

# National Pool Lifeguard Qualification

## THE POOL LIFEGUARD

Q1. Name the four categories of hazard.

- A1. 1) Physical hazards refer to the pools design, structure and features.  
2) Lifeguard can cause a hazard by the way he or she works.  
3) People using the pool, their age, numbers and the way they behave.  
4) Activity, in other words, what they are doing and whether its planned or unpredictable.

Q2. What areas of the pool need greater attention

- A2. 1) The bottom of the pool.  
2) Areas around flumes and slides.  
3) The water round inflatable equipment and floating toys.  
4) Handrails, scum channels and gutters.  
5) Areas around diving boards, wave machine and other outlets.

Q3. What factors should be considered when working out the numbers of lifeguards needed.

- A3. 1) The size and configuration of the pool.  
2) The numbers of pool users.  
3) Ages and abilities of pool users.  
4) Types of activity and programmes offered.  
5) The specific hazards of the pool.  
6) The amount and type of equipment in use.

Q4. Describe the advantages of zoning.

- A4. 1) Lifeguard is responsible for fewer pool users.  
2) Lifeguard is nearer the people they supervise.  
3) Lifeguard can concentrate on a smaller manageable area.  
4) Can rotate between zones to keep them alert and stop them getting bored.  
5) Can be assigned according to their experience, knowledge and skills.  
6) Can share observation of high risk areas with other team members.

Q5. Explain Intensive zoning.

- A5. 1) A programmed swimming zone.  
2) Roped off swimfit or jogging lanes.  
3) Areas around diving boards, flumes or wave machine outlets.  
4) Recreational area split into a number of overlapping parts.

Q6. Explain the difference between intensive and extensive zoning.

- A6. In the intensive zone system specific sections of the pool are allocated to each lifeguard patrol or position.  
In extensive zoning each lifeguard is responsible for scanning the entire pool area.

Q7. What are the advantages of combined zoning.

- A7. 1) Many or all lifeguards have an overview of all activities.  
2) It is easier for lifeguards to work as a team.  
3) Lifeguards can identify trends and patterns in pool use.  
4) In emergencies, lifeguards can contact other services ( police, fire or ambulance )  
Without leaving a zone entirely unsupervised.

Q8. What is scanning

- A8. Constantly watching a particular zone using a sweeping action.

Q9. What are the advantages of a lifeguard chair.

- A9. 1) A wide field view.  
2) Less reflection and glare from the surface of the pool.  
3) A clear view of the bottom of the pool – even in deep water.  
4) Distances you from noise, splashing and other distractions.  
5) Makes you more visible to pool users.

Q10. Disadvantages of lifeguard chair.

A10. 1) You're more remote from pool users.

2) Sitting for long periods can reduce your concentration, particularly if the pool environment is very hot.

Q11. What are the advantages of mobile patrolling.

A11. 1) It's easier to keep in contact with pool users and you're better placed to prevent accidents.

2) You can move quickly to deal with problems or offer assistance to colleagues without losing the view of your zone.

3) It makes the best use of frontal and peripheral vision.

4) Keeping on the move helps you concentrate, but creates changing viewpoints and allows bathers to see that you're paying attention.

Q12. Why is it important to rotate duties.

A12. To maintain concentration and reduce tiredness leading to reduced efficiency.

Q13. What ratio of teachers to pupils is recommended for adult and infant classes.

A13. 12:1 ratio for adult and infant classes, non – swimmers or beginners.

Q14. What activity in the pool can be supervised at a ratio of 30:1

A14 Aerobics in shallow water and for competitive swimmers training in lanes.

Q15. What hazards are associated with lane swimming.

A15. 1) Interference with or misuse of lane lines.

2) Fast swimmers catching slower swimmers.

3) Nose to tail swimming.

4) Swimmers colliding with others moving in the opposite direction.

5) Crowding at the ends of the lane preventing others from turning.

6) Swimmers in lanes stopping to talk.

7) Children or weak swimmers in inappropriate lanes.

8) Swimmers crossing lanes.

Q16. What are the two main written safety operating procedures.

A16. Normal Operating Procedure. Emergency Action Plan.

Q17. What is the Normal Operating Procedure.

A17. A detailed description of the day to day operation of the pool.

Q18. What is the Emergency Action Plan.

A18. A detailed description of what should be done in an emergency.

Q19. What type of things are included in the Normal Operating Procedure

A19. Details of the facility.

Potential risk factors.

Systems of work and operating systems. ( Lines of supervision, work rotation )

Dealing with customers.

First aid arrangements.

Lifeguard duties and responsibilities.

Details of alarm systems.

Emergency equipment.

Q20. What are some other functions of a pool lifeguard.

A20. Keep a close watch over the pool and the users to anticipate problems.  
Identify emergencies quickly and take appropriate action.  
Supervise diving or other pool activity when required.  
Carry out rescues and other emergency action when necessary.  
Give immediate first aid to any casualty.  
Communicate with pool users and colleagues when performing these tasks.

Q21. What is the Lifeguards first priority.

A21. Preventing accidents is a lifeguards first priority.

Q22. Why should lifeguards wear a uniform.

A22. So that the lifeguard can be easily recognised and identified in a crowded pool or in the event of an emergency.

Q23. What items of equipment do lifeguards carry or keep close at hand.

A23. A whistle, throw – bag and a torpedo buoy.

Q24. Why is in – service training needed.

A24. To keep lifeguards knowledge and skills up to date.

Q25. Why is teamwork so important to lifeguards.

A25. A well trained team is more effective than its members would be if they were working as individuals.

Q26. How can lifeguards communicate when working at the poolside.

A26. A whistle gets attention and you can then give instructions.  
Hand signals can be used.  
Your voice is your most useful tool backed up with the right body language.

Q27. What does one, two, and three short whistle blasts mean.

A27. One blast - Get the attention of a pool user.  
Two blasts – Get the attention of another lifeguard.  
Three blasts – lifeguard is taking emergency action.

Q28. What is post traumatic stress disorder.

A28. Stress which develops after an emergency has taken place.

Q29. Describe some effects of post traumatic stress disorder.

A29. Dizziness and shaking.  
Breathlessness or choking sensations.  
Nausea or diarrhoea.  
Headaches.  
Tension aches in the neck or back.

Q30. When should you get professional help for post traumatic stress disorder.

A30. You can't handle intense feelings.  
Your emotions aren't settling down.  
You feel chronic tension, confusion, emptiness or exhaustion.  
You continue to have physical symptoms.  
You have nightmares or can't sleep.  
You feel you want to talk to someone and don't know who to turn to.  
Your relationships suffer badly or sexual problems develop.  
You become accident prone.  
You turn to drink and / or drugs.  
Your performance at work suffers.

Q31. Explain the meaning of the 10 : 20 scanning system.

A31. You should be able to scan an area in about 10 seconds and be close enough to get to an incident in the zone within 20 seconds.

Q32. Name the two main groups of disability.

A32. Congenital disabilities are those people are born with such as cerebral palsy.  
Acquired disabilities are those resulting from illness or accident.

Q33. Name some higher risk bathers than normal bathers.

A33. Weak swimmers.  
Shower – offs or particularly boisterous or rowdy bathers.  
People wearing armbands or other buoyancy aids.  
Children not accompanied by an adult.

Q34. Name the four types of emergency.

A34. Aquatic emergency – happens in the water  
Out of water emergency – happens on the poolside  
Minor emergency – poses little danger  
Major emergency – is serious – even life threatening

Q35. What is an emergency.

A35. An emergency is any dangerous situation that arises suddenly, often with little or no warning. Swift action is needed to avert the danger or lessen the effect of the emergency.  
You need to be able to react quickly.

## **FIRST AID**

Q36. When we give first aid, we're trying to :

A36. Preserve life.  
Prevent the situation from getting worse.  
Promote casualty recovery.

Q37. What does diagnosis mean.

A37. Identifying the cause of an illness or the nature of an injury from the casualty's signs and symptoms.

Q38. Describe some of the things to look for during an assessment of a casualty.

A38. Scalp for bumps, bruises, indentations / softness, bleeding.  
Eyes for injury or bleeding.  
Ears for bleeding, fluid discharge or bleeding.  
Nose for bleeding, fluid discharge or other obvious damage.  
Cheeks for temperature, colour, clamminess, swelling or damaged cheekbone.  
Mouth for obstruction, foreign objects, fluid, vomit, tongue laceration, broken teeth, loose dentures or damage to jawbone.  
Breathing for regularity, rate or unusual odour.  
Neck for damage, deformity, carotid pulse, distended veins, bleeding or swelling.  
Chest/back for rise and fall, bruises, deformity, swelling, chest wounds, flail chest, back pain or compression pain.  
Abdomen for rigidity, tenderness, bruising, bleeding, bowel protrusion, bowel/bladder discharge, incontinence or pelvic girdle compression pain.  
Limbs – legs first, then arms for bruises, discoloration, swelling, deformity, broken bones or bone protrusion, bleeding, joint mobility, dislocation, circulation, reaction to stimuli, needle marks or Medic Alert bracelet.

Q39. Why is it important to keep a record of a casualty's condition.

A39. Because this information may be needed in a subsequent report. More importantly, it can be really helpful to any qualified medical practitioners who later take over the care of the casualty.

Q40. What are the general rules for treating a fracture.

A40. Keep the casualty in the position in which they were found.

Move them only if absolutely necessary.

Reduce the potential of further damage to the injury by immobilisation or support.

Support upper limbs by hand or with a sling.

Support lower limbs with pads of blankets, clothing or similar soft materials.

Cover any exposed wound with a dry, sterile dressing.

If an open fracture, apply a dressing to the wound taking care not to put direct pressure on any exposed bone.

Where a casualty with a lower limb injury has to be moved, gently strap the uninjured leg to the injured one with pads between the two.

Q41. What is the difference between a strain and a sprain.

A41. Strain : occur if muscles are over – stretched.

Sprain : Happen at joints where ligaments have been wrenched.

Q42. What is the treatment for a strain or a sprain

A42. Treatment follows the RICE principle.

R – rest the affected limb or joint

I - apply a protected ice or cold compress

C – apply compression to the injured area

E – elevate the affected area

Q43. When would you use an arm sling.

A43. An arm sling supports and immobilises an injured arm or wrist or provides support and reduces the weight on an injured shoulder.

Q44. When would you use an elevation sling.

A44. An elevation sling gives support and reduces the weight on the shoulder where there is a collar bone injury. This type of sling is also used to raise the arm up to reduce swelling and control bleeding when there are hand or lower arm injuries.

Q45. What can lead to loss of consciousness.

A45. Reduced supply of blood to the brain from suffocation, heart attack, stroke or shock.

Head injury.

Poisoning or drugs.

Effects of extremes of temperature.

Near drowning or some other form of asphyxiation, for example a sweet blocking the airway.

Epilepsy or diabetes.

Q46. Describe some signs that may precede fainting.

A46. Fainting follows a temporary reduction of the blood supply to the brain. It might begin with a feeling of dizziness and lead to collapse.

Causes : injury, illness, fatigue, long periods in a hot stuffy atmosphere, long periods of standing still.

Q47. What serious consequences might follow a head injury.

A47. Head injuries can damage the brain, leading to dizziness, confusion and unconsciousness.

Concussion or Compression injury to the brain can also occur.

Q48. What causes a heart attack.

A48. A heart attack happens if there is some interruption in the blood supply to the heart itself such as a blood vessel becoming blocked.

Q49. What is the treatment for a Heart attack.

A49. Alert lifeguard team.

Immediately summon qualified medical aid.

Take urgent action to carefully remove the casualty from the water, not just to prevent drowning but because water in their airway will make an already serious situation even more difficult.

Place them in a half – sitting, half – lying position.

If they're wearing any clothing, loosen anything tight round their neck and waist.

Reassure them while checking their breathing and circulation.

If they become unconscious but continue breathing, place them in the recovery position and monitor their condition.

Start cardio pulmonary resuscitation if the casualty's circulation fails.

Q50. What is shock.

A50. Shock is a failure of the circulation, which leads to an inadequate supply of blood to vital organs. So shock means there isn't enough blood being pumped round the body.

Q51. What is the treatment for shock.

A51. Treat the cause of the shock if possible – for example, by stopping external bleeding or dressing burns.

Reassure the casualty.

Lay conscious casualties flat with their legs raised.

Place unconscious casualties in the recovery position.

Keep them warm to prevent heat loss.

Don't give them food or drink because this may cause vomiting.

Q52. Which technique for relieving choking should not be used on infants ( under 12 months )

A52. Abdominal thrusts should not be used.

Q53. What is anaphylactic shock.

A53. This is a serious, potentially fatal condition caused by a massive allergic reaction.

Q54. What is the treatment for anaphylactic shock.

A54. Summon qualified medical aid.

Conscious casualties should sit in a position which relieves any breathing difficulties.

Unconscious casualties should be treated according to the usual procedures.

Q55. Contact with electricity can result in.

A55. Unconsciousness.

Spasm of the respiratory muscles so that breathing stops.

Cardiac arrest due to ventricular fibrillation which is an interruption in the regular and rhythmical beating of the heart.

Burns at the point(s) of contact.

Q56. What is the priority when rescuing someone who has received an electric shock.

A56. It is essential that the contact with the casualty is broken before treatment or a rescue is attempted.

Q57. What is Hypothermia and how should it be treated.

A57. Hypothermia starts when the casualty's core body temperature falls below 35 C.

Alert the lifeguard team and get assistance.

Move the casualty to a warm area.

Prevent further heat loss by wrapping them in a blanket, ideally with a reflective blanket on top and cover their head – note that foil blankets placed directly on wet skin may take some heat away from the body at all points of contact as the material sticks.

Ideally, heat during re – warming should come from the core of the body rather than the surface.

Maintain close observation of the casualty's breathing and circulation.

Get qualified medical aid as soon as possible. Transfer the casualty to hospital.

Q58. What is the treatment for burns and scalds.

A58. Alert lifeguard team.

Summon qualified medical aid unless the burn is superficial and very small.

Immerse the affected area in very cold running water for at least ten minutes.

If clothing is stuck to the burned area, don't try to remove it as you could cause further damage.

Remove any rings, watches or jewellery carefully before the injured area starts to swell.

Cover the burn with a clean, dry sterile dressing held in place with a lightly applied bandage. Treat the casualty for shock.

Q59. What is the difference between venous and arterial bleeding.

A59. Venous – blood is dark red in colour and will gush, though with less pressure than arterial blood.

Arterial – bright red in colour and will pump or spurt from the wound in time with the heart beat.

Q60. What is the treatment for bleeding.

A60. Wear protective gloves.

Alert the lifeguard team.

Summon medical aid in all but the most minor cases.

Apply direct pressure to the wound with a clean dressing, or in an emergency, with the fingers or palm of your hand.

Raise the affected area to reduce blood flow.

If the bleeding doesn't stop, don't remove the dressings but apply more on top of the first.

If the wound is large, it might be more effective to press the edges together with your fingers

Lay or sit the casualty down in a comfortable position.

Treat them for shock.

Q61. What is the treatment for bleeding from the nose.

A61. Sit the casualty down with their head held forward.

Ask them to breathe through their mouth.

Apply pressure to the soft tissue on both sides of the nose just below the bridge – they might be able to do this for themselves.

Ask them to try not to speak, swallow, cough or sniff, as this could dislodge the newly formed blood clot.

If the bleeding continues, either get medical help or transfer the casualty to hospital.

Apply the pressure for up to ten minutes and then allow circulation to return to normal.

You can try again for another ten minutes, but in most cases, the bleeding will stop within a few minutes.

Q62. What is the treatment for an asthma attack.

A62. Alert members of the lifeguard team.

Reassure the casualty.

Assist them from the water.

Sit them down on a chair or seat, with their body leaning forward.

Encourage them to use their prescribed medication.

Q63. What is the cause of diabetes.

A63. Diabetes is caused by a disturbance in the body's ability to regulate blood sugar levels.

It can result in : hyperglycaemia ( too much blood sugar )

Hypoglycaemia ( too little blood sugar )

Hyperglycaemia normally develops very gradually so you'll rarely find a casualty in this condition. Hypoglycaemia, however, can develop very quickly.

Q64. What is the treatment for diabetes.

A64. If they're conscious, give them drinks sweetened with two or three tablespoons of sugar – if they improve dramatically, the problem was an excess of insulin. If they don't improve, giving sugar will cause no harm.

Q65. What is the treatment for an epileptic fit. For seizures in the water:

A65. Alert other members of the lifeguard team.

After a non-convulsive seizure or absence, help the person out of the water quietly and calmly.

During a convulsive seizure, or absence, support them to keep their face clear of the water.

Take care that their head doesn't hit you or the poolside.

If possible, support them in shallow water until the seizure is over, then help them from the pool.

Monitor their breathing and circulation.

Be prepared to start CPR if needed.

Get medical help for anyone who has a seizure in the water because water may have been inhaled so there is a danger of secondary drowning.

A65. For seizures on dry land:

During a non-convulsive seizure or absence they may not need any attention other than observation and understanding.

During a convulsive seizure do not restrain the casualty and only move them if there is a danger of injury or falling into the water.

Objects which could cause injury should be removed.

Place the person in the recovery position as soon as possible.

Once the attack is over, they should rest quietly until they are fully recovered.

Get medical help if there is any injury, if the attack lasts for more than five minutes, if the attack is repeated without consciousness being regained, or if the seizure is unusual for that person.

Q66. What is cramp and what are the causes of cramp.

A66. Cramp is a sudden, involuntary and painful contraction of a muscle. Cramp is caused by very cold conditions, sudden or unusual exercise, a blow or injury to the muscle, or by excessive loss of salt from severe sweating.

Q67. What is the treatment for cramp.

A67. Alert other members of the lifeguard team.

Assist the casualty from the water.

If the lower limb is affected, ask them to lie down and elevate the affected limb.

Stretch the muscle by carefully and gently straightening the affected area.

If the calf muscle is affected, straighten the knee and gently push the casualty's toes towards their knee.

If the abdominal muscles are affected, encourage the casualty to stand straight and arch the back slightly.

Massage the affected area very gently to help the muscle to relax but don't rub the muscle violently.

Advise the casualty to rest before further activity.

Q68. What is the treatment for a foreign body in the eye.

A68. Alert other members of the lifeguard team.

Advise the casualty not to rub the eye.

Have them sit facing the light.

Stand behind them.

Gently separate the eyelids with your finger and thumb.

Examine every part of the eye.

If you can see the foreign body, wash it out with a sterile solution or tap water using an eye glass or eye irrigation unit.

If this doesn't work, carefully apply an eye pad, bandage the affected eye, and seek qualified medical aid.

Q69. What is the treatment if a tooth has been knocked out.

A69. It should be retrieved and stored in milk.

The casualty should seek attention from the dentist, taking the tooth to the consultation.



Q70. How quickly might a drowning non-swimmer succumb.

A70. As quickly as 20 seconds.

## **RESCUE TECHNIQUES**

Q71. What is the pattern of behaviour of a drowning non-swimmer.

A71. They are usually vertical in the water.

May have their head out of the water in the very early stages.

Take a gulp of air then sinks below the surface.

If able, pushes down with their arms, re-surfaces and gasps for air with their head tilted back.

Sinks again as their arms extend over their heads.

May repeat this sequence, pushing down on the water with arms extended and heads tilted back, until they are rescued or drown.

Q72. What is the pattern of behaviour of distressed or weak swimmers.

A72. Can usually attract attention in some way, by waving or calling.

Tends to be at an angle in the water rather than either on the surface or vertical.

Is able to help themselves to some extent and maintain their body position, although their arm and/or leg movements are generally ineffective.

Once they're too tired, they adopt a more vertical position in the water and need to be treated in the same way as drowning non-swimmers.

Q73. Describe the body position of an unconscious casualty in the pool.

A73. An unconscious casualty can be anywhere between the surface and the bottom of the pool.

More often than not be face down with arms and legs hanging limply.

Be totally limp in the water.

Be incapable of supporting or assisting themselves.

Q74. What are the advantages of a fixed focal point for rescues.

A74. A fixed focal point can save time, reduce decision making, and rescue equipment can be permanently positioned nearby.

Q75. In what circumstances might a shout and signal rescue be appropriate.

A75. Shout and signal should be used when the casualty is conscious, close to the edge of the pool and able to respond to instructions.

Q76. What sort of equipment might be used in a reaching and throwing rescue.

A76. Fixed or telescopic reaching poles.

Torpedo buoys for reaching and throwing.

Throw bags.

Buoyant throwing devices.

Q77. How do you perform an arm support tow.

A77. Grasp – but don't squeeze – the underside of their upper arm.

Use either right arm to right arm keeping your towing arm straight OR right arm to left arm, supporting the casualty's shoulders against your towing arm.

Apply a gentle lift to the casualty's arm to ensure their head stays clear of the water.

Swim sidestroke or lifesaving backstroke.

Observe the casualty and watch the direction you're travelling in.

Q78. How do you perform a hip support tow.

A78. Approach the casualty from the rear and usually just below the water surface as you get close to them.

Grasp them across the chest or around the waist, depending on their size, and put your arm under their arm.

Pull them on up to sit on your upper hip.

Keep your grip on the casualty.

Swim using the sidestroke kick.

Observe them and even if underwater, watch the direction of travel.

Q79. How do you perform a shoulder support tow.

A79. Approach the casualty from the rear (in most cases it may be appropriate to approach from underwater)

Grasp them around the chest and place your shoulder under their armpit.

Keep the side of your face close to the centre of their back.

Swim using sidestroke.

Observe the casualty and watch the direction of travel.

Q80. Describe three ways of entering the water to perform a rescue.

A80. Slide-in entry. Step-in entry. Straddle entry.

Q81. What is known as the freeboard.

A81. The distance between the surface of the water and the top edge of the pool.

Q82. Describe three ways of getting to the bottom of the pool to recover a casualty.

A82. Feet-first surface dive. Head-first surface dive. Dive from the poolside.

Q83. Name two swimming strokes recommended for rescues.

A83. Lifesaving backstroke and sidestroke.

Q84. Describe how to separate two casualties who are clinging to one another in the water.

A84. Grasp the uppermost casualty under the armpits from behind.

Force both casualties under the water.

Place your legs around the first casualty and your feet against the hips and thighs of the second casualty.

Maintain a grip on the first casualty's body.

Straighten your legs to force the two casualties apart.

Q85. Describe how to escape from a grasp from behind around the neck.

A85. Take a deep breath, tuck your chin into your chest.

Grasp their elbow and wrist on the upper arm.

Push up the elbow and pull down the wrist of the same arm rapidly and vigorously.

Push the casualty's arm up over the head and duck under the arm and elbow.

As the grasp is broken, escape behind and away from the casualty.

Adopt a defensive 'stand off' position and reassess the situation.

Q86. Describe how to escape from a grasp from behind round the waist.

A86. Take hold of a finger or thumb of each of the casualty's hands.

Exert pressure against the joint to lever the hands apart.

Push the elbows and hands outwards, forcing the casualty's arms wide apart.

Release the hold and swim quickly out of reach.

Adopt a defensive stand off position and reassess the situation.

Q87. Describe how to escape from a grasp from the front.

A87. Take a deep breath and tuck the chin into the chest.

Extend the arms forcefully against the casualty's chest, armpits or waist.

Duck away vigorously underwater and out of reach.

Adopt a defensive stand off position and reassess the situation.

## RESUSCITATION

Q88. What two things are necessary to produce energy in the blood.

A88. Food and Oxygen.

Q89. Which part of the body is the most sensitive to lack of oxygen.

A89. The Brain.

Q90. What is asphyxia.

A90. Insufficient oxygen reaching the blood because someone has either stopped breathing, or because they can't breathe properly.

Q91. Give some causes of asphyxia.

A91. Suffocation.

Reduction in the blood's ability to carry oxygen because of something such as gas poisoning or severe bleeding.

Breathing failure because of a chest injury, deep unconsciousness, drug overdose or electric shock.

Drowning.

Fluid in the lungs stopping oxygen being transferred to the blood.

Hyperventilation.

Q92. Give an example of an involuntary movement.

A92. Heart beat.

Q93. Describe drowning.

A93. Death from asphyxia caused by immersion in water.

Q94. Describe dry drowning.

A94. The airway will stay closed and no water will enter the lungs. (often with children)

Q95. Describe wet drowning.

A95. The airway will relax and reopen, water will then enter the lungs.

Q96. What is hyperventilation.

A96. Hyperventilation is repeated rapid, deep breathing.

Q97. What is secondary drowning.

A97. Associated with near drownings, small amount of water enters the lungs, it interferes with normal transfer of oxygen to the blood.

Q98. What does the term cardiac arrest mean.

A98. The heart has stopped pumping blood around the body.

Q99. What are the four stages in the chain of survival.

A99. Get the quickest possible help from medical professionals – dial 999 (or 112 from a mobile)  
Start CPR to buy time.

Electrical defibrillation of the heart to restart it.

Specialised advanced life support to stabilise the casualty.

Q100. What is the ABC of survival.

A100. Airway – make sure their airway is open and there's no obstruction.

Breathing – look, listen, feel for breathing.

Circulation – check for signs of circulation.

Q101. What are the priorities when treating a casualty.

A101. Determine the need for and give CPR.

Control severe bleeding.

Manage choking.

Care for the unconscious, breathing casualty.

Treat for shock.

Q102. How would you check for signs of circulation.

A102. Look, listen and feel for normal breathing, coughing or movement by the victim.

Q103. What is the ratio of chest compressions and rescue breathing for an adult.

A103. Ratio is 15 : 2

Q104. What depth do you compress the chest on an adult during CPR.

A104. Between 4 to 5 centimetres.

Q105. What depth would you compress the chest for infants or young children during CPR.

A105. Compress about one third of the depth of the chest.

Q106. What is the ratio of chest compressions and rescue breathing for young children and infants.

A106. Ratio is 5 : 1

Q107. What problems are caused by vomiting and air in the stomach during CPR.

A107. Vomiting : the danger is that the vomit will enter the air passages and lungs. This can interfere with breathing and cause a particularly severe form of pneumonia.

Air in the stomach : as the stomach swells, it interferes with the downward movement of the diaphragm and reduces the inflation of the lungs. Air in the stomach also increases the chance of the casualty vomiting.

Q108. Describe how to give rescue breathing in the water.

A108. Support the casualty with one hand under their far armpit or between their shoulder blades.

Place your forearm under their neck to assist head tilt.

Remove any obstruction or loose dentures from their mouth.

Lift their chin.

Make sure water doesn't splash over their face.

Give mouth to nose rescue breaths at the usual rate.

Q109. What are the three levels of resuscitation.

A109. Basic Life Support – CPR using rescue breathing and chest compression.

Basic Life Support With Adjuncts – basic CPR plus use of face masks, suction equipment and oxygen.

Advanced Life Support – use of defibrillation equipment, mechanical resuscitation equipment and other specialised techniques.

## **Spinal Cord Injury Management**

Q110. What are the possible results of a spinal injury.

A110. Monoplegia : paralysis of a single limb.

Hemiplegia : paralysis of one side of the body.

Paraplegia : paralysis of the lower limbs ( may involve paralysis of the bladder and/or rectum.

Quadraplegia : paralysis of all four limbs.

Q111. How many trained people are required for an Aquatic Spinal Injury.

A111. At least four trained people.

Q112. What is a vertebrae.

A112. One bone in the structure of the spine.

Q113. How many vertebrae are in the spine.

A113. 33.

Q114. In between the vertebrae are cartilage discs which :

A114. Allow limited movement.

Prevent friction.

Act as shock absorbers.

Q115. Name the two categories of nerves.

A115. Peripheral nerves and Autonomic nerves.

Q116. What is a flexion injury.

A116. When the head is pushed forwards, the ligaments are stretched and torn at the back.

Q117. What is an extension injury.

A117. When the head is forced backwards, the ligaments at the front are torn.

Q118. Name some signs and symptoms of a spinal injury.

A118. Lack of movement of one or more limbs.

Disorientation or bewilderment.

Numbness or tingling in the limbs.

A casualty floating face down in the water, unable to turn over.

Unconsciousness.

In extreme cases, respiratory and cardiac arrest.

Q119. What position should the casualty be kept in throughout the rescue and recovery from the water.

A119. You must make sure the casualty is kept in a horizontal position.

Q120. How would you apply the vice grip.

A120. Reach under the casualty, taking care to go round their near arm rather than under it.

Place your forearm along the line of their breastbone, supporting their face just above the chin securely with your thumb and fingers in a Y-shape either side of their jaw.

Place your other forearm in the same position along their spine. Your fingers should be outstretched on the back of their head, clamping it securely from behind.

Always place the elbows in position first, to make sure of a secure position for your hands which have to stabilise the casualty's neck.

Keep your fingers, hands, wrists and elbows and forearms should be gently but firmly pressed together in the same way that a vice holds an object securely between its jaws.

Q121. What two methods are available when a casualty is discovered in shallow water.

A121. Bear Hug and Head Splint.