**Dip IMC Single Best Answer**

**1, Which of these is an immediate dispatch criteria (London HEMS)**

a, Shooting

b, Ejected from vehicle

c, Drowning

d, Hanging

e, Explosion

**2, If first on the scene of an incident**

A, The practitioner’s vehicle should be at least 100 metres back from the incident

B, The front wheels should be left in the straight ahead position

C, Keys should be left in the vehicle with the engine running

D, Someone should stay with the vehicle if at all possible

E, The fire service will usually be in charge of parking at the scene.

**3, Suitable personal protective equipment (PPE) for a prehospital provider does not include**

A, Ear protection

B, Helmet

C, Safety boots

D, Head torch

E, Eye protection

**4, High visibility clothing should**

A, Be used at any pre hospital incident

B, Incorporate a minimum of 0.80m2 of fluorescent material

C, Incorporate a minimum of 0.50m2 of retro reflective material

D, Be at least Class 4 from European standard EN471

E, Include fluorescent gloves

**5, Which of these is not part of the SCREAMER mnemonic?**

A, S – Safety

B, C – Communicate

C, R – Read the wreckage

D, E - Environment

E, A – Assess the casualties

**6, Regarding the change in physiology at altitude (>5500m)**

A, Oxygen sats are the same as at sea level

B, Heart rate decreases

C, Haemoglobin concentration decreases.

D, Depth of breathing increases.

E, Exercise tolerance increases.

**7, Treatment for the prophylaxis of Acute Mountain Sickness include**

A, Nifedipine SR

B, Acetazolamide

C, Dexamethasome

D, Ofloxacin eye drops

E, Quinine

**8, Which of the following statements about High Altitude Pulmonary Oedema (HAPE) is least correct?**

A, It is correlated with sleeping height

B, It has an incidence of 10% at >2000m

C, It is caused by pulmonary hypertension secondary to hypoxia.

D, It should be suspected if shortness of breath occurs at rest or when lying down.

E, Symptoms and signs include, cough and crackles on the chest auscultation with a mild pyrexia.

**9, Treatment of High Altitude Cerebral Oedema (HACE) includes**

A, Continue the ascent

B, Use of a portable hyperbaric chamber

C, High dose prednisolone

D, A period of rest before continuing the ascent.

E, Prophylactic antibiotics to prevent secondary infection.

**10, Regarding Cold Injury**

A, Hypothermia is defined as temperature <33oC

B, GCS is prognostic of outcome

C, In hypothermia an ECG may show slow AF and J waves

D, Damage from frostnip is usually permanent

E, Cold injury is not preventable.

 **11, Which of these statements about heat illness is most correct?**

A, Heat exhaustion occurs at temperatures of over 39oC

B, During heat cramps sweating is decreased.

C, Ice packs in the groin, axillae and neck are more effective than evaporative cooling.

D, Heat stroke can lead to multi organ failure

E, Heat stroke has a mortality of less than 10%

**12, Following a snake bite**

A, Neostigmine can be used in the treatment of some snake bites

B, Envenomation is almost certain

C, The patient should move as quickly as possible to get to a medical facility

D, Antivenom is easily available for most snake bites

E, Identification of the snake is unnecessary.

**13, The following are all positive predictors of survival following submersion except**

A, Prolonged submersion

B, Young age

C, Low core body temperature on rescue

D, Early ROSC

E, No aspiration

**14, Regarding the definitions of submersion and drowning**

A, Near Drowning = Initial survival for 12 hours after submersion

B, Immersion syndrome = Syncope from cardiac dysrhythmia following submersion at >5oC

C, Dry drowning = hypoxaemia due to laryngospasm and loss of an airway

D, Wet drowning is less common than dry drowning

E, Post immersion/secondary drowning = Death up to one week after a near drowning.

**15, Decompression sickness**

A, Results from descending too quickly

B, Treatment is similar as for Arterial Gas Embolus

C, In Type I DCS there may be cardiovascular collapse

D, Occurs up to 12 hours after surfacing

E, Patients should be evacuated to a hyperbaric facility as soon as possible with unpressurised aircraft staying below 500m.

**16, Physiology during diving**

A, The absolute pressure increases by 1atm for every 10 metres the diver descends

B, The “bends” is caused by collection of nitrogen bubbles in the skin.

C, All tissues absorb Nitrogen at a similar rate

D, As the diver goes deeper more Nitrogen is excreted via the lungs

E, Boyles Law states that the volume of gas will decrease as the diver ascends.

**17, Regarding potential CBRN incidents**

A, You should position yourself downwind of the hot zone

B, The warm zone is safe to enter without protective clothing

C, STEP in the context of CBRN stands for “Safe To Evacuate Patient”

D, Removal of clothing can remove 90% of contaminants

E, STEP 1 requires you to send for specialist help.

**18, Nerve agents such as Sarin gas**

A, Cause miosis

B, Respiration will be depressed

C, Increase the activity of acetylcholinesterase

D, The skin will be dry

E, Are treated with Edrophonium

**19, Cyanide poisoning**

A, Is always as a result of deliberate release

B, Cause a decrease in oxygen saturations in the early phase

C, Should be treated with dicobalt edetate is there is any suspicion of cyanide exposure

D, Increase methaemoglobin production

E, Lactate measurement may be helpful.

**20, In radiological incidents**

A, A single dose always causes risk to others

B, Polonium releases β particles

C, Acute radiation syndrome occurs at levels above 0.5mSv

D, Patients always present immediately

E, Radioisotopes with specific antidotes include 131I and 137CS

**21. If first on scene at a potential mass casualty incident**

A, Your first action should be to treat those with life threatening injuries

B, You should park well away from the scene and ensure your lights and engine are turned off

C, Consider the safety of those affected above your own

D, The “E” of METHANE is the Exact location of the incident

E, The “triage sieve” comes after the “triage sort”

**22, During a Triage Sieve**

A, Those that breath after you open their airway are “P1”

B, A respiratory rate of between 10 and 30 means the patient must be P3

C, Stop to perform CPR on those that need it

D, Those that have a pulse of >120 are always P2

E, P4 are the walking wounded

**23, Which of the following is not the correct capacity for the oxygen cylinder described?**

A, C = 170l/min

B, CD = 340l/min

C. F=1360l/min

D, G = 3400l/min

E, H = 6800l/min

**24, A child aged 7 should weigh approximately how many kilos (according to the APLS formula)**

A, 20kg

B, 24kg

C, 28kg

D, 32kg

E, 36kg

**35, Each of these of a possible cause of traumatic cardiac arrest except**

A, Hypovolaemia

B, Hyperkalaemia

C, Tension pneumothorax

D, Massive haemothorax

E, Hypoxaemia

**36, Regarding “Celox” gauze**

A, The gauze should be applied and immediately bandaged in place

B, The gauze will be effective used as a bandage over a wound

C, Celox is derived from crushed insects

D, Direct pressure should be applied for three minutes after the wound is packed

E, It is not effective against arterial bleeding.

**37, Which of the following forms part of the “safe triangle” for siting a thoracostomy?**

A, 5th Intercostal space mid axilliary line

B, 5th Intercostal space mid clavicular line

C, 2nd intercostal space mid clavicular line

D, Medial border of pectoralis major

E, Lateral border of latissimus dorsi

**38, Which of these is the most common life threatening chest injury in trauma according to TARN**

A, Flail chest

B, Massive haemothorax

C, Tension pneumothorax

D, Open pneumothorax

E, Cardiac Tamponade

**39, Regarding Emergency Prehospital Delivery**

A, This can occur in up to 10% of booked hospital deliveries

B, There is no change in perinatal mortality rate

C, The second stage of pregnancy is the delivery of the placenta

D, When delivering the placenta you should apply gentle traction to the cord

E, The placenta should be kept for inspection by the midwife.

**40, During the second stage of pregnancy**

A, The cervix will be dilated to 8cm

B, If the cord is around the neck you must make efforts to move it

C, Most deliveries require assistance.

D, Following birth the baby should be dried and placed skin to skin with the mother

E, You should give 1ml of Syntometrine to facilitate delivery.

**41, In shoulder dystocia**

A, The posterior shoulder is impacted behind the symphysis pubis

B, You can use the exaggerated Sims’ manoeuvre to try to facilitate delivery

C, Occurs in 1% of all deliveries

D, The lobster sign is an indication it is present

E, If unsuccessful transfer to the nearest Obstetric Unit should take place in the supine position

**42, Regarding Post Partum haemorrhage**

A, Is defined as 1 litre of blood loss

B, Can occur up to 6 weeks after delivery

C, Causes include placental abruption

D, Is rare and occurs in less than 1% of deliveries

E, Occurs after the third stage of pregnancy is completed.

**43, Which of these is less correct regarding breech presentation**

A, The safest delivery is via Caesarean section in an Obstetric unit

B, The mother should be in the lithotomy position

C, You should always keep hands on the baby

D, It occurs in 3-4% of pregnancies

E, The Pinard manoeuvre can be used to free the legs if necessary

**44, The following are estimated frequencies for complications in pregnancy except**

A, Cord prolapse occurs in <1% of deliveries

B, Emergency prehospital delivery takes place for 5% of booked hospital deliveries

C, Shoulder dystocia occurs in 1% of deliveries

D, Breech presentation occurs in 3-4% of deliveries

E, Post partum haemorrhage occurs in 10% of deliveries.

**45, Pelvic binders**

A, Should be placed over the skin if possible

B, Should be used to package every patient at risk of pelvic trauma

C, Should be applied during a log roll to 90o

D, Are placed at the level of the pubic symphysis

E, Mandate the use of a spinal board

**46, Which of the following injuries is not commonly found after a fall from height**

A, Flail chest

B, Fractured calcaneum

C, Pilon fracture of the ankle

D, Fractured tibial plateau

E, Jefferson fracture of the cervical spine.

**47, Which of the following is most correct regarding motor vehicle collisions?**

A, 80% of aortic injury occurs after lateral impact

B, Presence of a tow bar in a rear impact increases the severity of injury

C, Restrained occupants in a frontal impact are likely to suffer posterior dislocation of the hip

D, Waddell’s Triad of Injury in children hit by cars is Unilateral head injury, Intrathoracic or intraabdominal injury and a fractured femur

E, Frontal impacts are less well tolerated than lateral impacts due to the presence of the engine.

**48. Tourniquets**

A, Should be tightened above venous pressure

B, Should be placed as distally as possible

C, A single tourniquet is always adequate to stop bleeding

D, Can be applied over clothes

E, Should be used immediately before other haemostatic methods have been attempted.

**49, When cooling a burn**

A, Non potable water can be used

B, You may require up to 120l of water

C, The ideal temperature is <5oC

D, Cooling is only effective in the first hour

E, Jewellery and clothing can be left on.

**50, In the prehospital assessment and treatment of burns which of the following is not correct?**

A, Extent is more important than depth

B, Fluid resuscitation should be given to all those with >5% TBSA burn

C, At least 20 minutes of cooling with water is recommended

D, A weak acid can be used to neutralise an alkali burn

E, Full thickness burns can be painful

**51, In patients involved in Motor Vehicle Collisions**

A, They must all have cervical spine immobilisation

B, A long spinal board can be used for extrication if absolutely necessary

C, They should be transported to hospital on the long spinal board

D, A patient can never have their cervical spine cleared at the scene

E, The majority of spinal injuries occur in the thoracic spine.

**52, The Canadian C Spine Rule**

A, Includes age under 65 as a risk factor

B, Is strongly specific for cervical spine fracture

C, Ambulant patients and those with front impact are “low risk”

D, Takes no account of the mechanism of injury

E, Involves rotating the neck (if other criteria are met) to 45o in both directions

**53, Which of these regarding the management of potential cervical spine injury is least correct**

A, Application of a semi rigid collar will still allow up to 30o of extension/flexion and rotation

B, Neurogenic shock can cause bradycardia and hypotension

C, Patients should never be allowed to self-extricate from a vehicle

D, A high cord injury can decrease the vital capacity to 10-20%

E, Priapism may be the only sign of cord injury in the unconscious patient.

**54, Which of these is not part of the METHANE mnemonic**

A, Major Incident Declared

B, Exact Location of the Incident

C, Time of incident

D, Hazards

E, Access/Egress

**55, Which of these is not part of the 30 second drills for optimisation of intubation conditions?**

A, Change the intubating practitioner

B, Optimise the operator position

C, Optimise the patient position

D, Release cricoid

E, Suction

**56, Regarding analgesia in the pre hospital environment**

A, Using iv paracetamol can reduce the amount of iv morphine needed

B, Ketamine is the drug of choice in mild pain

C, Entonox can be given to all trauma patients

D, Morphine is faster acting the fentanyl

E, Ketamine must not be used in patients with a head injury.

**57, “Entonox”**

A, Is a mix of 50% nitrous oxide and 50% air

B, Is transported in a cylinder with a white collar

C, Must be used with care at colder temperatures

D, Should be stored vertically if at all possible

E, Is easy to carry from the vehicle to the scene.

**58, Minimal monitoring during prehospital anaesthesia should include of these except**

A, Peripheral muscle stimulator

B, No invasive blood pressure monitoring

C, End tidal carbon monoxide monitoring

D, Pulse rate and rhythm

E, Pulse oximetry

**59, Recommended positioning for prehospital anaesthesia (RSI) includes**

A, Performing RSI in the back of the ambulance.

B, Positioning the patient supine on the floor

C, Ensuring that the sun is in front of you to aim visualisation

D, Two points of intravenous access

E, A “kit dump” next to the ambulance.

**60, All of these are correct about ketamine except**

A, It is an NMDA agonist

B, It can be used for analgesia

C, It can be used for sedation

D, It can be used for anaesthesia

E, Can be safely used in patients with raised intracranial pressure.

**61, This capnography trace is most likely to be seen in which condition**

A, Cardiac arrest

B, Asthma

C, Malignant hyperthermia

D, Oesophageal intubation

E, Pneumonia

**62, Which of these is the incorrect ECG lead position**

A, V1 - 4th intercostal space right sternal edge

B, V3 - 4th Intercostal space at left sternal edge

C, V4 - 5th Intercostal space left mid clavicular line

D, V6 - 5th Intercostal space left mid axillary line

E, V4R - 5th intercostal space right mid clavicular line

**63, Regarding non invasive blood pressure monitoring**

A, The cuff should be the smallest that will fit round the arm

B, It is placed at the same level as the heart

C, Is accurate during motion

D, As small cuff may underestimate the measurement

E, Can be inaccurate if the patient is pyrexia

**64. In cardiac ultrasound which of these findings does not correlate with the diagnosis given**

A, Paradoxical movement of the septum and right ventricular collapse = cardiac tamponade

B, Right ventricle larger than the left ventricle = PE

C, Empty left ventricle at the end of systole = hypovolaemia

D, IVC collapse fully during respiration or is >12mm = hypovolaemia

E, Hypodynamic well filled ventricle = sepsis.

**65, When driving under blue lights the driver is exempt from which of the following**

A, Failing to obey a “STOP” sign

B, Driving the wrong way up a one way street

C, Failing to obey a “GIVE WAY” sign

D, Failing to obey a “NO ENTRY” sign

E, Parking on the offside of the road at night, facing oncoming traffic

**66, The following are all key principles of the Mental Capacity Act (MCA) except**

A, The person must be supported to make a decision

B, The person must prove they have capacity in order to make an unwise decision

C, A person who has consumed alcohol may still have capacity

D, A person with learning difficulties may have capacity

E, Anything done to a person lacking capacity must be in the person’s best interest.

**67, The following all affect the degree of injury in firearm injuries except**

A, The size and location of the wound

B, Muzzle velocity

C, Projectile mass

D, Projectile construction

E, Distance travelled in the body.

**68, Features of primary blast injury**

A, Occurs most commonly in solid organs

B, Blast lung can cause cardiac tamponade

C, Is more common in large bowel than small bowel

D, Is always unsurvivable

E, Are a feature of low order explosions such as petroleum based explosions.

**69, The four Cs of incident management at a firearms incident does not include**

A, Confirm – Confirm presence of threat

B, Communicate – Ensure using a local operating channel

C, Clear – Clear people away from the threat

D, Cordon – Create a cordon at a safe distance to the incident

E, Control – Create an incident control point to control the incident.

**70, During a firearm incident**

A, Any assailant should not be treated ahead of the innocent

B, Casualties should not be moved prior to assessment and treatment

C, Clothing removed from casualties can be discarded

D, The engine block and wheels may provide more protection than other parts of a car

E, Any pre hospital provider should be prepared to operate within the outer cordon of an active firearms incident.

**71, What would be the oxygen requirement to transfer an intubated patient for 30 minutes with ventilator settings of FiO2 = 1, Rate = 10/min and tidal volume = 500ml**

A, 80 litres

B, 110 litres

C, 150 litres

D, 180 litres

E, 210 litres

**72, Which of these would not be a sign in acute severe asthma**

A, PEFR 33-50l/min

B, Silent chest

C, Resp rate>25/min

D, Heart rate >110bpm

E, Inability to complete sentences in one breath.

**73, Which of these is not part of the NATO phonetic alphabet**

A, A = alpha

B, I = India

C, J = Juliet

D, O = October

E, X = X-ray

**74, Which of these is not part of the “Sepsis Six”**

A, Oxygen (to saturations >94%)

B, White cell count

C, Intravenous antibiotics

D, Lactate measurement

E, Urine output measurement

**75, Which of the following are a symptom of anticholinergic poisoning**

A, Miosis

B, Dilated pupils

C, Hypothermia

D, Salivation

E, Lacrimation

**76, Which of these should be dosed according to total body weight and not “ideal” body weight**

A, Midazolam bolus

B, Fentanyl

C, Vecuronium

D, Rocuronium

E, Morphine.

**77, When treating children**

A, intramuscular adrenaline can be used in mild or moderate wheeze

B, Children with suspected meningitis should receive antibiotics pre-hospital

C, Repeated doses of nebulised adrenaline should be given in stridor

D, Parents should not go in the back of the ambulance so as not to distract clinical staff

E, Intravenous glucose should not be given in concentrations higher than 20%.

**78, The “Pillars” of clinical governance do not include**

A, Human resources support

B, Regulatory body oversight

C, Professional development

D, Working in a “safety culture”

E, Clinical audit

**79, Regarding children**

A, Children under 16 can never give their consent for a procedure

B, Both parents are required to give consent for a child under 16

C, There are circumstances when consent to perform a procedure is not needed

D, Consent decisions are always straightforward

E, Children can be designated as being “Selleck competent”

**80, The JRCALC suicide risk assessment does not include**

A, B – Background: Family history of suicide

B, I – Intent: Are they still having suicidal thoughts now?

C, P – Plan: Have they made practical, rehearsed plans?

D, A – Action: Have they carried out any task in anticipation: writing will, organising affairs. Do they have a history of previous attempts?

E, P – Protective – What level of support do they have?

**81, Using the NARU Triage Sieve assign this patient involved in a major incident a triage category:**

**A 65 year old man who has a traumatic amputation of his leg and is bleeding profusely and asking for help. Pulse 100/min. Respiratory Rate 28/min.**

A, P1

B, P2

C, P3

D, Dead

E, Survivor

**82, Using the NARU Triage Sieve assign this patient involved in a major incident a triage category:**

**A 23 year old man who has broken his arm and is ambulant at scene.**

A, P1

B, P2

C, P3

D, Dead

E, Survivor

**83, Using the NARU Triage Sieve assign this patient involved in a major incident a triage category:**

**A 36 year old female who is unconscious, with an open airway, but not breathing.**

A, P1

B, P2

C, P3

D, Dead

E, Survivor

**84, Using the NARU Triage Sieve assign this patient involved in a major incident a triage category:**

**An 18 year old man screaming in pain from bilateral broken legs. Pulse 110/min. Respiratory Rate 32/min.**

A, P1

B, P2

C, P3

D, Dead

E, Survivor

**85, Using the NARU Triage Sieve assign this patient involved in a major incident a triage category:**

**A 75 year old woman who has a chest and abdominal injury. Pulse 80/min. Respiratory Rate 20/min.**

A, P1

B, P2

C, P3

D, Dead

E, Survivor