

Print Name:

Date:

# Basic Climbing Exam

## Knots of the Trade

### Section 1: Matching (20 Points)

1. **This is the standard follow-through knot** used when connecting a safety rope to a harness; also known as the most widely used tie-in climbing knot. \_\_\_\_\_
2. **A Knot that is easy to adjust and untie** after it has been weighted; used as an anchoring knot, tie down point, and harness safety knot. \_\_\_\_\_
3. **A knot known well for binding together the ends of tubular webbing** for anchor loops, runners and quick draws; only used with webbing. \_\_\_\_\_
4. **A knot used mostly to tie together the ends of ropes** and adjustable loops. \_\_\_\_\_
5. **A knot that can be used as an ascender** and is best to tie using rope. \_\_\_\_\_
6. **This Pretzel-like knot is used to anchor ropes and webbing** to a fixed location and is designed to be tied with one hand, connected to carabineers, and adjusted quickly before loading. \_\_\_\_\_
7. **A rescue knot used with rope and a locking carabineer** to rappel down an incline or belay a moving rope system. \_\_\_\_\_
8. **A knot commonly used by mountain climbers** to anchor into the center of a rope, between the leader and follower during an alpine ascent. Keeps the rope moving along a straight line. \_\_\_\_\_
9. **This is a knot used to tie down objects** or as part of a z-pulley rope system. Creates single clip point on a tension line. \_\_\_\_\_
10. **This is an anchor system and knot used to help equalize** more than one anchor point and lock them into a single directional point. \_\_\_\_\_

### Key Word Answers:

- A. Double-Figure 8
- B. Ring Bend (aka Water Knot)
- C. Bowline Follow-through Knot
- D. Double-Fisherman
- E. Prusik Knot
- F. Clove Hitch
- G. Butterfly Knot
- H. Munter Hitch
- I. Cordellette Knot
- J. Directional Knot

# Anchoring Belay Systems

## Section 2: Matching & Short Answer (25 Points)

### Key Word Answers:

1. Which belay system takes the least amount of equipment? \_\_\_\_\_  
\_\_\_\_\_
2. Which belay system places the greatest amount of wear on a rope? \_\_\_\_\_  
\_\_\_\_\_
3. Which belay system is the safest system? \_\_\_\_\_  
\_\_\_\_\_
4. List three things to consider when safely setting up a top-rope system?  
\_\_\_\_\_
5. What are three things you can do to make a belay system safer?  
\_\_\_\_\_
6. What kind of anchors can be used to construct a top-rope anchor system?  
\_\_\_\_\_
7. What is the minimum number of primary anchors needed when setting a top rope system?  
At the top \_\_\_\_\_ At the Bottom \_\_\_\_\_ Why? \_\_\_\_\_
8. Why do belayers use directional anchors? \_\_\_\_\_  
\_\_\_\_\_
9. What is a fixed rope system? \_\_\_\_\_
10. How does the rigging system differ for fixed ropes then that of a typical cliff edge top rope system? \_\_\_\_\_  
\_\_\_\_\_
11. Why do we use self equalizing anchor systems? \_\_\_\_\_
12. Why do opposing anchor systems create a point for concern? \_\_\_\_\_  
\_\_\_\_\_
13. What is the maximum "V" angle desired when rigging and equalizing a secondary (webbing) anchor system?  
A. 120 Degree      B. 90 Degree      C. 60 Degree      Why? \_\_\_\_\_
14. What is the BUS belay system and how does it help keep a climber safe? \_\_\_\_\_  
\_\_\_\_\_
15. How do hand techniques differ when belaying for a lead climber rather than a top rope climber? \_\_\_\_\_  
\_\_\_\_\_

- A. Figure 8 Device
- B. Body & Hip Belay
- C. Munter Hitch
- D. Prusik Knot
- E. GRI GRI
- F. Carabiner Brake
- G. Tuber Belay Device

# General Rock Climbing Terms-

## Section 3: Term Description (20 Points)

1. Belay Device \_\_\_\_\_
2. Quickdraw \_\_\_\_\_
3. Route Pitch \_\_\_\_\_
4. Route Class \_\_\_\_\_
5. Route Grade \_\_\_\_\_
6. Run-out \_\_\_\_\_
7. Traverse \_\_\_\_\_
8. Crux \_\_\_\_\_
9. Deadpoint \_\_\_\_\_
10. Dyno \_\_\_\_\_
11. Arete' \_\_\_\_\_
12. Dihedral \_\_\_\_\_
13. Dropknee \_\_\_\_\_
14. Stem-out \_\_\_\_\_
15. Smear \_\_\_\_\_
16. Lay-back \_\_\_\_\_
17. Sport Climb \_\_\_\_\_
18. Top-rope \_\_\_\_\_
19. Onsite \_\_\_\_\_
20. Redpoint \_\_\_\_\_
21. Pinkpoint \_\_\_\_\_
22. Bouldering \_\_\_\_\_
23. Solo \_\_\_\_\_
24. Free-a-route \_\_\_\_\_
25. Double-check System \_\_\_\_\_

# The Standard Protocol-

## Section 4: Communication & Rope Management (28 Points)

1. You have just set up a top-rope system and are ready to lower the ropes, what do you say? \_\_\_\_\_
2. While lowering the rope a rock begins to roll towards the edge of the cliff, what do you say? \_\_\_\_\_
3. You just finished tying into your harness and are ready to climb, what things do you check? \_\_\_\_\_
4. What 5 things do you check on yourself before climbing with a rope?  
\_\_\_\_\_  
\_\_\_\_\_
5. What 5 things do you check on your belayers before climbing with a rope?  
\_\_\_\_\_  
\_\_\_\_\_
6. You finished double-checked your gear, your belayer, and are ready to climb, what do you ask? \_\_\_\_\_
7. Before stepping onto the rock, what do you say? \_\_\_\_\_
8. During the first 15 feet of the climb you have to be concerned about rope slack. Why is this? \_\_\_\_\_
9. The rope is too loose, what do you say to your belayer? \_\_\_\_\_
10. A rock seems loose or begins to move, what do you say? \_\_\_\_\_
11. You feel like you are going to fall or lose your grip, what do you say? \_\_\_\_\_
12. After reaching the top of the cliff edge, you are ready to lower, what do you say? \_\_\_\_\_
13. You reach the top and walk safely back from the edge of the cliff. What do you say? \_\_\_\_\_
14. After untying from the life-line, what do you do to reset the tope-rope anchor system? \_\_\_\_\_
15. You connect to a Fixed rope system and get ready to rappel, what do you need to do? \_\_\_\_\_
16. You are now ready to lower over the cliff edge, what do you say before starting the rappel? \_\_\_\_\_
17. What should your belayer say from below? \_\_\_\_\_
18. How does a belayer stop a rappel from a belay position on the bottom of the fixed line? \_\_\_\_\_
19. What is an important head safety device worn by climbers, rappellers, and belayers? \_\_\_\_\_
20. You have reached the bottom of the rappel rope, what do you say to the next rappeller above? \_\_\_\_\_
21. What can you use to safely backup your belay or rappel device? \_\_\_\_\_

# The Standard Backcountry Protocol-

## Section 5: Communication & Rope Management (17 Points)

1. What are some sure signs that you should hike down, or rappel, from exposure?  
\_\_\_\_\_  
\_\_\_\_\_
2. What is the safest standard way to quickly descend from a multi-pitch route? \_\_\_\_\_
3. If an electrical storm traps you before you get a chance to descend to safety, what do you do? \_\_\_\_\_
4. When the barometric pressure drops rapidly, what is likely to happen soon? \_\_\_\_\_
5. During a multi-pitch climb, you need to stay overnight on the cliff face, what do you sleep on? \_\_\_\_\_
6. What are you going to use when nature calls? \_\_\_\_\_
7. How can you conserve body heat and insulate yourself from the ground, rock, or wind below? \_\_\_\_\_
8. Make a list of the 8 most important items that you should pack for a multi-day climb! \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_
11. Now, rate those 7 items in progression from most important (1) to least important (8). \_\_\_\_\_
12. What are the top 3 most important items for any long climb, excluding fabric wears (socks, pants, ect.) and be prepared to explain why, later.
13. \_\_\_\_\_

# The Standard Rating of Routes-

## Section 6: Finding Your Way (9 Points) Matching

### Key Word Answers:

- |  |       |                          |
|--|-------|--------------------------|
| 1. This rating describes anchor placements as being easy to set and remove.                                      | _____ | A. V6                    |
| 2. This rating refers to extremely dicey placements that may only support body weight.                           | _____ | B. C1                    |
| 3. This rating describes a route which takes a minimum of 4 to 6 hours to complete on average.                   | _____ | C. A3                    |
| 4. This route will take a minimum of 2 or more days to complete.   | _____ | D. 3 <sup>rd</sup> Class |
| 5. This classification refers to a pitch that requires good climbing technique and completed in 1 hr or less.    | _____ | E. VI, 5.9               |
| 6. This route description describes an easy hiking grade of an approach trail.                                   | _____ | F. A3                    |
| 7. This route description notes the difficulty of a rope-less climb but not the danger of the fall.              | _____ | G. 2 <sup>nd</sup> Class |
| 8. This description notes the use of hands for balance while moving up or traversing along a steep angle.        | _____ | H. I, 13a                |
| 9. This rating describes a boulder problem that is rated equal to, or slightly more difficult than, a 5.9+ move. | _____ | I. V0                    |

# Training For Routes-

## Section 7: Bouldering Success (26 Points) short answer

1. What is the most important responsibilities of a spotter? \_\_\_\_\_
2. What are the four components of physical fitness? (1) \_\_\_\_\_  
 (2) \_\_\_\_\_  
 (3) \_\_\_\_\_  
 (4) \_\_\_\_\_
3. What is important before, during, and after a bouldering session? \_\_\_\_\_
4. Describe the '4-3-2-1' Training Cycle. This refers to what? (4) \_\_\_\_\_  
 (3) \_\_\_\_\_  
 (2) \_\_\_\_\_  
 (1) \_\_\_\_\_
5. What is endurance? \_\_\_\_\_
6. How do you train for power? \_\_\_\_\_
7. List three things the body needs before, during and after power workouts. \_\_\_\_\_
8. The sacred triangle training program is based on what four basic fundamental rules? (1) \_\_\_\_\_  
 (2) \_\_\_\_\_  
 (3) \_\_\_\_\_  
 (4) \_\_\_\_\_

## The 7 Absolute truths of Climbing Performance-

- |  |           |          |
|--|-----------|----------|
| 1. The best training for climbing is climbing.   | Yes _____ | No _____ |
| 2. Wasted energy and time are lost forever.  | Yes _____ | No _____ |
| 3. General conditioning is the safest type of training for beginner-level climbers.          | Yes _____ | No _____ |
| 4. Sport-specific conditioning is the most effective fitness training for advanced climbers. | Yes _____ | No _____ |
| 5. Strength training can build endurance, but endurance does not build maximum strength.     | Yes _____ | No _____ |
| 6. Recomposing and strengthening occur only during sleep and rest days.                      | Yes _____ | No _____ |
| 7. The body should only go where the mind has first already gone.                            | Yes _____ | No _____ |

