. His workmate has brought in the amputated part.
  - (a) Outline the management of this patient, including the care of the amputated limb.
  - (b) What are
    - (i) the predictors of a favourable outcome?
    - (ii) the relative contraindications to reimplantation?
- A 7 year old boy presents with a history of fever and vomiting. Examination reveals the child to be drowsy with a stiff neck.
  - (a) Describe the management of this child.

- (b) Describe the lumbar puncture findings that would confirm the diagnosis of bacterial meningitis.
- 3. (a) Describe the clinical picture of a patient with severe hyperthyroidism.
  - (b) List the factors which may precipitate a thyroid storm.
  - (c) Outline your management of a patient with thyroid storm.
- 4. You have received a letter of complaint from angry relatives who complain about the treatment and discharge of a patient from your Emergency Department. Outline your approach to this matter.
- A previously well 25 year old patient presents at 30 weeks gestation with right sided abdominal pain.
   Discuss the assessment and management of this patient.
- 6. You have received a phone call from Ambulance Control warning you of the impending arrival of a 26 year old male who has been stung by a bee and is having "breathing difficulties".
  - (a) What are the potential differential diagnoses and what clinical and investigation features would discriminate amongst these?
  - (b) The patient has clinical evidence of upper airway obstruction. What is your management?
- 7. A 19 year old girl is referred to your department by her local doctor who suspects she may be schizophrenic.
  - (a) How would you establish the diagnosis?
  - (b) What are the indications for admission?
- 8. A 72 year old patient with a history of chronic airflow limitation presents with agitation, vomiting and palpitations.

He has been on a slow release theophylline preparation for several years and has recently increased his medication himself due to a worsening of his airway disease.

- (a) What are the diagnostic possibilities?
- (b) Outline a plan of management of this case.

#### **MARCH 1994**

- Discuss the differences in basic life support between adults and children.
- 2. (a) When and how should fresh frozen plasma be used? What complications may occur?
  - (b) What conditions are most commonly associated with disseminated intravascular coagulation (DIC)?
  - (c) How is DIC diagnosed and treated?
- A 25 year old woman has ingested an unknown quantity of amitriptyline.
  - (a) What are the potential complications of this ingestion?
  - (b) Outline the management plan for this patient.
- 4. Following a head injury, discuss:
  - (a) the criteria for admission to hospital;
  - (b) the indications for a cerebral computer tomography (CT) scan.
- 5. A child presents with a seizure.
  - (a) What features would you use to distinguish between a febrile convulsion and a more serious seizure disorder?
  - (b) Outline your management if a child presents in status epilepticus.
- Outline the causes and the diagnostic features of sudden visual loss.
- 7. An athlete presents with a painful deformed shoulder.
  - (a) What features would differentiate between an anterior and posterior dislocation?
  - (b) Describe your management of an anterior dislocation.
  - (c) What discharge advice would you give following successful reduction?

- 8. A 69 year old woman presents with abdominal pain.
  - (a) What are the clinical and other features which would support the diagnosis of mesenteric ischaemia?
  - (b) Outline your management of mesenteric ischaemia.

#### **OCTOBER 1994**

- 1. A 45 year old man with a history of vomiting and abdominal pain is diagnosed to have acute pancreatitis.
  - (a) Outline your management of this disease.
  - (b) Give a detailed list of the possible aetiologies of this disease.
  - (c) Describe the features that would indicate a poor prognosis.
- 2. A staff member sustains an accidental needle stick injury from a patient who is known to be HIV positive.
  - (a) Outline your management.
  - (b) What are the advantages and disadvantages of zidovudine (AZT) prophylaxis?
- 3. A 50 year old insulin dependent diabetic presents with ketoacidosis.
  - (a) List the possible precipitants.
  - (b) Outline your management.
- (a) Describe the different procedures for performing cricothyrostomy.
  - (b) What are the complications of cricothyrostomy?
- A six month old child presents not moving the right arm. X-ray reveals a spiral fracture of the mid shaft of the humerus.
  - Outline your management of this case.
- 6. A man is brought to your department by private transport after he has attempted to hang himself. He is restless and muttering incomprehensible noises. With painful stimuli, he opens his eyes and flexes his limbs. His pulse rate is 60 per minute and blood pressure 180/110mm of mercury.
  - What is your plan of management?
- 7. Describe the management of a 62 year old man who presents to your Emergency Department with a letter from a local GP, which reads, "Dear Doctor, this patient's creatinine is 0.74 (normal range 0.06 0.10), having been 0.08 when I checked it six months ago. Please admit and treat".
- 8. (a) What are the clinical and investigative features of pelvic inflammatory disease which would differentiate it from other causes of acute abdominal pain?
  - (b) Outline your approach to the management of a patient with pelvic inflammatory disease.

- A 35 year old man arrives in your Emergency Department after ingesting an organophosphate pesticide. He is vomiting, anxious and restless.
  - (a) Describe the mechanism of organophosphate toxicity and the resultant symptoms and signs.
  - (b) How would you assess and treat this patient?
- 2. You are the on-duty Emergency Department consultant. A 60 year old man is brought by ambulance for certification of death after being found dead in bed by his wife. As you examine the person, you are told that he was seen and discharged from your department 24 hours previously with chest pain. His wife and son arrive in a distressed state and angrily confront reception staff, demanding to speak to the "doctor in charge". How would you deal with this situation?
- A 20 year old man is brought by ambulance to your Emergency Department after being involved in a high speed motor vehicle accident. His pulse is 58 beats per minute and blood pressure 85/55 mm Hg. He is alert and

orientated, with no external evidence of injury. He complains of pain in the neck and says he can't feel his arms or legs.

Outline your assessment of this patient.

4. A 60 year old man presents with two hours of severe central chest pain radiating to both arms. He is pale and diaphoretic, has a pulse rate of 96, a blood pressure of 90/60 mm Hg and has moist inspiratory crepitations over all his lung fields. His ECG shows an acute anteroseptal infarction.

Discuss the treatment options of this patient.

- 5. (a) Discuss the relative merits of the methods available to confirm endotracheal tube placement.
  - (b) Describe your protocol on recognition of a failed intubation.
- A six month old child presents with a fever of 39 degrees Celsius
  - (a) What clinical manifestations may indicate that this child has septicaemia?
  - (b) Assuming this child has bacterial meningitis and his weight is 8 kg, describe in detail his management, including the expected cerebrospinal fluid findings when a lumbar puncture is performed.
- 7. An obese 80 year old man presents after having collapsed with the sudden onset of severe back pain. He is sweaty, with a pulse rate of 120 beats per minute and a blood pressure of 100/60 mm Hg. The peri-umbilical area is tender, with no obvious expansile mass in the abdomen.
  - Discuss the investigations available to assist you in the diagnosis.
- 8. A 14 year old girl is brought to your Emergency Department by her friends. She is smelling of alcohol, is uncooperative, constantly screaming abuse at the staff and is disrupting the department. She tries continually to get out of bed, only to collapse on the floor.
  - (a) What are the risk factors for suicide in this adolescent?
  - (b) Outline your management of this case.

#### **SEPTEMBER 1995**

- Outline the causes of pulseless electrical activity (PEA).
   Discuss the management of PEA.
- 2. A 27 year old female presents after a high speed motor vehicle accident in which she was the front seat passenger. She is 28 weeks pregnant. Her pulse rate is 75 beats per minutes, blood pressure 100/60 mm Hg, peripheral perfusion appears normal and she is alert and orientated. Her only external sign of injury is a seat belt mark on her chest and abdomen.
  - Discuss the issues peculiar to pregnancy that should be considered in this patient's assessment, investigation and disposition.
- 3. Outline the assessment and management of a previously well 26 year old man who presents with an acutely painful, red and swollen left testis.
- 4. Describe the technique of airway support and intubation of a 15 month old child who has status epilepticus.
- 5. A 56 year old woman presents from your hospital's Nuclear Medicine Department. She has a lung scan result showing multiple mismatched perfusion defects to the right middle and lower lobes and the left lower lobe, interpreted as a high probability of pulmonary embolic disease. Clinically she has a pulse rate of 125 beats per minute, a respiratory rate of 30 per minute, a blood pressure of 95/65 mm Hg, her JVP is elevated by 6 cm and she has clear lung fields. Her arterial blood gas on

60% oxygen by mask is  $PaO_2$  52 mm Hg,  $PaCO_2$  32 mm Hg,  $PaCO_2$  32 mm Hg,  $PaCO_3$  15.3 mmol/L.

Describe your management.

- 6. You have recently been appointed Director of Emergency Medicine in a hospital which is about to undergo a major refurbishment. Outline your approach to designing the new Emergency Department in this hospital.
- 7. You assess an 80 year old female with melaena. Her vital signs consist of a pulse rate of 110 beats per minute and a supine blood pressure of 120/70 mm Hg which falls to 100/70 mm Hg when sitting. The haemoglobin level is 70 g/L (normal >115 g/L). What are the risks and complications of blood transfusion in this patient?
- Describe the manifestations of digoxin toxicity and its management.

- You are a doctor in a Medical Centre which is responsible for receiving referrals from first aid personnel at a fun run. A 28 year old collapses after 13 km of a 14 km run held in an ambient temperature of 21° C. Examination reveals a man who is disoriented and sweaty with a pulse rate of 140 per minute, a BP of 90/60 mmHg, and a rectal temperature of 41° C. He is shouting and thrashing about. During your assessment he has a generalised seizure.
  - Describe your management of this case.
- Describe how you would recognise and manage a case of domestic violence.
- Discuss the role of the Beta Human Chorionic Gonadotrophin (β-HCG) test and ultrasound in the diagnosis of ectopic pregnancy.
- 4. (a) In what clinical settings is antibiotic prophylaxis of merit?
  - (b) What is your antibiotic choice and its rationale in the prevention of infective endocarditis in a patient who has a Ventricular Septal Defect, is allergic to penicillin and is about to undergo an urgent surgical procedure?
- 5. A 45 year old man with a history of chronic alcohol abuse presents with profuse haematemesis and nelaena. Clinically, he has stigmata of chronic liver disease and appears mildly jaundiced. His pulse is 102 beats per minute and regular, and his BP is 95/60 mmHg.
  - (a) What are the prognostic indicators for a poor outcome in this patient?
  - (b) Outline your approach to treatment if the patient continues bleeding and remains unstable after initial fluid resuscitation.
- 6. A 43 year old female who is on lithium therapy for manic depressive psychosis is brought to the Emergency Department with vomiting and diarrhoea. She is dysarthric, confused and hyperreflexic to examination.
  - (a) Describe your management and disposition of this patient.
  - (b) What are the indications for haemodialysis?
- 7. A 3 year old boy, who has a history of hydrocephalus treated with the insertion of a ventriculo-peritoneal shunt 2 years ago, presents to the Emergency Department following a generalised seizure lasting 20 minutes. Describe your management and disposition of this child.
- 8. A 25 year old complains of facial pain following an assault.

- (a) What are the major symptoms and clinical signs which indicate a fracture involving the zygomatic bone or zygomatico-maxillary complex?
- (b) What are the indications for operative intervention?

#### 1996/2

- A twenty year old intellectually disabled man is brought to your Emergency Department after being rejected by his carers in a hostel because of violence towards other clients. He has difficulty in communicating and requires six staff members to restrain him and his behaviour is disrupting the department. Outline your approach to the assessment and treatment of this man.
- 2. A forty year old man complains of a red eye.
  - (a) Outline the appropriate steps required for adequate assessment.
  - (b) Describe the clinical features and outline the treatment required for the following conditions:
    - (1) Acute glaucoma
    - (2) Anterior uveitis
    - (3) Corneal abrasion
- Describe, in an appropriate sequence, drugs which could be used to manage a five year old child in status epilepticus.
- 4. Outline your treatment strategy for a thirty year old female brought to the Emergency Department with a fluctuating level of consciousness and intermittently vomiting. Initially her rectal temperature is noted to be 38.7°C, the pulse rate is 120 bpm and the blood pressure 90/60 mmHg. Muscular rigidity is clinically apparent. Empty bottles of Fluoxetine, Paracetamol, Phenelzine and Amitriptyline had been found beside her.
- Discuss the indications, delivery technique and possible adverse effects of continuous positive airways pressure delivered by face-mask.
- 6. As the director, outline your approach in ensuring that your Emergency Department gives quality care.
- 7. Compare and contrast the identification, assessment and treatment of diabetic ketoacidosis and non-ketotic hyperosmolar coma.
- 8. An elderly women is brought to the Emergency Department after being rescued unconscious from a house fire. She is subsequently confused and dyspnoeic, her pulse is noted to be 120 bpm and her blood pressure 90/79 mmHg. She has burns to 30% of her body surface including her left arm which is grossly swollen with no radial pulse. Outline the treatment required.

#### 1997/1

- A call is received from ambulance control stating that in ten minutes your Emergency Department will receive five adult victims of chlorine gas inhalation from a factory accident.
  - (a) What immediate action would you take in the ten minutes available?
  - (b) What clinical features are suggestive of significant exposure to chlorine gas?
- Discuss the investigation, treatment and disposition of a female nine month old infant who presents with a three day history of fever, higher than 38.5 deg C and with no obvious source of infection found on physical examination.
- 3. You have received a complaint from a member of the nursing staff alleging harassment by a member of the Emergency Department medical staff. Describe how you would resolve the matter.
- 4. A sixty six year old female presents with a two day history of progressive difficulty in getting up from a chair. There is a past history of oral steroid dependency

- for asthma, ischaemic heart disease and a mastectomy for breast cancer. She is haemodynamically stable and examination of the legs reveals proximal symmetrical weakness, grade 4/5 with brisk reflexes and no sensory loss
- (a) List the differential diagnosis.
- (b) Discuss your approach to investigating this patient's problem.
- 5. A seventy two year old man presents with sudden onset of severe retrosternal pain following vomiting.
  - (a) Describe the clinical and investigational findings which would support a diagnosis of oesophageal rupture.
  - (b) Describe the priorities in management.
- Discuss the utility and relative merits of CT, ultrasound and diagnostic peritoneal lavage in the investigation of blunt abdominal trauma.
- Discuss the alternatives for sedation and anaesthesia of a two year old child having a laceration to the lower lip sutured in the Emergency Department.
- 8. List the differences in symptoms, signs and management between croup and epiglottitis in children.

- A 6 year old is brought to the Emergency Department, with worsening asthma for the last 4 hours. On arrival, she is unable to speak, has marked use of accessory muscles, respiratory rate 60/minute, pulse rate 160/minute and oxygen saturation of 92% on 6 litres per minute of oxygen.
  - (a) Discuss the treatment options for this patient.
  - (b) What are the indications for intubating this patient?.
- An elderly man is sent to the Emergency Department after becoming increasingly confused and having allegedly assaulted a staff member at his nursing home.
  - (a) Outline the investigation of this elderly man.
  - (b) What is your plan for safely caring for the patient in your Department?
- 3. (a) List your criteria for the extubation of a patient in the Emergency Department.
  - (b) Describe how you would manage the extubation of a patient post cardiac arrest, who fulfilled your criteria for extubation.
- Describe the assessment of a 30 year old female presenting with a 2 day history of pain in the right iliac fossa.
- A 4 month old child dies in your Department, after attempted resuscitation for an apparent Sudden Infant Death. Describe the issues that now need to be addressed with the family.
- A 65 year old man with insulin dependent diabetes mellitus presents to the Emergency Department with a sudden decrease in vision.
  - (a) Describe your assessment of this patient.
  - (b) List your differential diagnosis.
- 7. A 22 year old is brought in by ambulance after falling from his skateboard. He has a large swelling on his left forehead, is aggressive and incoherent and wants to leave the Emergency Department. Discuss your management.
- 8. (a) Discuss the management of a potential alcohol withdrawal in a 54 year old who drinks 120g of alcohol per day, and is being admitted for treatment of small bowel obstruction.
  - (b) The patient is still in the Emergency Department, 24 hours after admission, and becomes acutely sweaty, tachycardic and tremulous. Outline your assessment and treatment.

Fellowship Examination Past Papers - Part B

#### 1998/1

- An 8 day old full term baby presents to the Emergency Department with increasing jaundice.
  - (a) Describe your assessment.
  - (b) List the differential diagnosis.
- Discuss the treatment options for a 75 year old woman who presents with an exacerbation of her chronic airways limitation. Her arterial blood gases on room air on arrival are:

pH 7.28 pCO2 62 mmHg O2 52 mmHg HCO3 17 mmol/L

BE 5 oxygen saturation 84%.

- Discuss options for the removal of nasal and aural foreign bodies in children in the Emergency Department.
- 4. A 17 year old female is brought to the Emergency Department by friends. They tell you she has taken an unidentified white tablet and alcohol at a party. She is tachycardic, agitated and confused and wants to leave the ED. Outline your assessment and management.
- 5. A 40 year old man presents to the Emergency Department with fever and confusion for 24 hours. His wife tells you that he returned from holiday in Bali a week ago and had his spleen removed after a motor vehicle accident aged 15. He is febrile 39 C, pulse 120, blood pressure 80 systolic.
  - (a) List your differential diagnosis?
  - (b) Describe your initial management?
- 6. (a) Write guidelines for the assessment of hand injuries presenting to the Emergency Department.
  - (b) Discuss which nail bed injuries, bites and infections of the hand require immediate surgical referral.
- A 64 year old man presents with increasing abdominal pain following a barium enema for investigation of constipation.
  - (a) Describe your assessment of this man.
  - (b) X-rays show free intraperitoneal air. Describe your management.
- 8. An electricity worker sustained a high voltage injury while working on a power line. He lost consciousness for 60 seconds and has injuries to his left hand and both feet with loss of tissue. Describe your assessment and management of this patient.

#### 1998/2

- A thirty two year old female is referred by her General Practitioner to the Emergency Department. She is thirty four weeks pregnant and has a twenty four hour history of right-sided abdominal pain. Outline your assessment and early management of this patient.
- A twenty year old man presents after being rescued from a house fire. He was initially found unconscious, but on arrival at the Emergency Department he has a Glasgow Coma Score of 13. His carboxyhaemoglobin level on arrival is 30%.
  - (a) Describe the initial assessment of this man.
  - (b) Discuss the indications for hyperbaric oxygen treatment in carbon monoxide poisoning.
- 3. A mother brings her nine month old infant to the Emergency Department. The child has a two day history of vomiting and diarrhoea and has been fed on sweetened condensed milk with a vitamin supplement. On arrival the child's weight is 8.0 kg, systolic blood pressure 90 mmHg, tympanic temperature 35°Celsius, respiratory rate 40 breaths per minute, and heart rate 120 beats per minute.

Serum electrolytes taken on arrival show (normal range given in parentheses):

 sodium
 160
 mmol/L
 (136 – 146)

 potassium
 3.6
 mmol/L
 (3.2 – 5.5)

 chloride
 60
 mmol/L
 (94 – 107)

 bicarbonate
 2
 mmol/L
 (24 – 31)

- (a) List the differential diagnosis.
- (b) Describe your management of this infant, including a detailed plan for fluid resuscitation.
- A forty four year old man presents to the Emergency Department with an acutely inflamed left knee and right wrist joints. Outline your assessment and management.
- Discuss the use of heparin in the treatment of ischaemic coronary syndromes in the Emergency Department.
- Discuss the assessment and management of pretibial lacerations presenting to the Emergency Department.
- (a) List the equipment necessary in an urban district hospital Emergency Department for the management of paediatric airway problems.
  - (b) You are informed that a general duties (non-paramedic) ambulance is five minutes away, transporting a two year old child with acute respiratory distress. The child has stopped breathing and is receiving intermittent positive pressure ventilation by face mask. Outline your preparations for management of this child's airway.
- 8. An eighteen year old man arrives in the Emergency Department following a stab wound to the right side of his neck. The wound is bleeding profusely and his respiratory rate is 32 breaths per minute. Outline your assessment and management.

- 1. A 60 year old male presents with right sided flank pain which radiates to the groin.
  - (a) What is your differential diagnosis?
  - (b) Discuss the merits of the various medical imaging techniques available to investigate this patient.
  - (c) What are the indications for early urological referral in a patient with renal colic?
- 2. Discuss the role of Emergency Department thoracotomy.
- A 32 year old farm hand presents to triage stating he has been bitten by a snake. He then collapses. Discuss your management of this patient.
- 4. Discuss the use of antidotes in patients who present with the following toxic ingestions:
  - (a) Cyanide
  - (b) Heavy metal poisoning
- 5. A 10 year old boy presents with an acute exacerbation of asthma. He is a frequent attendee of your department. He has required an Intensive Care Unit admission for his asthma within the last 18 months. He has a Pulse Rate 140 beats per minute, Blood Pressure 95/70 mmHg, Temperature 37.9°C, Respiratory Rate of 40 breaths per minute and an Oxygen Saturation of 95% on 4 litres per minute of oxygen.
  - Describe your assessment and management of this patient.
- 6. A 78 year old lady is referred by her hostel because of frequent falls and increasing confusion. The hostel management feels she requires a higher level of care and are refusing to have her back.
  - Outline your management.
- 7. Discuss your assessment of severity of illness in a 9 month old child.
- Discuss the strategies that can be used to minimise timeto-thrombolysis for acute myocardial infarction.

#### 1999/2

- 1. You are the duty medical officer at a regional trauma centre. Outline your response to a request from Ambulance Control for assistance at a bus crash involving at least 30 casualties.
- 2. A 35 year old woman who is 36 weeks pregnant is brought to your Emergency Department complaining of increasing headache. She is noted on examination to have very brisk reflexes and facial oedema. Her observations are as follows: Blood pressure 150/110 mm Hg, Pulse Rate 102 beats/min.
  - (a) Describe your assessment of this patient.
  - (b) How would you manage this patient?
- A 4 year old child is brought to the Emergency
  Department with a 24 hour history of vomiting and
  diarrhoea. Discuss your assessment and management of
  this child and outline principles of fluid management in
  children.
- A 24 year old male construction worker slips and falls astride on scaffolding.
   Outline your assessment and management of potential injuries.
- Discuss the role of Continuous Positive Airway Pressure ventilation in the Emergency Department.
- Discuss the choice of suture material in wound management in the Emergency Department.
   Also, discuss alternative methods of skin closure.
- A 32 year old female presents with a 5 day history of progressive weakness in both legs. Give the differential diagnosis and discuss your assessment and investigation of this patient.
- 8. A factory worker is brought to the Emergency Department with hydrofluoric acid burns to his hands. Discuss the management of this patient.

#### 2000/1

- 1. A 35 year old male with no previous psychiatric history is brought to the Emergency Department handcuffed under Police escort. Police were called because he had been violent towards his parents.
  - (a) Describe the important issues in this patient's presentation.
  - (b) Describe the principles of management and discuss the pharmacological agents that may be used if this patient becomes aggressive.
- The care person of a mildly intellectually impaired 9 year old girl has noticed a green discharge on the girl's underwear.
  - Discuss your assessment and management of this young girl.
- A 17 year old male is involved in a high speed motor vehicle accident. He is hypotensive and tachycardic and you are having difficulty obtaining peripheral intravenous access.
  - (a) Discuss your options for obtaining rapid venous access in this situation.
  - (b) Discuss the role of hypotensive fluid resuscitation in this patient.
- 4. A 25 year old female presents with lower abdominal pain, vaginal bleeding and 6 weeks of amenorrhoea.
  - (a) What is the differential diagnosis?
  - (b) Discuss your assessment and further management of this woman.
- 5. A 40 year old female has metastatic breast cancer and is on chemotherapy. She presents to the Emergency Department with a temperature of 39.5°C. Her physical examination is unremarkable.
  - (a) Discuss investigations you would order in this patient.

- (b) Justify your choice of antibiotics.
- 6. Discuss the management of a patient who ingests a large dose of a selective serotonin reuptake inhibitor.
- A 68 year old lady with rheumatoid arthritis presents with an acutely painful knee. She is currently on low dose prednisolone and non steroidal anti inflammatory agents. Her temperature is 37.9°C.
  - (a) What is the differential diagnosis?
  - (b) What clinical features may assist you with the differential diagnosis?
  - (c) Describe your management of this patient.
- 8. You are the senior medical officer on duty on a Saturday evening when you hear an argument take place at Triage. The father of a baby is being verbally abusive to nursing staff. The patient is a 12 week old baby with a febrile illness. They presented to the Emergency Department two hours ago and have still not been seen by a medical officer.

Discuss your plan of managing this situation.

#### 2000/2

- Describe the aetiology, complications and Emergency Department management of priapism.
- 2. A 72 year old woman presents with tearing chest pain suggestive of dissection of her aorta.
  - (a) Discuss the utility of chest X-ray in this situation.
  - (b) Outline the Emergency Department management of proven aortic dissection.
- 3. A previously well 48 year old woman presents with acute urinary retention and loss of perineal sensation.
  - (a) List your differential diagnosis.
  - (b) Discuss your assessment of this patient.
- 4. You are on duty one evening, in a 200 bed rural hospital, when you are notified to expect the arrival of 15 patients from a bus accident, in approximately 30 minutes. You are the only consultant in the hospital at the time of notification.
  - Describe the preparations you would make.
- A 4 year old boy presents after having inserted a peanut into his nostril. The child is extremely distressed.
   Discuss the management of this child in the Emergency Department.
- 6. You are the Director of the Emergency Department. Your department is accused of inappropriately allocating triage categories, and the hospital administration asks you for a briefing paper outlining the triage process. Outline your paper.
- You are the retrieval doctor for an intubated patient with head and chest injuries by fixed wing aircraft. Outline the measures you would take to minimise complications during transport.
- 8. A mother presents with her very distressed 18 month old child. The mother thinks the child has been eating the powder detergent from the dishwasher. Discuss your assessment and management.

- Discuss the management of traumatic injury to the pinna of the ear.
- Your department has just managed a 3 year old child with apparent meningococcal septicaemia. The child required extensive resuscitation and retrieval to a paediatric intensive care unit. Discuss further actions required in relation to this patient.
- Discuss the management of a Junior Medical Officer who, while working in your Emergency Department has just sustained a needle stick injury from a patient known to be HIV positive.

- Discuss the advantages and disadvantages of setting up a chest pain evaluation unit in an Emergency Department.
- A 2 year old child is brought to your Emergency Department after several episodes of haematemesis. The mother is concerned that the child may have taken some of her iron tablets.
  - Discuss your assessment and management.
- A 36 year old man presents to the Emergency
  Department with a sudden deterioration of vision in his
  left eye.
  - (a) Outline your assessment of this patient.
  - (b) List your differential diagnosis
- A 30 year old woman who has been fitting for 45
  minutes arrives by ambulance. She is 36 weeks pregnant.
  Discuss the Emergency Department management of this
  patient.
- 8. A 23 year old man presents after falling 2 metres through a plate glass window. He is unconscious with a large shard of glass penetrating his left lateral thorax. He is also bleeding profusely from a deep laceration to the left upper arm. His pulse is 125/min and BP 90/60. Outline your assessment and management.

#### 2001/2

- Following an adverse event involving excessive use of intravenous sedation by a Junior Medical Officer in your Emergency Department, you are asked to review practices and develop a procedural sedation policy for Emergency Department patients.
   Describe the process and issues specific to the development of such a policy.
- 2. A 70 year old man presents to your community hospital Emergency Department with a 24 hour history of intermittent chest pain. This pain is the same pain he had with his myocardial infarction which occurred 12 months ago and was treated with thrombolysis. His ECG shows a new anterior myocardial infarction.
  - Discuss your management options.
- 3. A 35 year old woman with a history of depression is brought to the Emergency Department by her family for psychiatric assessment after the patient told her family that she was going to kill herself. The patient absconds while waiting to be seen.
  - (a) Outline your management.
  - (b) Outline the measures you would take to prevent similar incidents occurring.
- 4. A 58 year old man self-presents complaining of neck pain and not being able to lift his arms following a white water rafting accident. At triage the patient is placed on a bed and a cervical collar is applied. He is haemodynamically normal, has a GCS 15, and is noted to have bilateral arm weakness.
  - (a) Describe your assessment of this man.
  - (b) Discuss the role of steroids in this patient's treatment.
- 5. An eight week old boy is brought to the Emergency Department by his parents after a 4 hour history of increasing breathing difficulty. The infant has a 4 day history of increased cough, and conjunctivitis for 2 days. On arrival, he is triaged to a resuscitation area and is monitored. He appears mottled and lethargic. His pulse rate is 180/min, respiratory rate 65/min, temperature 37.9C (per axilla) and SaO<sub>2</sub> unmeasurable due to a poor trace. His bedside glucose is 5.4 mmol/L.
  - Outline your assessment and management of this baby.
- An 8 year old female is an unrestrained rear seat passenger in a high speed motor vehicle crash, where the vehicle rolled several times. She is transported to

- hospital by ambulance with oxygen, a cervical collar and spine board. On arrival, her vital signs are: pulse rate 120/min, blood pressure 105/70, respiratory rate 40/min, GCS 15, SaO<sub>2</sub> 99% (on oxygen). Examination reveals pain on pelvic springing and suprapubic abdominal tenderness. X-rays of her cervical spine and chest show no apparent injuries. Pelvic X-ray shows a mixed vertical shearing and rotational injury with multiple fractures and bilateral sacro-iliac joint disruptions.
- (a) Outline your treatment of this patient on arrival.(30% Marks)
- (b) Discuss the options available to detect the presence of intra-abdominal injury in this patient. (70% Marks)
- 7. A 68 year old woman presents with acute pain and paraesthesiae in her right leg. She has a past history of smoking and hypertension. On examination the leg is cool to touch and there are no pulses palpable below the groin.
  - Describe your assessment and management of this patient in the Emergency Department.
- 8. An 18 year old female is brought in by ambulance following an ingestion of an unknown amount of 240mg diltiazem slow release tablets and 50mg atenolol tablets, along with a quantity of alcohol approximately 45 minutes prior to her arrival in the Emergency Department. On arrival, she is drowsy but responsive, pulse rate 55/min, blood pressure 85/30, respiratory rate 12/min and SaO<sub>2</sub> 99% (on oxygen). She is triaged to a resuscitation area.

Describe your management of this patient.

- A 3 year old boy refusing to weight bear on his right leg is brought to your Emergency Department. His mother says that he started limping 3 days ago and now will not walk.
  - Describe your assessment and initial treatment.
- 2. A 65 year old female presents 10 days following coronary artery bypass surgery at your regional referral hospital. She is complaining of lightheadedness and sharp chest pain. On examination, she has a clean median sternotomy wound, pulse rate 105/min, blood pressure 145/90, respiratory rate 24/min, SaO<sub>2</sub> 94% (room air). There is dullness to percussion and reduced breath sounds at the left lung base. ECG shows sinus tachycardia with ST-T changes present on her predischarge ECG. Chest X-ray shows a moderate left pleural effusion.
  - Outline your assessment and management of this patient.
- 3. A 22 year old male is brought to your Emergency Department handcuffed by the Police. He has been aggressive and violent at the local shopping centre. He is extremely uncooperative and verbally aggressive towards you and your staff. The Police are in a hurry and would like to go. They request that they be allowed to remove the man's handcuffs and leave.
  - (a) How do you assess a patient's potential for violence in the Emergency Department?
  - (b) Outline how you would assess this man's mental state.
- You are asked to be involved in the development of a clinical policy for the outpatient management of patients with deep venous thrombosis.
   Discuss the issues.
- 5. An 18 year old male is brought to your Emergency Department by ambulance following a motor vehicle

- crash. He has been transported with a cervical collar in situ.
- Describe your assessment of the patient to allow safe and timely removal of his cervical collar.
- 6. A 42 year old female factory worker is brought to hospital with protracted vomiting, following a chemical spill at a local petrochemical plant. Hazchem information provided by her employer identifies the substance involved as an organophosphate.
  - (a) Describe the management of this patient on arrival at your department. (80% marks)
  - (b) Briefly discuss the investigations indicated. (20% marks)
- 7. A 2½ year old girl is brought to your Emergency Department by her father. She was in a playground and suddenly became extremely distressed with apparent pain in her right arm. There is no history of any witnessed injury.
  - On arrival (approximately 40 minutes later) she is drowsy, tachypnoeic, tachycardic and gurgling sounds in her upper airway. A small red mark is noted on her right arm.
  - Describe your assessment and management of this child.
- 8. An 82 year old woman is brought to the Emergency Department having been discovered on the floor unable to weight bear. On arrival, her left leg is shortened and externally rotated, with X-ray showing a Garden III fracture of the left neck of

X-ray showing a Garden III fracture of the left neck of femur. She is clinically dehydrated and has a temperature of 31°C.

Describe the options for treating this patient.

#### 2002/2

- An 80 year old woman is brought to your ED after collapsing while on an organised bus tour. On arrival, she is confused and dyspnoeic, with PR 50/min, BP 85/40, SaO<sub>2</sub> 90% (on oxygen). ECG shows a narrow complex bradycardia with no acute ischaemic changes.
  - (a) Outline your investigations.
  - (b) Describe your treatment options.
- 2. A 75 year old man is brought in by ambulance with light-headedness and malaena. He reports a 24 hour history of malaena. He has a past history of abdominal aortic aneurysm treated by endoluminal stenting 10 months ago at another hospital. His vital signs are: pulse rate 80/min, blood pressure 135/85 (with no postural drop), GCS 15/15. On examination he has a palpable non-tender aorta and malaena.
  - (a) Describe your assessment of this man.
  - (b) Outline your treatment and disposition plan.
- 3. Discuss the investigation of patients presenting with seat-belt bruising across the chest and abdomen following a motor vehicle crash.
- 4. You are preparing to semi-urgently intubate a patient.
  - (a) Outline how you assess the likelihood of this being a difficult intubation.
  - (b) Describe your approach to managing a potentially difficult intubation.
- 5. A 6 year old child is brought in by his mother with a 3 day history of initially watery diarrhoea and vomiting but now there is some blood in the motions. The mother is concerned about the child's poor urine output. On examination the child is pale and lethargic with a pulse rate of 160/min and a rectal temperature of 37.8C. Initial pathology reveals a creatinine of 170 umol/L (60 120) and a haemoglobin of 7 gm/dl.

List your differential diagnosis and describe your management.

- 6. In response to delays in delivering prompt analysis to patients with pain presenting to your ED, it is decided to institute a policy for nurse initiated analysis. Describe the issues to be considered in developing such a policy.
- 7. A 38 year old woman, recently discharged following admission for depression, presents having ingested a large amount of paracetamol. She says that she ingested twenty (20) 500mg tablets the previous day and has ingested a further twenty (20) paracetamol tablets 2 hours prior to presentation.
  - Describe your assessment and discuss management of this patient.
- 8. Discuss the process of risk stratification of patients presenting with acute coronary syndromes to the Emergency Department.

#### 2003/1

- 1. You are the ED director. Your CEO has told you that in order to save costs, he wishes to set up a GP clinic in the hospital grounds beside your ED to see category 4 and 5 patients.
  - Outline your advice to him on this issue.
- 2. An 70 year old woman presents following a trip and fall in the garden. A right anterior dislocation of the glenohumeral joint is demonstrated on X-ray. There is no other apparent injury.
  - (a) Discuss procedural sedation in this situation. (70%)
  - (b) Describe your discharge planning with regard to this patient. (30%)
- 3. A 2 year old child presents by ambulance with 50% burns to the lower half of the body only. Describe your management of this child.
- 4. A 72 year old man is brought to the Emergency Department by ambulance with a 2 hour history of epistaxis. He is on warfarin for atrial fibrillation.
  - (a) Describe your assessment of this patient. (50%)
  - (b) Describe your management of this patient. (50%)
- 5. A middle aged man is brought into your Emergency Department by ambulance. He was found unconscious in his apartment with a suicide note next to him. There was no evidence of trauma and no empty medication packages were found. He was intubated at the scene. Naloxone given had no effect on his level of consciousness.

On arrival, his observations were heart rate 50 beats/minute, blood pressure 110/70mmHg, spontaneous respiratory rate 6 breaths/minute achieving an oxygen saturation of 92% on 6 litres/minute of oxygen. His initial ECG revealed a slow atrial flutter with variable block.

His initial biochemistry showed:

		Reference Range
Sodium	128	135 - 145mmol/L
Potassium	7.5	3.5 - 5.0mmol/L
Chloride	110	97 - 109mmol/L
Urea	17	3.0 - 8.0mmol/L
Creatinine	0.08	0.08 - 0.11mmol/L

- (a) Outline your assessment of this patient. (50%)
- (b) Outline your management of this patient. (50%)
- 6. Discuss the various imaging investigations available in the evaluation of renal colic.
- 7. An 84 year old man is brought to the Emergency Department by his family. His wife notes that his behaviour has been increasingly aggressive over a period of two weeks. She no longer feels able to cope with him at home. He has a history of moderately severe dementia, prostatic carcinoma, ischaemic heart disease and aortic valve replacement.
  - (a) Outline your assessment of this patient. (70%)

- (b) Describe your management of this patient. (30%)
- 8. A 67 year old male presents to your urban district Emergency Department 1 hour post onset of chest pain. His ECG reveals acute ST segment elevation of 3mm in leads V3, V4, and V5. He is treated with aspirin (300mg), reteplase (two 10 unit boluses 30 minutes apart), and unfractionated heparin (5000 unit bolus and 1000 units/hr infusion).

Sixty-minutes after the thrombolysis is administered the patient complains of increasing left sided chest discomfort and shortness of breath.

A repeat CXR reveals a new large left-sided collection in the pleural space.

His vital signs are currently heart rate 100 beats/minute, blood pressure 85/55mmHg, respiratory rate 26 breaths/minute and an oxygen saturation of 92% on 6 litres of oxygen/minute via Hudson mask.

Outline your management of this situation.

#### 2003/2

 A 4 year old boy presents with a foul smelling round foreign body in his nostril. He has a history of a ventriculoseptal defect and his parents are somewhat anxious

Discuss your options with regard to his management.

- 2. A 25 year old prisoner is brought from the local prison by ambulance with a stab wound to the left neck. On arrival he is handcuffed to the ambulance trolley. He is muttering to himself, sitting upright, but talking with no obvious dysphonia or stridor. There is an obvious penetrating wound over the left mid sternocleidomastoid.
  - (a) Describe your assessment. (50%)
  - (b) Describe your management. (50%)
- A 36 year old male presents to your Emergency Department with pain and swelling to both his left knee and right elbow joints.
  - (a) Describe your assessment. (50%)
  - (b) Describe your management. (50%)
- Discuss the methods of confirming endotracheal tube placement.
- 5. You receive a call from the ambulance control at 4pm on Friday. A pungent gas has been released in the underground train station. Your Emergency Department is the nearest tertiary hospital. At least 100 patients are involved.

Outline your response to this notification.

- 6. A 36 year old skier is brought into your Emergency Department by helicopter paramedics. He had been found unconscious in a wooded area of the ski field. On arrival he has:
  - a pulse rate of 55 beats/minute with atrial fibrillation,
  - a blood pressure of 110/70 mmHg, and
  - a Glasgow Coma Score of 12.
  - (a) Describe your differential diagnosis. (50%)
  - (b) Describe your management of this patient. (50%)
- 7. A 75 year old man is brought in by ambulance with lightheadedness and malaena. He reports a 24 hour history of malaena, with a small amount of bright bleeding prior to calling an ambulance. He has a past history of abdominal aortic aneurysm treated by endoluminal stenting 10 months previously at another hospital.

His vital signs are:

- pulse rate 80 beats/minute,
- blood pressure 135/85 mmHg, and
- Glasgow Coma Score of 15.

- He has a palpable non-tender aorta and malaena without fresh blood on rectal examination.
- (a) Describe your assessment of this man. (50%)
- (b) Describe your management of this man. (50%)
- A 22 year old woman presents following an alleged assault. She is withdrawn and will not discuss the details of the incident.

On examination, she has multiple of bruises of varying appearance over her body and face. The nursing staff report blood on her underpants while undressing. Describe your assessment of this woman.

#### 2004/1

- 1. You are the director of an urban emergency department. Your staff have brought to your attention the case of a 24 year old woman who has presented to your emergency department on 15 occasions in the past two weeks. On each occasion she complains of severe abdominal discomfort. Investigations have failed to find a cause. She has recently moved to your area from interstate, where she states "the doctors couldn't help me". When given analgesia, she usually leaves the department without further assessment.
  - How would you deal with this problem?
- 2. A 23 year old overseas student presents to your emergency department complaining that he has difficulty with his eyesight. Examination shows he can only recognise hand movements. He admits to work stresses and that he had taken an overdose of quinine tablets.
  - (a) Describe the clinical features and complications of a quinine overdose. (50%)
  - (b) Describe the management of this patient. (50%)
- A 52 year old man has been referred to you by his general practitioner because of the recent development of macroscopic haematuria.
  - (a) Describe your assessment of this patient. (80%)
  - (b) Outline your disposition of this patient. (20%)
- 4. Discuss the investigations available in evaluating a patient with a suspected pulmonary embolus.
- 5. An 11 day old male presents with a history of 12 hours of fever. His parents describe a rigor at home. He is well looking, has a temperature of 39°C with otherwise normal vital signs for age and is feeding normally at the breast
  - (a) Discuss the investigations in this patient. (50%)
  - (b) Describe the procedure of lumbar puncture, including a description of the contraindications and complications. (50%)
- 6. A 28 year old woman who is 32 weeks pregnant is brought in by ambulance to your base hospital. She complains of seeing flashing lights and having headaches. At triage, her vital signs are:
  - Pulse rate 80 beats/minute
  - Blood pressure 135/95mmHg
  - Glasgow Coma Score of 15/15

As you start to assess her she has a grand mal seizure. Describe your management of this patient.

- 7. A 38 year old man is brought in by ambulance. He was found unconscious in a house fire by the fire brigade. He is now conscious with spontaneous respirations and has O<sub>2</sub> being delivered via a Hudson mask at 6L/min. He has a black sooty face and head. Both his hair and nasal hair are singed. He has carbonaceous spots on his tongue and pharynx. There is circumferential blistering to his left leg.
  - (a) Outline your management of this patient. (70%)

- (b) Discuss the use of hyperbaric oxygen in this case.
- 8. A two year old girl presents with her parents after running into the edge of a coffee table. She sustained a 4cm frontal scalp laceration above her left eyebrow. There was no loss of consciousness and no other apparent injury.

Discuss the anaesthetic options in managing this child.

- 1. You are notified by the Director of an Intensive Care Unit at another hospital about a 63 year old male who had recently presented to your emergency department with a large subarachnoid haemorrhage. He is now in the Intensive Care Unit with a poor prognosis. This patient had attended your department 48 hours earlier with the presenting complaint of "Headache". He left the waiting room prior to being seen.
  - How would you manage this incident?
- 2. Discuss the role of adrenaline and vasopressin in cardiac
- 3. You are working in a large regional emergency department. You receive a telephone call from a doctor at a small community hospital two hours away by road. This doctor is a general practitioner with limited emergency experience. He asks for advice regarding an 18 month old boy who presented with fever, pallor and stridor. Despite intramuscular and nebulised steroid the child has severe respiratory distress with stridor.
  - (a) Outline your advice to the referring doctor. (50%)
  - (b) Outline the arrangements you would undertake to transfer this child. (50%)
- 4. A 24 year old woman presents to your emergency department two weeks following a backpacking holiday in South-East Asia. She now has had three days of fevers, as well as generalised weakness, anorexia and
  - Describe your assessment of this patient.
- 5. Discuss the investigations that could be used in the investigation of abdominal pain in a four year old child.
- 6. A 3 year old child is brought into the emergency department having ingested "at least 20" of her mother's iron tablets.
  - (a) Describe your assessment of this patient. (50%)
  - (b) Describe your management of this patient. (50%)
- 7. A 45 year old male is brought into the emergency department having attempted to hang himself with a belt in his bedroom. On presentation, he has a Glasgow Coma Score of 7.
  - (a) Outline the potential complications of this presentation. (50%)
  - (b) Outline your management of this patient. (50%)
- 8. A 32 year old multiparous woman presents via ambulance with marked per vaginal bleeding following the precipitous delivery at home of her term infant 15 minutes previously. The infant is well and is under the care of the neonatal service. The ambulance service has been unable to establish intravenous access and her blood pressure is now unrecordable.

Outline your management of this patient.

- 1. A patient presents with neck pain following a motor
  - Discuss what factors on history, examination and investigation you could use to clear the cervical spine.
- 2. A 76 year old female with a history of controlled atrial fibrillation presents to the emergency department with severe central abdominal pain of 2 hours duration.

- Describe your assessment of this patient.
- 3. You have just reviewed an 18 year old female who believes she is in premature labour. She is Gravida 1 and Parity 0. She is approximately 26 weeks pregnant by dates. She has received minimal antenatal care.
  - (a) Describe your assessment of this patient. (50%)
  - (b) Describe your management of this patient. (50%)
- 4. Describe a detailed protocol for the use of propofol in the emergency department.
- 5. A 72 year old patient presents to the emergency department with acute left hemiparesis.
  - (a) List your differential diagnoses. (50%)
  - (b) Discuss the use of thrombolysis in acute stroke. (50%)
- 6. The mother of a child makes a complaint. She states that three days previously, her 5 year old son had presented to the emergency department with elbow pain after a fall onto his outstretched hand. Following X-rays, the treating doctor had "pulled on the elbow several times causing him to cry". The doctor stated that he had suffered a "sprained elbow" and to return if the pain did not settle. The mother is distressed that her son had received no analgesia for the sprain and that he continued to not move the elbow because of pain. She also complained that the doctor spoke in a rude and insulting manner, and was very rough in his examination. During your investigation, you find that the official report of the X-ray revealed a supracondylar fracture. Describe your management of this situation.
- 7. A 30 year old known schizophrenic is brought in to the emergency department by police. He is aggressive and has been handcuffed.
  - Describe how you would "medically clear" this patient.
- 8. Concerned parents present with their 5 day old baby. The neonate is feeding poorly, lethargic and jaundiced. Describe your assessment of this patient.

- 1. You are the Director of the emergency department with the following problem. The hospital's access block is 47% and its bed occupancy is 92%. Describe your strategies to reduce access block in this situation. (100%)
- 2. (a). How would you distinguish between neuroleptic malignant syndrome and serotonin syndrome? (50%)
  - Outline your management of neuroleptic malignant syndrome. (25%)
  - Outline your management of serotonin syndrome.
- 3. A 38 year old woman presents in a post-ictal state. A venous blood gas on arrival reveals a Sodium level of 110 mmol/L (Reference Range: 135-145 mmol/L).
  - List the possible causes of hyponatraemia in this patient. (30%)
  - Outline your management of this patient. (70%)
- 4. A 17 month old boy is brought to your emergency department by ambulance. He has been previously identified to be a child at risk. He has been run over by a motor bike in the driveway of his home. He has multiple tyre marks over his lower limbs. He is alert and appropriately responding for his age. Following clinical examination, you determine that his injuries are restricted to his lower limbs.
  - Describe your management of this boy. (100%)
- 5. Discuss the different methods used to control epistaxis in the emergency department. (100%)
- 6. A 62 year old man with known chronic renal failure presents with respiratory failure, secondary to pulmonary

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oedema. Oxygen saturation is 89% on 100% oxygen utilizing bi-level positive airway pressure (BiPAP). His observations are:

Glasgow Coma Score 14

Temperature 37.0oC

Respiratory Rate 32/min

Systolic blood pressure 90 mmHg

Electrocardiograph Rate of 105 /min with a regular broad complex rhythm.

An urgent Potassium level of 8.7 mmol/L (Reference Range: 3.5-4.9 mmol/L) has been recorded.

Discuss rapid sequence induction in this man. (100%)

- A 26 year old woman on maintenance steroids for ulcerative colitis presents to the emergency department with a 12 hour history of abdominal pain.
   Describe your assessment of this woman. (100%)
- 8. Describe a detailed protocol for the emergency department management of paediatric gastroenteritis. (100%)

#### 2006/1

- (a) Outline the evidence for therapeutic hypothermia in post cardiac arrest patients. (30%)
  - (b) Describe a protocol for therapeutic hypothermia in your emergency department. (70%)
- 2. You are the consultant in charge of the emergency department in a tertiary hospital. The ambulance service calls at 1000 hours on a weekday warning that they are at the scene of a major motor vehicle crash. They have 6 patients 5 adults and a 12-month-old infant, all in a serious condition. They will be arriving at your department in 10 minutes.
  - Describe your response to this situation. (100%)
- 3. First time parents bring their distressed and crying six week old boy to the emergency department. They report that their child has been repeatedly vomiting all day. Describe your assessment of this patient. (100%)
- 4. A 50 year old woman presents to the emergency department with the sudden loss of vision in one eye.
  - (a) List your differential diagnoses. (30%)
  - (b) Describe your assessment of this patient. (70%)
- A 46 year old alcoholic presents with a large haematemesis. He is haemodynamically unstable. Describe your management. (100%)
- 6. Describe your management of the athlete with heat stroke. (100%)
- A 55 year old man presents to triage complaining of throat tightness, itch, generalised erythema and lip swelling whilst eating at a local Thai restaurant.
  - (a) Outline your history and examination of this patient. (50%)
  - (b) Describe your management of this patient.(50%)
- 8. Discuss the different anaesthetic modalities which may be employed to manage a wrist fracture in a 58 year old man in the emergency department. (100%)

#### 2006/2

- 1. (a) What are the symptoms and signs of lithium toxicity? (30%)
  - (b) Describe the specific treatments for lithium toxicity including their indications. (70%)
- In a patient with major pelvic trauma, describe the factors you would consider in deciding to use interventional radiology. (100%)

- Describe the use of amiodarone in the emergency department, including its indications and limitations. (100%)
- An angry man is at triage demanding analgesia for severe leg pain.
  - He states that he was in the emergency department 2 days earlier for a broken leg. You notice he has a below knee plaster with swollen, white coloured toes. You suspect a compartment syndrome.
  - Describe your management of this situation.(100%)
- A 55 year old man has just undergone endotracheal intubation for severe asthma. Immediately post intubation, his systolic blood pressure falls to 80 mmHg.
  - (a) Outline the causes of post intubation hypotension in this man. (50%)
  - (b) Describe your ventilation strategy for this man. (50%)
- 6. A 6 year old child with no significant past history presents with diabetic ketoacidosis.
  - Describe your management of this case. (100%)
- 7. List and justify the investigations you would consider in a 79 year old woman who presents with poorly localised abdominal pain. (100%)
- 8. The table shown describes the performance by Australasian Triage Scale (ATS) of your emergency department over a one month period.

Triage	Percentage	Percentage	Average
Categ	Number	seen	Wait
ory	of	within	Time
	Attendan	Performa	
	ces	nce Threshol d	
	%	%	Minutes
1	2	100	1
2	19	72	9
3	41	38	54
4	35	47	79
5	3	58	95
Did Not			
Wait	11		
Total	100	49	53

- (a) Describe the performance of your emergency department in this month with reference to the Australasian College for Emergency Medicine's recommended performance indicator thresholds. (30%)
- (b) What measures could be used to improve your emergency department's performance in relation to the data presented above. (70%)

#### 2007/1

 A 5 year old boy is brought to your major referral emergency department by his mother, who states he has been bitten on his ankle by a snake while playing in their back yard one hour previously. He has a pressure immobilization bandage in place. He is currently asymptomatic with the following vital signs:

PR	90	per min
BP	95/55	mmHg
RR	20	per min
O2 Sat	99%	room air

(a) What features on assessment would indicate evenomation? (50%)

One hour later the child is asymptomatic. Initial investigations are normal. The pressure immobilization bandage is still in place.

- (b) List the criteria which need to be met for the child to be discharged. (50%)
- 2. A 22 year old woman with a past history of asthma, presents with a spontaneous right pneumothorax estimated to be around 25% of lung volume.

Discuss your management options in this patient. (100%)

3. A number of staff have been assaulted over the last 6 months in your emergency department.

Outline strategies to improve staff safety from violence in your emergency department. (100%)

- 4. Compare and contrast the cardiac arrest algorithm for asystole between adults and children older than one year. (100%)
- 5. A 60 year old presents with a painful red eye. There is no history of trauma.
  - (a) How would you distinguish between anterior uveitis and acute angle closure glaucoma? (50%)
  - (b) Outline your management of acute angle closure glaucoma. (50%)
- A 19 year old woman presents with a 12 hour history of right iliac fossa pain and tenderness.
  - (a) List your main differential diagnoses. (30%)
  - (b) Compare and contrast the utility of computerised axial tomography and ultrasound for these conditions. (70%)
- 7. Discuss the utility of laboratory investigations in a one year old child with a high fever, who appears well, and has no focus of infection on history and examination. (100%)
- 8. An 18 year old intoxicated man is brought to your emergency department after diving into shallow water. He has examination findings consistent with a complete C6-C7 cord lesion. He has no other injuries.

Describe your management. (100%)

#### 2007/2

- 1. A 60 year old man presents to your emergency department with breathing difficulties. He has just arrived on a flight from a country where there have been recent case reports of Avian influenza.
  - On examination, he is febrile, drowsy and markedly dyspnoeic.
  - (a) Describe how you would minimize the contagion risk in your emergency department in this 2. situation. (50%)

Ten further patients who were on the same flight as this man present with similar symptoms in the next 24 hours.

- (b) Outline the additional measures required to contain the contagion risk. (50%)
- Describe how the normal anatomical and physiological changes of pregnancy influence the assessment of a 32 week pregnant woman presenting with multiple trauma. (100%)
- 3. A 72 year old man presents to the emergency department with a two day history of abdominal pain. A CT scan undertaken to investigate recent weight loss and jaundice shows a pancreatic mass lesion.

On examination, he is confused and jaundiced with maximal tenderness in the right upper quadrant.

His observations are:

39.8°C Temp PR 120 per min BP 100/65 mmHg RR 22 per min O2 Sat 98% on oxygen 6 LPM Describe your management. (100%)

- 4. Following a period of prolonged resuscitation, a 4 year old child has died in your emergency department as a result of a home pool drowning. The child's parents have just arrived at triage and are unaware of what has happened.
  - Outline how you would deal with the important issues raised in this situation. (100%)
- Discuss the pharmacological options available (including dosages and modes of delivery) to treat anaphylaxis in the emergency department. (100%)
- 6. A 58 year old patient who is undergoing Continuous Ambulatory Peritoneal Dialysis for end stage renal disease presents with a 6 hour history of severe abdominal pain and vomiting.

His observations are:

Temp	38.8°C	
PR	110	per min
BP	150/90	mmHg
RR	22	per min
O2 Sat	98%	on oxygen 6 LPM

Describe your assessment. (100%)

- 7. (a) Outline the spectrum of possible emergency department presentations resulting from metamphetamine use (30%)
  - (b) Outline your approach to the treatment of acute behavioural disturbance caused by methamphetamine toxicity (70%)
- 8. A 12 year old girl with cystic fibrosis presents unwell with a fever and acute shortness of breath.

Her observations are:

Temp	38.2°C	
PR	130	per min
BP	100/60	mmHg
RR	30	per min
O2 Sat	91%	room Air

A Chest X-ray reveals bilateral patchy consolidation and a 20% left sided pneumothorax.

Describe your management of this child. (100%)

#### 2008/1

 A 68 year old woman has collapsed with a brief loss of consciousness in church this morning. She has been transported by ambulance to your emergency department and is currently asymptomatic.

Describe your assessment and risk stratification of this patient (100%)

A 20 year-old man has been intubated in the emergency department the previous evening after ingesting an unknown quantity of alcohol and benzodiazepines.

At 0800 hours, his observations are:

Temp	36	°C
HR	80	/min
BP	110/70	mmHg
$SpO_2$	100	%
$FiO_2$	1.0	

Describe

- (a) Your criteria for extubation (30%)
- (b) The process of extubating this patient (70%)
- 3. Compare and contrast the assessment features of Measles and Kawasaki's Disease. (100%)
- 4. A 7 year old girl is brought to your emergency department by ambulance following a moderate speed motor vehicle accident. She complains of a sore neck and tingling in her hands. She is currently lying on the stretcher crying, distressed and hyperventilating with no cervical immobilisation. The girl's uninjured mother has accompanied her in the ambulance.

Discuss the possible approaches to protecting her cervical spine pending further assessment. 100%)

- 5. Write a set of guidelines for the use of physical restraints on a patient in the emergency department.
- 6. A 19 year old woman is brought to the emergency department by her concerned parents with a two day history of irritability and headache. She has a history of developmental delay and a ventriculo-peritoneal shunt for congenital hydrocephalus.

Her Glasgow Coma Score is 15. Her vital signs are normal. (100%)

Describe your assessment.

7. You are the Director of Emergency Medicine in a 150 bed district hospital. Your Chief Executive Officer is concerned about your 'did not wait' (DNW) rate of

Describe your approach to this situation. (100%)

8. A 58 year old woman presents to the emergency department complaining of a 5 day history of sore throat and progressive difficulty in swallowing.

Examination reveals she is febrile with stridor at rest. Oropharyngeal examination does not reveal an overt diagnosis.

Describe your management. (100%)

#### 2008/2

1. A 52 year old woman presents with atypical chest pain and a normal ECG.

What features on assessment would influence the disposition of this patient? (100%)

2. You have been called to assist a junior doctor dealing with an upset family.

The family is unhappy with the proposal of a "Do Not Resuscitate" order for their elderly mother.

Outline your approach to this situation. (100%)

- 3. A 46 year old man presents with one hour of severe left sided abdominal pain, radiating to the left loin. An abdominal CT scan reveals a 6 mm stone in the lower third of the left ureter with a mild hydronephrosis.
  - Discuss the analgesic and other treatment options in this patient. (100%)
- 4. Compare and contrast propofol and ketamine for procedural sedation in the emergency department.
- 5. A 10 year old boy is brought to hospital by his parents after falling off his skateboard and hitting his head.
  - What clinical factors would influence your decision to order a brain CT scan?

After full assessment he is deemed fit for discharge.

- (b) Describe your discharge advice. (50%)
- 6. You have been advised by Emergency Medical Services of a bus versus petrol tanker accident with mass casualties.

Describe how you would configure and deploy a medical team to the accident scene. (100%)

7. A mother brings to your emergency department her 4 day old boy with a 24 hour history of poor feeding and rapid breathing. He also had 2 episodes where he appeared to stop breathing for a few seconds.

Describe your assessment of this baby. (100%)

8. A 32 year old woman who is 33 weeks pregnant is referred to your emergency department because of a blood pressure of 140/95 and right upper quadrant pain for 24 hours. One hour after arriving in the emergency department, the patient begins to have a grand mal

Describe your management. (100%)

#### 2009/1

- 1. Write a guideline for the assessment of first trimester bleeding. (100%)
- A 68 year old morbidly obese woman with chronic airway limitation and ischaemic heart disease is brought to your emergency department with severe abdominal pain. There is a strong clinical suspicion of pancreatitis. Describe your assessment and risk stratification of this (100%)

A 47 year old man with a history of hypertension and depression has presented to your emetrically department following deliberate self poisoning approximately 3hrs ago with 20 x 240mg slow release verapamil tablets.

His initial vital signs are:

GCS	15	
HR	50	/min (100%)
BP	115 / 70	
RR	16	/min
SaO2	99%	room air

Describe your management of this patient. (100%)

4. A 55 year old man is brought to hospital by ambulance complaining of severe headache, vomiting and blurred vision. On initial examination his BP1009260 / 145, similar in both arms. His Glasgow Coma Score is 14. CT scan reveals no abnormality.

Discuss the pharmacological treatment options for the treatment of his hypertension. (100%)

- A 9 month old girl with a fever of 390 Celsius attends your emergency department with her mother. What features on assessment would need to be present for this child to be discharged? (100%)
- What modifications to basic and advanced cardiac life support are required in an adult patient with a cardiac arrest secondary to unintentional (environmental) hypothermia?

A 53 year old previously well man presents with a 6 hour history of palpitations. He is otherwise asymptomatic.

His vitals signs are:

BP 120 / 80 RR 22 /min

ECG reveals atrial fibrillation with a rate of 130 /minute.

His assessment does not reveal a cause for his arrhythmia.

Discuss the management options for this patient. (\$00%)

A 28 year old gas worker is brought to your emergency department having been injured in an explosion at work. On arrival in the emergency department he has the following vital signs:

> **GCS** 10 HR 120 /min 125 / 75 BP

Describe your assessment of this patient.

#### 2009/2

1. A 35 year old intravenous drug user presents with a history of being unwell for 16 hours.

His observations are:

HR	112	/min
BP	108/54	mmHg
Temp	39.8	°Celsius
RR	24	/min
O <sub>2</sub> saturation	96	% room air

(100%)

Describe your assessment 2. Discuss the use of non-invasive ventilation in the emergency department. (100%)

- 3. A 45 year old man with chronic pancreatitis has presented to your emergency department on multiple occasions in the last two months requesting analgesia for abdominal pain. His behaviour has become increasingly demanding and belligerent. A personalised management plan is now required.
  - (a) Describe the process for the development of this management plan (50%)
  - (b) Outline the important features to be included in this plan (50%)
- 4. A 4 year old girl presents with anaphylaxis following a bee sting. She is poorly responsive, pale and floppy in appearance. She has no stridor but widespread wheeze on chest auscultation.

Her observations are:

HR	152	/min
BP	68/42	mmHg
RR	56	/min
Temperature	37	°Celsius
O2 saturation	92	% 10L/min O <sub>2</sub>

Describe your management (100%)

- 5. Describe the range of uses and utility of bedside ultrasound in the trauma patient. (100%)
- 6. A 25 year old man presents to your emergency department following an accidental exposure of the whole of his right hand to a 35% solution of hydrofluoric acid. He has no other injuries.

Describe your management (100%)

- 7. Compare and contrast the clinical features which differentiate cauda equina syndrome and Guillain-Barré syndrome. (100%)
- 8. A 2 year old boy presents in status epilepticus for 40 minutes. After witnessing two unsuccessful attempts at intravenous cannulation, his mother becomes distressed and is interfering in the resuscitation.
  - (a) Identify the issues raised by this situation (30%)
  - (b) How would you manage these issues (70%)

(50%)