TEST EXAM

PART 4

EXPERT LAND NAVIGATION

1. Knowing these four basic skills, it is impossible to be totally lost; what are they?
   a. Track Present Location / Determine Distance / Sense of Direction / How to Read a Topographic Map
   b. Track Present Location / Determine Distance / Night Navigation / How to Read a Topographic Map
   c. Track Present Location / Staying on Course / Sense of Direction / Terrain and Map Association
   d. Track Present Location / Plan to Navigate / Sense of Direction / How to Read a Topographic Map

2. True   False   (circle one)
   The best way to learn LAND NAVIGATION is to get "dirt time", that is, get out there with a map and compass.

3. Navigating accurately in featureless terrain takes lots of...? (select all that apply)
   a. Mental concentration
   b. Patience
   c. Advanced navigation skills
   d. Practice and experience.

4. DEAD RECKONING is?
   a. Where back azimuth (or reverse direction) data is combined with time (or distance traveled) data.
   b. Where plotting (or estimation) data is combined with pacing (or distance traveled) data.
   c. Where location (or landmark) data is combined with time (or distance traveled) data.
   d. Where azimuth (or direction of travel) data is combined with pacing (or distance traveled) data.

5. The rules of Dead Reckoning? (select all that apply)
   a. After estimating your location using Triangulation of three landmarks
   b. Every hour on the hour (*30 minutes on the half hour is more accurate*)
   c. After every straight mile traveled
   d. After every change of direction (azimuth)
   e. After every rest stop

6. True   False   (circle one)
   Dead Reckoning is used for terrain with lots of landmarks and not for featureless (non-identifiable landmarks) terrain.

7. Desert terrain? (select all that apply)
   a. Use the Luminous Magnetic Arrow aligned with the Luminous Bezel Line set to an azimuth.
   b. For short distances, or as long as they are visible, use your foot steps behind you as a trail back azimuth reference, to keep you on course.
   c. Use intermediate landmarks that are a short distances between each, until destination is reached.
   d. With few visual cues, restricted visibility by a sandstorm, you must proceed by Dead Reckoning.

8. There are several types of deserts, what are they?
   a. Mountain
   b. Rocky Plateau
   c. Sand dune
   d. All of the above

9. True   False   (circle one)
   Rocky Plateau deserts - Most challenging of all, however, are the existence of hidden canyons and deep washes (arroyos) which can impede your forward progress along a route you might have thought was easy cruising. It is not uncommon to have to hike 10 to 20 miles out of your way to work your route around a canyon that is impassable.

10. To determine the _____, take a compass bearing *directly down the slope* you are standing on, along an imaginary line that runs straight down the slope. It should cut through each of the contour lines at about a 90° angle. By checking the map and knowing the direction of slope where you are located, you will be able to keep track of your location. This is called?
    a. Angle of slope
    b. Baseline of slope
    c. Aspect of slope
    d. Azimuth of slope

11. True   False   (circle one)
    The jungle is easy to traverse in a straight line, if you create your own jungle path by chopping through it.

12. True   False   (circle one)
    The jungle and many rainforests are so dense that the navigator must rely heavily upon the **dead reckoning** technique when moving in the jungle. Be prepared to follow a meandering course that will take you twice as long to cover the same ground.
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13. In snow or arctic terrain?   (select all that apply)
    a. When the weather is good, Dead Reckoning works well, even on glaciers or other open snowfields, and use Human Reference Points, or make a Reference Point out of snow for a Back Azimuth.
    b. The snow is easy to traverse and judging distance is easy. When estimating distance add 5 feet to your estimated calculation.
    c. You only need to use the compass and map (triangulation) to keep track of your location.
    d. Snow changes things, filling in the landscape; Depressions are leveled out, Drifts fill ravines turning them into flats, Trails disappear, Bodies of water look like open fields.

14. Fog, low visibility, and snow whiteout?   (select all that apply)
    a. If you see a fog bank is approaching or fog starting to form, be sure to fix your map position.
    b. In low visibility you can use a flashlight to penetrate the low visibility.
    c. No. 1 rule for navigating in low visibility is "Always trust your compass."
    d. There is danger of suffering from vertigo where there is no clear deference between sky and ground.
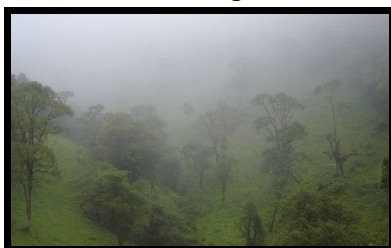
15. True   False   (circle one)
Navigating at night is challenging and requires a high level of knowledge, confidence, and lots of practice performing these skills, before heading out to the wilderness at night.

16. The first thing is to get your eyes ready for night vision navigation. How?   (select all that apply)
    a. If in a white lighted area, wear red goggles for 30 minutes, before heading out in the night. Wearing red goggles is effective because red light does not affect the eyes.
    b. Five minutes in the dark without looking at bright lights is the minimum necessary, 30 minutes is better.
    c. Use a white light flashlight to travel at night for about the first 30 minutes, and then turn off the flashlight. Your eye will be adapted for night navigation.
    d. Staying in a red-lighted area for about 20 minutes followed by about 10 minutes in a dark area. The red-lighted method may save time by allowing you to check equipment, or do some other job before moving into darkness.

17. True   False   (circle one)
The first thing is to get your eyes ready for night vision navigation. Second thing is to maintain night vision during the night. Any bright light can temporarily ruin one's night vision.

18. Protecting Night Vision? (select all that apply)
    a. If it becomes necessary to look into a lighted area or to use a flashlight, cover one eye so as to retain some night vision in the eye.
    b. Use a red light stick to read your map or other activity during the night.
    c. Using a flashlight with a red lens filter will not damage your night vision.
    d. Dark adaptation is affected by exposure to bright lights such as matches, white light flashlights, flares, and vehicle headlights. Full recovery from this exposure may take up to 45 minutes.

19. Night vision scanning enables you to overcome many of the physiological limitations of your eyes and reduce the visual illusions that so often confuse the eyes (mind).   (select all that apply)
    a. Practice seeing things without looking directly at them.
    b. Off-Center Vision. This technique requires looking 10 degrees above, below, or to either side of an object rather than directly at it. This allows the peripheral vision to remain in contact with an object.
    c. Bleach-Out Effect. Even when off-center viewing is practiced, the image of an object viewed longer than two to three seconds tends to bleach out and become one solid tone. Avoid looking at an object longer than two to three seconds.
    d. Use a flashlight temporary for less than 2 seconds, this will allow you to maintain your night vision with no night vision lost.

20. Traveling at night? (select all that apply)
    a. As you know there are many more hazards at night, where your visibility is limited.
    b. Orient the map to the landscape and use Thumbing-the-Map to keep track of your location.
    c. The basic technique used for night Land Navigation is dead reckoning.
    d. Stay off paths that wild predators use for preying on other animals.

21. True   False   (circle one)
    Lensatic Compass Night Navigation - for night use, special features of the compass include the luminous markings, the bezel ring, and two luminous sighting dots.

22. Setting the Lensatic Compass for night travel means rotating the Luminous Bezel Line from the Fixed Index Line left or right a specific amount. Heading between 0º-180º is divided by 3 and sum is number of clicks to the left of the Fixed Index Line. Heading between 180º-360º, subtract heading from 360 then divide by 3 and sum is number of clicks to the right of the Fixed Index Line. If sum is not exactly divisible by 3, then round up or down to the nearest whole number. With the following information what is the setting?
    a. Desired heading of 27º is _____ clicks to the _____ from the Fixed Index Line.
    b. Desired heading of 95º is _____ clicks to the _____ from the Fixed Index Line.
    c. Desired heading of 327º is _____ clicks to the _____ from the Fixed Index Line.
    d. Desired heading of 246º is _____ clicks to the _____ from the Fixed Index Line.

23. True   False   (circle one)
    Once the Luminous Bezel Line is set for Night Navigation, use the Center-Hold method and keep the North Arrow aligned with the Luminous Bezel Line. Proceed forward in the direction of the Luminous sighting Dots.
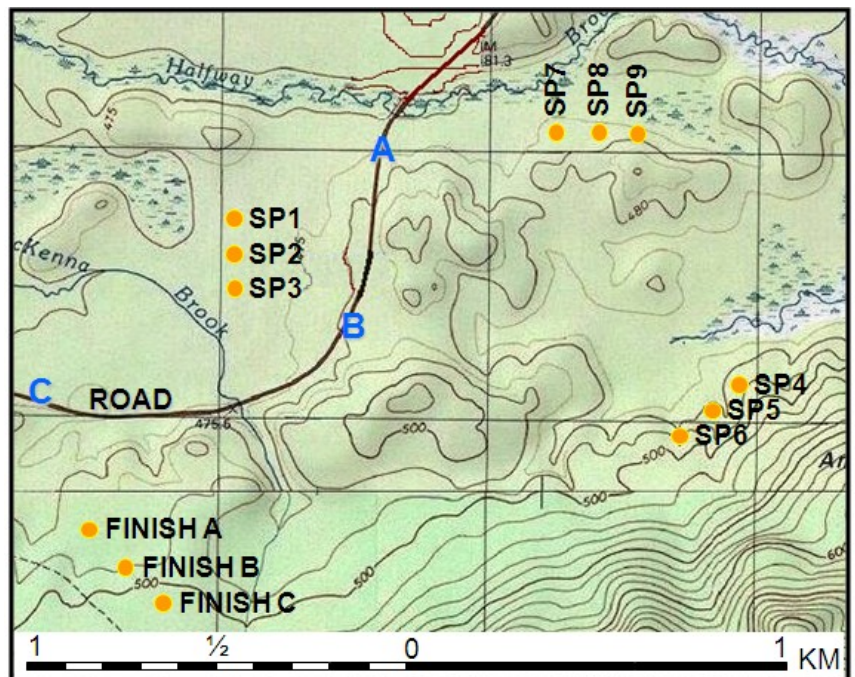

24. True   False   (circle one)
    Land navigation is a skill that is unforgettable. Once a person reads about it in a book, the person need not make use of the skills they have acquired to remain proficient in land navigation. The person does not have to get out into the field and practice with a map and compass.

25. True   False   (circle one)
The purpose of setting up a sustainment program is to provide Navigators with training that reinforces and builds on the training they have received in the classroom and field.

26. The sustainment program should address all skills from basic map reading to the Navigator planning and executing a route.   (select all that apply)
    a. The program should be developed into individual "Training Modules" so that it can be used as a whole group program or used separately by individuals.
    b. Provide only the book or lessons and let the navigator train themselves in the field.
    c. First determine the levels of proficiency and problems that the Navigators have in land navigation.
    d. Evaluate by personal observation, written test, and training.

27. Train-the-Trainer Program. (select all that apply)
    a. A Person trains him or herself to be an instructor and certifies self to teach others.
    b. The purpose in a group is to develop instructors that are capable of training others with the confidence and skills necessary to accomplish all assigned land navigation skills.
    c. Students train the instructor before the instructor trains the students.
    d. Determine which instructors conduct which module of training and have them practice until they are fully prepared to give the training.   Other instructors certify each instructor's training program.

28. There are basic guidelines to use when setting up a Land Navigation course. (Select all that apply)
    a. Determine the Standards – how many routes, distance, and time allowed, etc.
    b. Decide on the Terrain – use terrain that is similar to terrain that will traveled used by expeditions or group hiking trip.
    c. Perform a Map and Ground reconnaissance – duration (time) of course, check for hazards, etc.
    d. Students must be expert navigators to participate in the courses.

29. True   False   (circle one)
On a Land Navigation course - the student must navigate using the easily marked trails from a **start point**, through several intermediate points (**stake points**), to a **finish point**, and running as fast as possible, to beat the clock.

30. True   False   (circle one)
On a Land Navigation course - the student must navigate using the compass and map from a **start point**, through several intermediate points (**stake points**), to a **finish point**.

31. True   False   (circle one)
During the Land Navigation course as student must record Start time, Azimuths, Distance, and stake numbers for each location point required to complete the course.
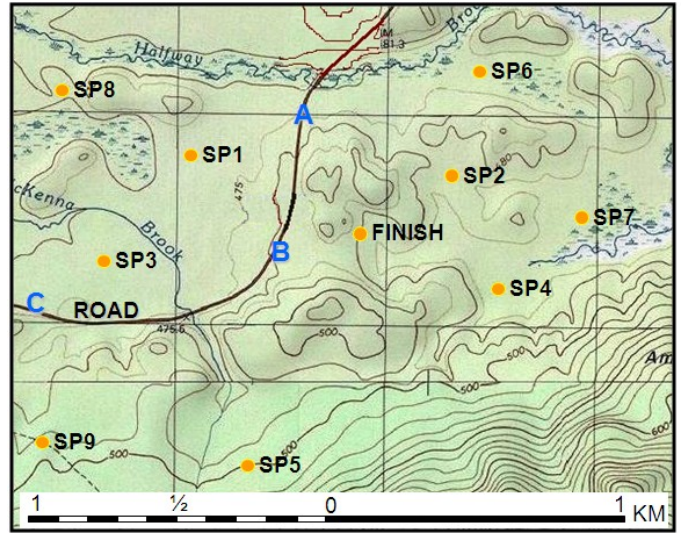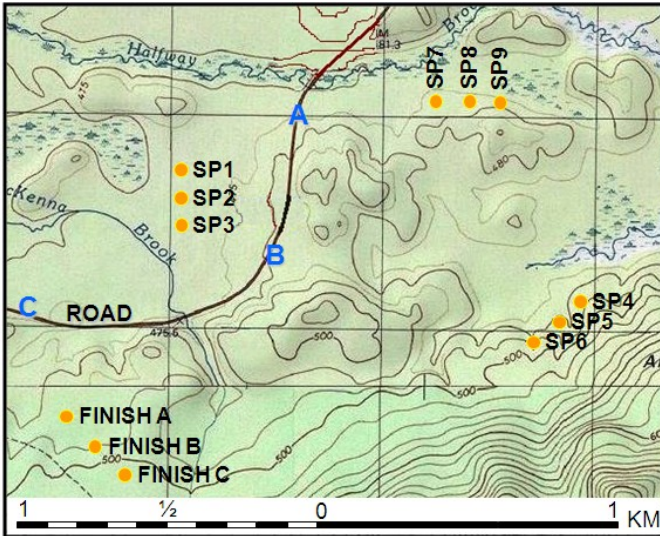
32. True   False   (circle one)
    Stake Points may or may not be shown on the student's map depending on the students skill level.

33. True   False   (circle one)
    A Land Navigation course can look like either example below.

END OF TEST (each question is worth 3 points)