

9.7 CMAS-ISA RESTRICTED SPORT DIVER CERTIFICATE CMAS EQUIVALENT – NONE

(Depth limit - 18 meters)

9.7.1 OBJECTIVE

To supply a framework for the training of physically disabled and handicapped divers enabling them to obtain the 1 Star Restricted Sport Diver qualification.

9.7.2 SYLLABUS

Prescribed manual: CMAS One Star Diver Manual

The candidate shall receive tuition in the theory of:

- a. Basic and Scuba Equipment: Mask, Snorkel, Fins, Wet Suit, Weight Belt, Knife, Dive Watch, Scuba Cylinders, Demand Valves, Pillar Valves, Pressure Gauges, Depth Gauges, BC's.
- b. Snorkel and Scuba Techniques: Pre/Post Dive Routine, Entries, Exits, Signals, Mask Clearing, Buoyancy Compensation, Buddy breathing, Doffing and Donning, BC's use.
- c. Scuba Diving Physics: Archimedes' Principle, Water Viscosity, Temperature and Heat Loss, Light and Vision, Sound, Boyle's Law, Dalton's Law, Henry's Law, Charles' Law, Combined Gas Law.
- d. Scuba Diving Physiology: Circulatory system, Lung function, Hyperventilation, Hypoxia, Anoxia, Hyperthermia, Hypothermia, Shock, Cramp, Exhaustion, Effects of Pressure, Barotrauma, Nitrogen Narcosis, Oxygen Poisoning, Decompression Sickness.
- e. Decompression and the use of: Decompression, Use of no stop table, Rate of Ascent, Altitude, Exercise, Flying.
- f. Scuba Dive Planning: Dive Plan and Profile, Shore dives, Boat dives, Air Endurance.
- g. Rescue and Resuscitation: CPR, EAR and General First Aid, Underwater Rescue, Possible Complications.
- h. Free diving and Scuba Activities

9.7.3 PREREQUISITES

To attend the 1 Star Restricted Sport Diver Course.

1. Must be at least 14 years old.
2. Must submit a medical certificate clearing the holder as fit to participate in the sport of underwater diving before participating in any practical training. A medical practitioner using the CMAS-ISA Sport Diving Medical Examination Form must have carried out the medical examination. Where an individual is attending a CMAS-ISA course for the first time, the certificate must not be older than 3 months and not older than 12 months when the One Star Restricted Sport Diver certificate or any other subsequent certificate is finally issued.

To write the 1 Star Restricted Sport Diver examination.

3. Must attend a 1 Star Restricted Sport Diver course run by at least an in-date Two Star instructor (Course Convenor).

To apply for the 1 Star Restricted Sport Diver certificate.

4. Must pass the theory examination as set by a panel of Instructors, or as set by CMAS-ISA. A pass mark of 65% is compulsory.
5. Must pass the A, B, C & D practical tests.
6. Must log at least 5 scuba dives in open water and have these verified by at least an in-date Two Star Instructor. The candidate must buddy with at least 2 Two Star Advanced Divers. The dives are to be of at least 15 minutes duration and to a depth not exceeding 18m.
7. Must apply for the certificate through the Instructor.
8. The certificate must be endorsed according to the candidate's ability.

NOTE: Parts 4, 5 & 6 must be completed within 1 year of writing the theory examination. Failing which parts 4 and 5 must be re-done.

The above mentioned prerequisites are the minimum required for the CMAS-ISA One Star Restricted Sport Diver Certificate.

9.7.4 THEORY EXAMINATION

The examination format shall be as follows:

Section A	
20 Short questions testing elementary Snorkel/Scuba Diving knowledge.	20 marks
Section B	
Short questions on basic and scuba equipment knowledge.	20 marks
Section C	
Short questions on diving physics.	20 marks
Section D	
Short questions on diving physiology and medical aspects.	20 marks
Section E	
Short questions on hyperventilation, hypothermia and hyperthermia	20 marks
Section F	
Short questions on rescue and emergency procedures.	30 marks
Section G	
Short questions on dive planning.	20 marks

Time allowed for the Examination is 3 hours. Total marks = 150.

9.7.5 PRACTICAL TESTS

NOTE: All practical tests to be conducted by at least an in-date Two Star Instructor. Tests A, B, & C are to be carried out during one practical session in the same swimming pool. The pool should be at least 2m deep and preferably 3 to 5m deep. A rest period of one minute is allowed between tests unless otherwise stated.

A. To be carried out in the swimming pool wearing either a swimsuit only or a wetsuit with neutralising weight belt.

1. Swim 100m freestyle. No rest allowed during the swim. Crawl, breaststroke or butterfly style may be used.
2. Float on back for 3 minutes during which slight arm and leg movements are allowed. Alternatively use any other drown proof technique for 3 minutes.
3. Sink basic equipment in no less than 2m of water (3 to 5m is preferred). Dive each individual item separately and refit on the surface. If wearing a wetsuit, the neutralising weight belt is not to be removed.
4. Do an emergency weight belt release. If no wetsuit is worn, still do this test using a weight belt equal to 5 % of normal body weight.
5. Submerge completely and hold breath for 30 seconds while remaining submerged. Surface.
6. Clear snorkel and breathe through snorkel for 1 minute with head submerged.
7. Swim 20m with face submerged, breathing through snorkel only.

B. To be carried out in swimming pool wearing full scuba equipment, wetsuit, weight belt and BC.

1. Do the complete scuba pre-dive routine including the BC and fit diving equipment with the aid of a buddy.

2. Perform at least one neat entry as prescribed by the examiner and regain equilibrium under water.
3. Submerge and demonstrate buoyancy control without the use of the BC.
4. At the deep end of the pool remove, replace, refit and clear mask 3 times.
5. Remove demand valve, replace and purge 3 times.

C. To be carried out in the swimming pool, wearing full scuba equipment, wetsuit, weight belt and BC.

1. Orally inflate the BC and demonstrate emptying of the air in the BC in order to submerge.
2. Demonstrate underwater the ability to increase and decrease buoyancy with the aid of the BC.
3. Demonstrate the use of an additional air supply i.e. pony bottle or power inflator, as well as the emergency dumping of air.
4. Swim 25m on the surface wearing scuba equipment but breathing through the snorkel.
5. Submerge at the deep end of the pool, signal "I am out of air" and "I am going up". Remove mouthpiece, fit snorkel and surface whilst exhaling. Signal "I and OK" on surfacing.
6. Submerge and share air from scuba equipment with a buddy for 2 min, while not exceeding 3m in depth. Change over to buddy's scuba equipment and share air for another 2 min. Surface whilst exhaling.
7. Swim 25m using a blacked out mask, either being led by another diver or following a rope. Surface whilst exhaling.
8. Swim 5m underwater to the deep end where a buddy is simulating unconsciousness. Demonstrate rescue techniques and the use of your buddy's BC to surface whilst exhaling.
9. Simulate some form of lifesaving techniques and EAR/CPR, if possible.
10. Complete the post dive routine.

D. To be carried out in open water under controlled conditions wearing basic equipment only. A wetsuit together with a neutralising weight belt may be worn. Tests 1 & 2 to be performed if not in possession of a Snorkel certificate.

1. Swim 25m on the surface in open water.
2. Do a snorkel dive to a depth of at least 3m and signal "I am OK" on surfacing whilst exhaling.

Using full scuba equipment and BC.

3. Do complete pre-dive routine including the BC.
4. Enter water with mask in hand, fit, clear and orally inflate the BC. Empty the air in the BC in order to submerge and descend to 10m depth.
5. Demonstrate the ability to increase and decrease buoyancy with the aid of the BC.
6. Demonstrate the use of an additional air supply i.e. pony or power inflator as well as the emergency dumping of air.
7. At 10m depth, remove, refit and clear mask.
8. At 10m depth, remove, refit, and purge mouthpiece of demand valve.
9. Give, receive and interpret CMAS approved hand signals.
10. At 10m depth, share air with your buddy for 1 minute, change over to your buddy's scuba equipment and share air for a further 1 minute.
(NO surfacing allowed during this exercise).

NOTE: Test D does not count as one of the 5 qualifying dives, but may form part of the qualifying dives.

Perform a further 5 additional qualifying scuba dives under the direct supervision of at least an in-date 2 Star Instructor. The candidate must buddy with at least 2 Two Star Advanced Divers. The dives are to be of at least 15 minutes duration and to a depth not exceeding 18m. Only 2 dives are to be executed per day.

Apply for the certificate via the Instructor.