

## NCRC Instructor Recertification Practice Questions

### Policy

1. Explain the role of an NCRC instructor in a real rescue incident NOT associated with an NCRC training event.
2. Describe the 2 tiers of the NCRC organizational structure, and describe 3 key responsibilities for each level.
3. What is the process for seeking approval for an NCRC regional seminar?
4. Who can serve as a site host/coordinator for the seminar?
5. Who can serve as the Lead Instructor for an NCRC regional seminar and what approval must they have to be Lead Instructor?
6. What are 4 major responsibilities of a seminar's lead instructor?
7. Who must give you permission to announce or conduct a regional NCRC seminar?
8. Under what conditions can persons who are not certified NCRC instructors teach at NCRC regional seminars?
9. What is the parent organization of the NCRC?
10. What are the recertification requirements for NCRC instructors that must be fulfilled every three years?
11. How can the Lead Instructor obtain the most current version of NCRC curriculum for use in a NCRC seminar?
12. What e-mail address should be used when submitting a request to hold an NCRC regional seminar?
13. Where can an instructor find current information on the fees associated with NCRC seminars?
14. Can youth under the age of 18 participate in NCRC seminars? If so, what special conditions must they fulfill?
15. Can the NCRC logo be used on a hat, shirt, or other item of apparel?
16. How does a person become a member of the NCRC?

### Leadership – Followership

17. Detail a two-part definition of the concept of teamwork.
18. List 4 types of conflict resolution that a good leader could draw upon.
19. Define followership. Why is followership crucial to cave rescue?
20. List 6 characteristics of a good leader and six characteristics of a good follower.

## Medical

21. What is the primary goal of cave rescue?
22. Discuss 3 major differences in underground and above ground medical care.
23. What is the standard of care that NCRC teaches with regard to medical issues, Advanced Life Support (ALS) or Basic Life Support (BLS)? (circle one)
24. List the 4 questions you should ask yourself when you approach a potential patient in a cave.
25. What are the 4 stages of an initial medical assessment?
26. What do the letters stand for in the acronym SAMPLE, which is used when taking a medical history?
27. What 5 components make up a full evaluation of vital signs?
28. A hands-on, Head-to-Toe survey occurs when in a complete medical assessment?
29. What are 4 components of an appropriate treatment for shock?
30. Proper splinting requires immobilization \_\_\_\_\_ and \_\_\_\_\_ the injured joint or bone.
31. List 4 mechanisms of heat loss, and describe how they would occur within the cave environment.
32. List 4 risk factors that make it more likely a person will get hypothermia.
33. List 4 things cave rescue task force members should do to help prevent hypothermia in themselves and their teammates.
34. What 4 things can be done to treat mild hypothermia in-cave?
35. Contrast the symptoms seen in mild and severe hypothermia.
36. What is the most appropriate in-cave treatment for severe hypothermia?
37. What is the appropriate word for referring to the person being rescued?
38. Identify 6 groups with psychological investments in cave rescue situations.
39. Describe 3 forms of post-trauma mental health services, and discuss their application to cave rescue linked trauma.

## Patient Packaging & Transport

40. What is the function of the tarp placed in the litter during patient packaging?
41. Describe layers involved in packaging a patient in a Ferno, listing from the Ferno in to the patient.
42. What are 3 reasons why patient access must be maintained when patients are packaged?

43. When securing a patient in a Ferno litter, what is the primary purpose of the Double V?
44. What consideration determines whether you use a foot loop in a Ferno packaging system?
45. Should helmets be left on patients in Ferno or in SKED litters? Why or why not?
46. Describe the 2 main steps in securing a patient in a SKED litter.
47. Name 5 types of litters for patient movement. Identify the 2 that are most commonly used in cave rescue, and discuss why they are popular for the application.

#### Cave Environment, Water, Atmosphere

48. What is the NSS Motto?
49. What are 5 common life-threatening factors associated with cave environments?
50. List and describe all clothing necessary for safe caving. Include at least 5 items.
51. Discuss 5 rescue strategies for water-entrapped cavers, and identify which is generally the best strategy.
52. Would it be safe for a sump diver, a cave diver, or a cavern diver to enter a flooded cave that has people entrapped in it? Please answer separately for each type of diver.
53. What is generally the most feasible response to persons stranded in a flooded cave?
54. List and describe 3 ways that water can infiltrate a karst landscape, and identify the most dangerous one from a cave rescue standpoint.
55. Give 3 examples of manmade unsafe atmospheres in caves and 3 examples of naturally occurring unsafe atmospheres in caves.

#### Search

56. What are 2 tasks that should be performed immediately when a cave search is initiated?
57. Concerning Search Theory, what does  $P_a \times P_d = P_s$  mean?
58. Discuss 3 ways to limit your search area.
59. Name, then compare and contrast the two types of search teams.
60. Draw cave mapping symbols for: Slope, Ledge, Pit, Flowing water, Standing water; Ceiling height, Breakdown, Underlying passage.

#### Communications

61. Describe one example of direct communication in a cave rescue and one example of indirect communication in a cave rescue.
62. What is the first priority connection for communication when installing a field telephone system?
63. Draw a picture of a proper splice of communications line?

64. Describe 4 rules for communicating effectively by phone or radio.
65. What is the proper orientation for installing batteries in a TA-312 field phone?

### ICS

66. What is the appropriate span of control, or the best number of people to have assigned to one overseeing person, as stated in the ICS system?
67. To whom does the IC in an ICS system report?
68. What are the 6 responsibilities of a task force member, as designated by the ICS system?
69. What is the primary role of an Initial Response Task Force?
70. READ THIS QUESTION CAREFULLY, AND ANSWER IT COMPLETELY. If a group of 5 NCRC trained persons arrives on-scene as the first responders (i.e., there are no other rescuers there) to a person-lost-in-cave incident, how should they organize themselves under ICS?
71. Name the 7 task forces utilized in cave rescue, as described in NCRC curricula.
72. List the 4 general staff functional areas identified in ICS and briefly describe their major responsibilities.

### Single Rope Techniques

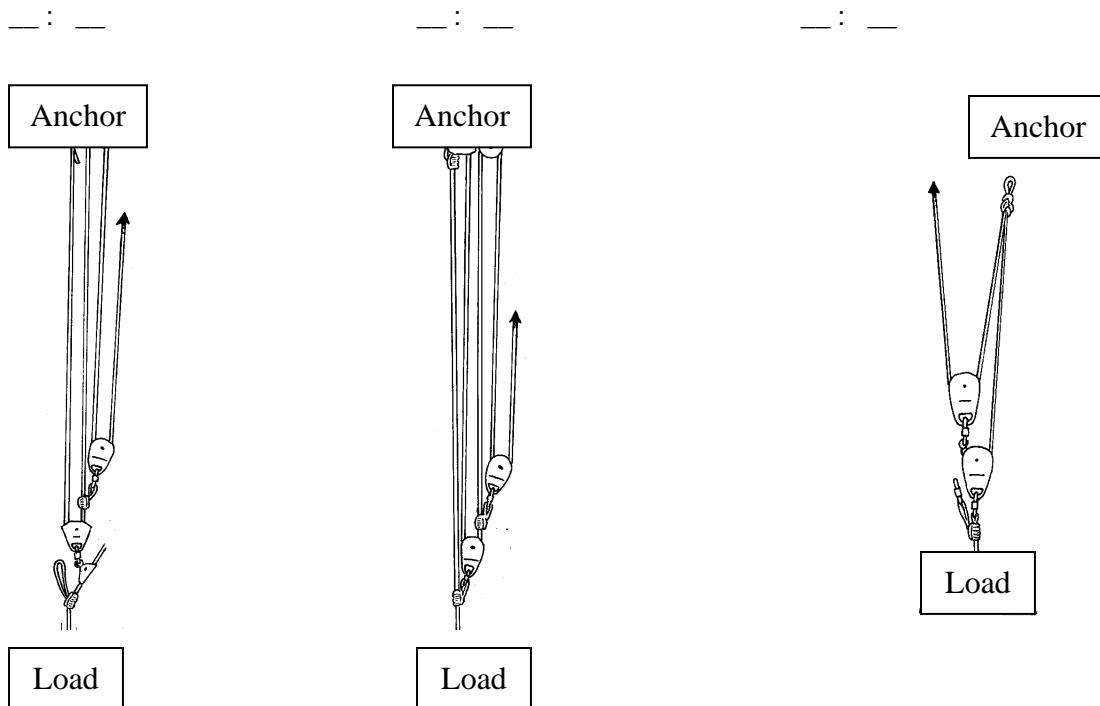
73. List 3 standard personal ascending systems. Describe the basic components of each.
74. A safe ascending system for cave rescue needs at least how many gripping points attached to the seat harness?
75. List 4 types of personal descent devices commonly used by cavers.
76. What is the NCRC required tie off for an open frame rack?
77. What are the 2 main functions of a QAS when tending an edge?
78. What is the most common misuse of a QAS that should be guarded against?
79. Describe 3 situations in which it would be appropriate for a solo rescuer to attempt a single rope rescue of a person stuck on rope.
80. What is the medical emergency concerning a person stuck on rope?
81. List 4 common, non-traumatic conditions leading to cavers stuck on rope?

### Technical Rigging

82. A Kilo Newton equals approximately \_\_\_\_\_ lbs. force.
83. What type and size of rope is used for typical cave rescue applications?
84. Describe 3 reasons dynamic rope is not appropriate for cave rescue use.

85. Discuss 4 ways rope might be damaged.
86. Of non-locking carabiners, auto-locking carabiners, and locking carabiners, which are generally the most appropriate for a rescue application and why?
87. What are 2 main concerns when deciding whether to use steel or aluminum carabiners for a specific application?
88. What is the strongest shape of carabiner?
89. What is the standard size cord to create prusiks for standard size rescue rope? What is the standard size for rescue rope?
90. Draw a picture of a prusik minding pulley and a regular pulley that explains the difference between them.
91. Which is stronger: one-inch tubular webbing or one-inch solid webbing?
92. List and explain 4 of 8 basic commands for belaying.
93. List and explain 6 commands for hauling.
94. List and explain 3 lowering system commands.
95. During any vertical exercise, what is the appropriate response to a request for "SLACK"?
96. List probable component strengths for caving rope, rappelling racks, steel carabiners, aluminum carabiners, webbing, and Ferno litters. Which component is most likely to be the weak link in an actual system, as it is deployed in cave rescue?
97. Draw or describe the brake tender's positioning in a lowering system.
98. Discuss 3 main considerations when rigging to formations.
99. Describe 3 reasons to backup an anchor.
100. Give an example of an appropriate application for each of the following: Tensionless anchor, W3P2, Basket rigging, Multi-Point Anchoring
101. What is the difference between Load Sharing and Load Distributing anchors?
102. What is the angle beyond which the two legs in a load sharing anchor system experience force multiplication, such that each leg exceeds the actual load?
103. When rigging multi-point anchors, what percentage of the original load is borne by each leg when the internal angle is 90 degrees? 150 degrees?
104. What percentage of the original load is seen by the deviation anchor when the angle of deviation is 10 degrees? 30 degrees?
105. Describe 3 commonly used artificial anchoring systems.
106. How may toothed ascenders be used in haul systems?
107. When used for progress capture, how many prusiks are required?

108. Draw a 1:1 (or "Georgia Haul") including progress capture.
109. When is a 1:1 haul system appropriate? When operating a 1:1, be alert for what?
110. State the major disadvantages of using a 2:1 without progress capture on a separate rope.
111. Sketch a 3:1 (z-rig) hauling system, complete with progress capture system and belay. Label components (if not clearly drawn), including anchors, pulleys, carabiners, load, edge protection, etc.
112. State 3 advantages of a 3:1 Haul System with internal progress capture?
113. Define the "Rule of 12" and describe its implications with a 3:1 and a 1:1 haul system.
114. How do mechanical advantage systems change the variables in the equation  $Work = Force \times Distance$ ?
115. Contrast Ideal, Theoretical, and Actual mechanical advantage.
116. What is the ideal mechanical advantage of each of the following illustrations?



117. The NCRC curriculum illustrates three general types of counterbalance systems: rappelling counterbalance, climbing counterbalance, and diminishing loop counterbalance. Sketch one of these systems and label its key components.
118. Define the term "belay."
119. Contrast climbing and rescue belays in 3 different ways.
120. When is it appropriate (according to NCRC) to employ a munter hitch belay in Level 1 or Level 2?

121. What type of belay must be utilized by Level 1 & 2 for rescue loads being lifted/lowered on rope? Draw and label the components.
122. When should a PMP be used in a T3WP belay? When may it be excluded?
123. Should belay lines run through high directionals? Why?
124. How is the Münter hitch in a Radium Load Release Hitch "blocked" (tied off)? (List the sequence and placement of knots or hitches utilized.)
125. To what should you connect the active end of the belay line in a vertical rescue situation?
126. Define the Whistle Test and the Drop Test for vertical rescue systems.
127. What is the appropriate use of cammed ascenders in rescue belay applications?
128. How is a packaged patient attached to the belay system?
129. What is the main advantage of rigging a litter in a horizontal configuration? What is the main disadvantage?
130. What is the main advantage of rigging a litter in a vertical configuration? What is the main disadvantage?
131. Discuss considerations for rigging tag lines on a vertical litter.
132. What is the main advantage of using a high change of direction at an edge.
133. Describe 2 acceptable ways with 2 different knots to rig a litter focal point.
134. Draw the recommended high and low litter bridles for rigging vertical Ferno.
135. When is it most profitable to use both high and low bridles on a litter?