



Advanced Emergency Care Program 2011

Pre-Course Written Assessment

Instructions:

1. DO NOT mark this paper.
2. Put your answers ONLY on the Answer Sheet.
3. There may be more than one answer that you believe addresses the question. Select the best answer of the choices available.
4. Send your completed answer sheet to the Course Director.

1. The aims of first aid are to:
 - a) save life
 - b) prevent further injury
 - c) promote recovery
 - d) do all of the above
2. If a casualty refuses treatment, you should:
 - a) continue skiing and leave them alone
 - b) stand back, monitor until you are sure they are OK and be prepared to offer further assistance
 - c) insist on administering first aid
 - d) call for assistance and restrain the reluctant casualty
3. Inhaled air contains:
 - a) 78% nitrogen, 21% carbon dioxide, 0.03% oxygen and some other gases and particles
 - b) 78% oxygen, 21% nitrogen, 0.03% carbon dioxide and some other gases and particles
 - c) 78% nitrogen, 21% oxygen, 0.03% carbon dioxide and some other gases and particles
 - d) 78% carbon dioxide, 21% oxygen, 0.03% nitrogen and some other gases and particles
4. All of the following are part of the airways except:
 - a) trachea
 - b) oesophagus
 - c) larynx
 - d) bronchi
5. The trachea, bronchi and alveoli are all part of which system of the body?
 - a) Musculoskeletal
 - b) Circulatory
 - c) Respiratory
 - d) Digestive
6. Arterial blood is:
 - a) bright red and spurts from a wound
 - b) bright red and oozes from a wound
 - c) dark purplish red and spurts from a wound
 - d) dark purplish red and oozes from a wound



7. Veins are:
 - a) thin-walled, low pressure vessels that carry blood to the heart
 - b) thick walled, low pressure vessels that carry blood away from the heart
 - c) thin walled, low pressure vessels that carry blood away from the heart
 - d) thick walled, elastic, high pressure vessels that carry blood to the heart

8. The best points at which to feel a pulse are where the:
 - a) artery lies near the surface of the body and near a bone against which pressure can be applied
 - b) vein can be seen beneath the skin
 - c) artery is close to a large muscle
 - d) vein lies near a long bone of the upper or lower extremities

9. An effective pulse to be taken in an infant is the:
 - a) radial pulse
 - b) femoral pulse
 - c) brachial pulse
 - d) popliteal pulse

10. The right side of the brain controls:
 - a) the body's left side functions
 - b) right side of face
 - c) left side of face
 - d) the body's right side functions

11. Cerebro-spinal fluid (CSF):
 - a) has no real purpose
 - b) cushions the brain against sudden movement or impact and provides nutrients to the brain and spinal cord
 - c) carries oxygen to the brain
 - d) does all of the above

12. The spinal cord is contained within:
 - a) transverse canal
 - b) vertebral canal
 - c) dorsal canal
 - d) cartilaginous canal

13. A cause of a dilated pupil (not reacting to light) is:
 - a) oxygen deprivation
 - b) excess oxygen
 - c) nicotine addiction
 - d) bright light

14. The cervical spine has how many vertebrae?
 - a) 5
 - b) 7
 - c) 9
 - d) 11



15. The humerus, radius and ulna are all bones of the:
 - a) lower extremities
 - b) hand
 - c) foot
 - d) upper extremities

16. The large bone of the upper leg is called the:
 - a) femur
 - b) patella
 - c) radius
 - d) humerus

17. Ligaments link:
 - a) bone to bone
 - b) bone to muscle
 - c) muscle to muscle
 - d) muscle to skin

18. The stomach, intestine and pancreas are all parts of which body system?
 - a) Musculoskeletal
 - b) Circulatory
 - c) Respiratory
 - d) Digestive

19. What is the correct order of the Primary survey?
 - a) Danger, Breathing, Send for Help, Airway, Response, Circulation
 - b) Response, Danger, Airway, Send for Help, Breathing, Circulation
 - c) Response, Airway, Breathing, Danger, Send for Help, Circulation
 - d) Danger, Response, Send for Help, Airway, Breathing, Circulation

20. When assessing danger, the first priority is to ensure the safety of:
 - a) the injured casualty
 - b) bystanders
 - c) family members
 - d) the patroller

21. What is the correct head position for rescue breathing in an infant?
 - a) Neutral
 - b) Chin up
 - c) Chin down as far as possible
 - d) Head turned to the side

22. An unconscious casualty is always at risk of airway obstruction whilst on the:
 - a) side
 - b) stomach
 - c) back
 - d) head



23. When do you leave an unconscious casualty in the supine position (on their back)?
- a) when you are required to administer CPR
 - b) when they have been submerged in a creek
 - c) when there are no fluids in casualty's mouth
 - d) when you suspect a spinal injury
24. Under what circumstances is it acceptable to halt a casualty examination?
- a) when any injury is located
 - b) when a life threatening haemorrhage is recognised
 - c) when the casualty is placed in the lateral position
 - d) when the airway is clear
25. For a conscious casualty, the most convenient pulse to check is the:
- a) femoral
 - b) brachial
 - c) temporal
 - d) radial
26. During secondary survey, observation of clear or slightly blood stained fluid from the ears indicates the possibility of a fracture to the:
- a) basal skull
 - b) jaw
 - c) nose
 - d) eye socket
27. A clear weakness down one side of the body suggests:
- a) extreme alcohol intake
 - b) effect of excessive cold
 - c) internal head injury
 - d) narcotic overdose
28. CPR is continued until which of the following occurs?
- a) Effective spontaneous ventilation and circulation are restored
 - b) A medical practitioner assumes responsibility
 - c) Exhaustion of the patrollers
 - d) Any of the above
29. Which of the following is NOT part of Airway management?
- a) Jaw thrust
 - b) Lateral chest pressure
 - c) Chin lift
 - d) Head tilt
30. An effective chest compression depth is:
- a) one third the depth of the chest
 - b) one half the depth of the chest
 - c) one quarter the depth of the chest
 - d) 5 cm for all casualties, regardless of age



31. During CPR performed by one patroller on a child, the compression to inflation ratio is:
- a) 2 : 30
 - b) 1 : 5
 - c) 30 : 2
 - d) 5 : 1
32. The recommended minimum number of CPR cycles in two minutes is:
- a) 3 cycles.
 - b) 5 cycles.
 - c) 7 cycles.
 - d) 9 cycles.
33. The surface under a casualty for CPR needs to be:
- a) soft and squashy
 - b) soft and flat
 - c) firm and flat
 - d) firm and modest incline
34. Hand/finger positions for compressions during CPR should be over the:
- a) right side of the chest
 - b) left side of chest
 - c) upper sternum
 - d) lower sternum
35. Preparation of a casualty for defibrillation includes:
- a) placing electrodes, follow voice prompts
 - b) removing neck jewellery, check for pace maker, turn off radios/phones, clean dry chest, follow voice prompts
 - c) placing electrodes on front of chest and on back
 - d) maintaining supplemental oxygen to the casualty
36. The Pharynx, Epiglottis and Larynx are all part of which body system:
- a) the upper Airway
 - b) the small intestine
 - c) the lower Airway
 - d) the large intestine
37. Blisters can be broken when:
- a) close to the eyes
 - b) in the throat
 - c) the blister is small
 - d) the blister is large
38. What is the FIRST procedure to clear the airway of a conscious patient with a severe airway obstruction?
- a) Encourage patient to cough
 - b) Back blows
 - c) Chest thrusts
 - d) Abdominal thrusts



39. Which of the following is NOT recommended in the treatment of a conscious asthmatic patient?
- a) Stop the activity
 - b) Rest and reassure the casualty
 - c) Lay the casualty down
 - d) Check if they have a personal asthma action plan
40. A pneumothorax, a sucking chest wound and a compound rib fracture are all examples of:
- a) closed Chest Injuries
 - b) upper Airway Obstruction
 - c) open Chest injuries
 - d) abdominal Injuries
41. Paradoxical movement occurs with which chest injury?
- a) A fractured rib
 - b) A flail chest
 - c) A pneumothorax
 - d) A fractured sternum
42. Which is NOT an early sign of Hypoxia?
- a) Tachycardia (rapid heart rate)
 - b) Shortness of breath
 - c) Rapid respiratory rate
 - d) Bradycardia (slow heart rate)
43. What colour is a NEW Medical Oxygen cylinder?
- a) Blue with a white shoulder
 - b) Black with a white shoulder
 - c) White with a white shoulder
 - d) Blue with blue shoulder
44. Perfusion is:
- a) the blood returning to the heart
 - b) the satisfactory delivery of oxygen and nutrients to the organs of the body and the removal of the waste products
 - c) the function performed by the kidneys
 - d) the production of insulin
45. The most effective method of controlling external bleeding is to:
- a) increase exercise
 - b) apply direct pressure to the wound
 - c) splint the wound
 - d) wash the wound



46. If a casualty had internal bleeding in their lungs, the blood coughed up would be:
- a) black - like coffee grounds
 - b) black - like tar
 - c) bright red and frothy
 - d) brown - like dirt
47. Management of most external bleeding consists of:
- a) protection [gloves], elevation, pressure bandage, rest and reassurance
 - b) rest, reassurance and oxygen
 - c) gloves, oxygen, rest, reassurance and elevation
 - d) tourniquet, oxygen, rest and reassurance
48. When controlling bleeding from the scalp, you should:
- a) apply direct pressure to the wound
 - b) not apply pressure to the wound
 - c) apply tape - being careful as there may be a skull fracture beneath the wound
 - d) apply direct pressure only if there is no CSF leaking from the ears
49. Shock is defined as:
- a) excessive tissue perfusion
 - b) inadequate tissue perfusion
 - c) excessive blood supply to the brain
 - d) inadequate blood supply to the lungs
50. Swollen lips and tongue, hives, difficulty breathing and lowered blood pressure could indicate:
- a) anaphylactic [allergic] shock
 - b) cardiogenic shock
 - c) neurogenic shock
 - d) psychogenic shock
51. Concussion, Contusion and Intracranial haematoma are classifications of:
- a) chest injuries
 - b) abdominal injuries
 - c) brain injuries
 - d) spinal injuries
52. Which of the following is NOT a general sign or symptom of a brain injury?
- a) Violence or aggression
 - b) Irrational behaviour
 - c) Paralysis or weakness of one limb
 - d) Rapid breathing
53. Glasgow Coma Scale is a:
- a) quantitative circulatory assessment of the casualty
 - b) quantitative neurological assessment of the casualty
 - c) respiratory assessment of the casualty
 - d) physical assessment of the casualty.



54. A casualty with a particularly severe head injury would have a Glasgow Coma Scale score of:
- a) 15
 - b) 12
 - c) 10
 - d) 8 or less
55. Paralysis and numbness maybe indicative of:
- a) fracture of the coccyx
 - b) damage to the bone of the vertebrae
 - c) spinal cord damage
 - d) bruised gluteus maximus
56. Any spinal injury is best managed by:
- a) using scoop/backboard/vacuum mattress, cervical collar, oxygen, rest and reassurance
 - b) allowing casualty to sleep
 - c) using pain relief, scoop/backboard/vacuum mattress, rest and reassurance
 - d) giving ibuprofen with food
57. Simple, Compound and Complicated are all classifications of:
- a) sprains
 - b) brain injuries
 - c) dislocations
 - d) fractures
58. An impacted fracture is when:
- a) the fracture is at right angles to the long axis of the bone
 - b) the bone kinks and bends without separating
 - c) there are more than two pieces of bone
 - d) the fractured bone ends are driven into each other
59. Which of the following is a sign or symptom of a fracture?
- a) Deformity at the injury sight
 - b) Crepitus (grating of the bones ends)
 - c) Loss of function
 - d) All of the above
60. A dislocation is:
- a) a displacement of the bone ends that form a joint
 - b) the break in the continuity of a bone
 - c) an injury of the ligaments around a joint
 - d) a stretched or torn muscle
61. Initial management of a soft tissue injury is:
- a) rest, ice, compression, elevation
 - b) rest and massage
 - c) continue activity and treat later
 - d) hot packs and massage



62. In splinting a fracture you should:
- a) splint securely above and below the fracture site
 - b) splint tightly so the casualty cannot move any part of the limb below the fracture
 - c) splint securely below the fracture site
 - d) rest the fractured limb on a pillow while casualty is being transported
63. Which of the following splints could be used to manage a dislocated shoulder?
- a) A vacuum splint
 - b) An air splint
 - c) An angle splint
 - d) Any of these splints may be used, depending on the shoulder and arm positions
64. A wrist fracture is managed with:
- a) a collar and cuff sling and swathed to the chest
 - b) an air splint
 - c) a splint and an arm sling
 - d) a donway traction splint
65. A common complication of a pelvic fracture is:
- a) hypovolaemic shock
 - b) loss of feeling in lower limbs
 - c) osteoporosis
 - d) hip replacement
66. A shaft of femur fracture is best managed with:
- a) a donway traction splint
 - b) a hare traction splint
 - c) a sager splint
 - d) any of these traction splints can be used
67. A fractured knee would be best managed with:
- a) a collar and cuff sling
 - b) a box splint
 - c) an arm sling
 - d) a sager splint
68. A fractured ankle would be best managed with:
- a) a collar and cuff sling
 - b) an arm sling
 - c) an air splint
 - d) a donway traction splint
69. The Elevation sling is NOT recommended for:
- a) severe bleeding of the hand
 - b) a tibial fracture
 - c) a thumb fracture
 - d) a clavicle fracture



70. An Air splint is recommended for the treatment of a fracture of:
- tibia/ fibula
 - clavicle
 - humerus
 - wrist
71. Which of the following statements about the Stiff Neck Cervical is NOT true?
- Provides complete cervical spine immobilization
 - Must be used in conjunction with a spine board, straps, head blocks and tape
 - Requires at least 2 patrollers to apply
 - Comes in multiple sizes
72. A Scoop stretcher is a useful lifting device in which of the following circumstances?
- An unconscious casualty
 - A casualty with a suspected pelvic fracture
 - A casualty with multiple injuries
 - In all of the above circumstances
73. A Donway traction splint, Hare traction splint, Sager splint and Kendrick traction splint are all splints used to treat fractures of which bone?
- Femur
 - Humerus
 - Tibia
 - Radius
74. Pain is controlled by:
- psychological factors
 - splinting, dressing and bandages of wounds.
 - analgesics.
 - all of the above.
75. The maximum dosage of Penthrane (Methoxyflourane) in 24 hours is:
- 3 mls
 - 6 mls
 - 9 mls
 - 12 mls
76. Entonox cannot be administered in which of the following cases?
- Outside temperature is above 0 degrees Celsius
 - A 10 year old girl complaining of general knee pain after a twisting fall
 - A pregnant woman who has suddenly gone into labour
 - A casualty complaining of chest pains after falling heavily on a tree stump
77. The reason that Penthrane/Entonox must be self administered is:
- the patient is less likely to suffer adverse side effects
 - this reduces the risk of overdose
 - it allows the ski patroller to attend to other first aid aspects
 - reduces the risk of the patient suing later on



78. Cold Injury can be influenced by which of the following?
- Environmental temperature
 - Wind speed
 - Nutritional state of the body
 - By all of the above
79. Hypothermia is best described as:
- exposure
 - lowered core body temperature
 - cold extremities
 - high core body temperature
80. Management of hypothermia includes:
- vigorous physical activity, hot shower
 - protection from environment, blankets, head covering, body heat
 - dry clothes, electric blanket, alcohol
 - hot shower, sit by open fire, warm drink
81. Management of a burn includes:
- removal of cause, applying ointment and dressing
 - removal of cause, running cool water over burn then cover with sterile dressing, seeking medical assistance
 - covering with adhesive dressing and seek medical attention
 - putting ice on the burn
82. If both arms were burnt on an adult, what percentage of the body surface area is involved?
- 9%
 - 18%
 - 27%
 - 36%
83. Which is NOT a sign or symptom of snow blindness?
- Sensitivity to light
 - Tearing of the eyes
 - Impaired colour vision
 - Intensely painful, gritty eyes
84. Diabetes is a disorder where the body does not produce or is unable to correctly use which body chemical?
- Insulin
 - Endorphins
 - Platelets
 - Bile
85. Which of the following statements is NOT part of the management of an epileptic casualty?
- Protection from potential dangers
 - Prying mouth open to assist breathing
 - Placing casualty in lateral recovery position when possible
 - Give therapy Oxygen if available



86. An Acute Myocardial Infarction occurs when there is blockage to which artery or its branches?
- Femoral
 - Brachial
 - Coronary
 - Radial
87. A casualty is presenting with the signs and symptoms of a heart attack and is in extreme pain. You would:
- administer only oxygen
 - administer ibuprofen
 - administer no gases or medication
 - administer oxygen with pain relief [Penthrene or Entonox]
88. When dealing with a suspected poisoning, the patroller should first:
- ensure the situation is safe for patroller before proceeding
 - roll casualty onto side
 - call the Poisons Information Centre
 - begin CPR immediately
89. The treatment of a Red-back spider bite is:
- to place an ice pack over the bite
 - the same as for a snake bite - a constrictive bandage
 - to place a warm compress over the bite
 - not applicable as no treatment is required
90. Severe allergic reactions can come from bee and some other insect bites. This reaction can cause:
- cardiogenic shock
 - anaphylactic shock
 - septic shock
 - neurogenic shock
91. During electric shock, which type of tissue is at the greatest risk of damage?
- All tissue is at equal risk
 - Connective tissue
 - Nervous tissue
 - Blood vessels
92. Penetrating eye injuries are best treated by:
- covering the injured eye with a bandage and transporting to hospital
 - covering both eyes with a bandage, reassuring casualty and transporting to hospital
 - lying the casualty down during transport
 - administering an eyewash and medicated eye drops
93. Management of amputations involves:
- putting the amputated part in cold milk, then stopping bleeding
 - applying a tourniquet, transporting casualty after you have recovered part
 - stopping the bleeding, putting part in water tight container in very cold water and sending to hospital with casualty
 - covering amputated part in esky filled with ice, applying tourniquet to limb and sending both to hospital



94. During childbirth, after the head emerges, using fingers, you gently check around the baby's neck for what?
- a) The umbilical cord
 - b) The placenta
 - c) Mucous
 - d) The baby's hands
95. After delivery, it is important to snugly wrap the baby, as which medical condition is a serious problem to newborns?
- a) Hyperthermia
 - b) Haemorrhage
 - c) Hypothermia
 - d) Hypoglycaemia
96. In the Ski Patrol context, which of the following could cause significant OHS risk to the patroller?
- a) Manual handling
 - b) Slips, trips and falls
 - c) Infections from first aid delivery
 - d) All of the above are potential risks to a patroller
97. What is the most common micro organism that causes infection?
- a) Bacteria
 - b) Fungi
 - c) Parasites
 - d) Viruses
98. Hand washing:
- a) may be replaced by an alcoholic chlorinated handrub if no washing facilities exist
 - b) is not necessary after using gloves where no contamination occurred
 - c) is sufficient to provide an acceptable barrier when dealing with a casualty
 - d) is not as important as wearing gloves in Infection Control
99. Contaminated waste includes:
- a) blood stained dressings
 - b) body organs or parts
 - c) blood or body fluids
 - d) all of the above
100. Reduction on rope strength can be caused by:
- a) physical damage
 - b) sunlight
 - c) wear
 - d) all of the above

Now that you are finished, check your answers and send the completed answer sheet.