

Chapter 1:

1. Search can be defined as:
- A. the location of persons in distress.
 - B. the retrieval of persons in distress.
 - C. the location and retrieval of persons in distress.
 - D. helping persons in distress.

Answer: A

2. Rescue can be defined as:
- A. the location of persons in distress.
 - B. helping persons in distress.
 - C. delivering persons in distress to a place of safety.
 - D. the retrieval and initial care for a person in distress along with their delivery to a place of safety.

Answer: D

3. The three fundamental skills for search and rescue training are:
- A. search, rescue, and recovery.
 - B. search, ICS training, and rescue.
 - C. search, rescue, and survival/support.
 - D. search, rescue, and improvisation.

Answer: C

4. The Provisional International Civil Aviation Organization (PICAO) defines search and rescue as:
- A. the act of finding and returning to safety the survivors from an emergency incident.
 - B. the location of persons in distress.
 - C. helping persons in distress.
 - D. a rescue problem.

Answer: A

5. T.J. Setnicka, author of "Wilderness Search and Rescue," stated that SAR was essentially:
- A. a rescue problem.
 - B. a transportation problem.
 - C. a retrieval operation.
 - D. a search operation.

Answer: B

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6. The National Association for Search and Rescue is:
- A. a for-profit organization composed of paid search and rescue personnel.
 - B. a not-for-profit membership organization of both paid and unpaid SAR professionals.
 - C. part of the Federal Emergency Management Agency.
 - D. part of the USA Freedom Corps.

Answer: B

7. The National Association for Search and Rescue (NASAR) developed the SAR TECH certification criteria in order to:
- A. evaluate three levels of search responder so that a measurable level of capability could be available for incident commanders.
 - B. provide training opportunities for paid SAR responders.
 - C. provide opportunities for citizens to participate in search operations.
 - D. train search managers.

Answer: A

8. The Citizens Corps programs DO NOT include:
- A. Community Emergency Response Team (CERT).
 - B. Neighborhood Watch Program (NWP).
 - C. Medical Reserve Corps (MRC).
 - D. SAR TECH Standards.

Answer: D

9. The CERT course is offered by:
- A. National Association for Search and Rescue (NASAR).
 - B. Medical Reserve Corps (MRC).
 - C. Federal Emergency Management Agency (FEMA).
 - D. Mountain Rescue Association (MRA).

Answer: C

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Chapter 2:

1. The National SAR Committee (NSARC) sponsors and oversees the:
- A. U.S. National Search and Rescue Plan (NSP).
 - B. International Civil Aviation Organization (ICAO).
 - C. International Maritime Organization (IMO).
 - D. National Association for Search and Rescue (NASAR).

Answer: A

2. The federal SAR coordinator for all inland SAR is the:
- A. U.S. Navy.
 - B. U.S. Army.
 - C. U.S. Air Force.
 - D. FBI.

Answer: C

3. The U.S. National Search and Rescue Plan (NSP) was developed to:
- A. provide guidance to agencies for coordinating civil SAR services to meet domestic and international commitments.
 - B. provide the international SAR community with an approach to organizing operations.
 - C. provide an effective, integrated, worldwide system that makes and keeps SAR services available wherever people travel.
 - D. assist countries in meeting their SAR obligations.

Answer: A

4. The National Search and Rescue Supplement (NSS) is a supplement to the:
- A. NIMS.
 - B. Federal Response Plan.
 - C. Homeland Security Directive HSPD-5.
 - D. IAMSAR (International Aeronautical and Maritime Search and Rescue) Manual.

Answer: D

5. Emergency Locator Transmitters (ELTs) are designed for:
- A. land-based applications.
 - B. use by individuals.
 - C. aviation use.
 - D. maritime applications.

Answer: C

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6. Cospas-Sarsat is:

- A. an international search and rescue system that uses satellites to detect and locate emergency beacons.
- B. a document describing five stages of a SAR operation.
- C. responsible for promoting efficient organization of SAR services within a SAR region.
- D. establishing guidelines for U.S. land SAR operations.

Answer: A

7. Personal Locator Beacons (PLBs) are designed for:

- A. aviation use.
- B. maritime applications.
- C. FEMA
- D. use by individuals.

Answer: D

8. Emergency Position Indicating Radio Beacons (EPIRBs) are designed for:

- A. use by individuals.
- B. maritime applications.
- C. land-based applications.
- D. aviation use.

Answer: B

9. A Local User Terminal (LUT):

- A. is the mechanism by which an individual transmits his or her location.
- B. is a mobile unit carried by individuals.
- C. is the ground station that processes the signal from an emergency beacon.
- D. transmits an alert message to the appropriate RCC.

Answer: C

10. The Mission Control Center (MCC):

- A. is the ground station that receives an emergency beacon.
- B. transmits an alert message to the appropriate Regional Control Center (RCC).
- C. operates exclusively on 800.5 MHz.
- D. coordinates international response to emergency beacons.

Answer: B

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11. The Department of Homeland Security (DHS) is charged with:
- A. oversight of the Cospas-Sarsat system.
 - B. development of a National Response Plan (NRP).
 - C. coordination of community emergency management.
 - D. oversight of the International Civil Aviation Organization (ICAO).

Answer: B

12. Outside of National Parks, domestic land SAR services are often performed by:
- A. U.S. Air Force.
 - B. Federal Emergency Management Agency (FEMA).
 - C. state and local authorities or SAR units.
 - D. U.S. Air Force Rescue Coordination Center (AFRCC).

Answer: C

13. The operational capabilities of a FEMA Urban SAR Task Force include:
- A. physical and technical search and rescue operations in damaged collapsed structures.
 - B. oversight of the U.S. Air Force Rescue Coordination Center (AFRCC).
 - C. first response to an ELT beacon.
 - D. oversight of the National Response Plan (NSP).

Answer: A

14. FEMA US&R teams generally perform:
- A. hazardous materials surveys and evaluations.
 - B. wilderness searches for lost hikers.
 - C. avalanche rescues.
 - D. urban searches for Alzheimer patient walk-aways.

Answer: A

15. According to the National Center for Missing & Exploited Children, one of the criteria that should be met before an AMBER Alert is activated is:
- A. the child has been missing for 24 hours.
 - B. law enforcement believes the child in danger of serious bodily harm or death.
 - C. the child is 10 years of age or younger.
 - D. the child has been missing for 48 hours.

Answer: B

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16. According to the National Center for Missing & Exploited Children, one of the criteria that should be met before an AMBER Alert is activated is:

- A. the child has been missing for 12 hours.
- B. law enforcement confirms a child has been abducted.
- C. the child is 9 years of age or younger.
- D. the child has been missing for 36 hours.

Answer: B

17. According to the National Center for Missing & Exploited Children, one of the criteria that should be met before an AMBER Alert is activated is:

- A. there is enough descriptive information available to believe and immediate broadcast alert will help.
- B. the child has been missing for 15 hours.
- C. the child is 9 years of age or younger.
- D. the child has been missing for 48 hours.

Answer: A

18. According to the National Center for Missing & Exploited Children, if you believe your child is missing you should:

- A. print flyers and place them around the neighborhood.
- B. call law enforcement immediately.
- C. report the incident to the AFRCC.
- D. contact local SAR resources.

Answer: B

Chapter 3:

1. Which ICS function approves the ordering of additional resources?

- A. Plans
- B. Operations
- C. Logistics
- D. Command

Answer: D

2. The planning section:

- A. runs staging areas.
- B. performs the tactical actions of the mission.
- C. maintains and displays situation status.
- D. requests all personnel and equipment.

Answer: C

3. Which ICS function provides treatment of injured SAR workers?

- A. Plans
- B. Operations
- C. Logistics
- D. Command

Answer: C

4. The standardization of job titles in ICS:

- A. determines to which ICS section a person is assigned.
- B. identifies to which level of the ICS organization a person is assigned.
- C. determines how many personnel they will manage.
- D. defines the legal liability of the unit.

Answer: B

5. The *type* of a resource relates to:

- A. the staffing size in a resource.
- B. the level of skill and capability of a resource.
- C. the sort of work the resource may do.
- D. the ability to manage personnel

Answer: B

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6. In multi-agency and multiple jurisdiction incidents, how many Incident Commands may there be?

- A. a few
- B. as many as are needed
- C. one per agency or jurisdiction
- D. one

Answer: D

7. The five primary ICS management functions are:

- A. Command, Operations, Planning, Logistics, and Finance
- B. Command, Resource, Planning, Food Unit, and Transportation
- C. Command, Public Information, Liaison, Safety, and Logistics
- D. Task Force, Strike Team, Single Resource, Branch, and Division

Answer: A

8. In an incident with many kinds of resources, how many incident bases may be established?

- A. a few
- B. as many as are needed
- C. one per kind of resource
- D. one

Answer: D

9. An Incident Action Plan:

- A. provides specific tactical direction for a designated operational period.
- B. should never be shorter than 2 hours.
- C. is set as positive direction and should not be altered until the next operational period.
- D. is always 12 hours.

Answer: A

10. Strike Team requirements include:

- A. the same kind and type of resources.
- B. common communications.
- C. a leader.
- D. all of the above.

Answer: D

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11. Task Force requirements include:

- A. the same kind and type of resources.
- B. different kinds and types of resources.
- C. permanent shift of resources.
- D. similar resources combined with common communication.

Answer: B

12. An available resource's reporting location, time, and likely length of mission is found in:

- A. IAP Objectives.
- B. IAP Strategies.
- C. Incident Assignments Lists.
- D. IAP map.

Answer: C

13. Check-in may occur at:

- A. staging areas.
- B. incident base.
- C. camps.
- D. all of the above.

Answer: D

14. The Incident Command System refers to:

- A. an on-scene incident management model.
- B. the response plan for all incidents.
- C. the management of multi-agency incidents.
- D. a jurisdiction's emergency response plan.

Answer: A

15. The Resource Unit Leader reports to:

- A. the Planning Section Chief.
- B. the Operations Section Chief.
- C. the Logistics Section Chief.
- D. the Finance/Administration Section Chief.

Answer: A

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16. Common terminology should always be used in the ICS for:

- A. resources.
- B. position titles.
- C. resources and facilities.
- D. all of the above.

Answer: D

17. Every incident needs a written Incident Action Plan.

- A. True
- B. False

Answer: B

18. Essential elements of the Incident Action Plan include:

- A. organization details.
- B. a statement of objectives.
- C. a suspension plan.
- D. both a and b.

Answer: D

19. Command Staff consists of:

- A. Operations, Planning, Logistics, and Finance.
- B. Task Force, Strike Team, and Single Resource.
- C. Safety Officer, Liaison Officer, and Public Information Officer.
- D. Branches, Groups, Divisions.

Answer: C

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Chapter 4:

1. If the subject of a SAR mission is found unconscious, the SAR provider's authorization to treat life-threatening injuries is called:

- A. expressed consent.
- B. implied consent.
- C. engendered reliance.
- D. duty to act.

Answer: B

2. If, while on a mission, a SAR provider finds a conscious, mentally incompetent adult subject with non-life-threatening injuries, the provider's authority to treat and transport:

- A. is granted by implied consent for routine care.
- B. may be authorized by a law enforcement officer.
- C. is mandated to avoid breach of duty.
- D. is granted by expressed consent.

Answer: B

3. The Good Samaritan Laws in most states:

- A. mandate a duty to act even by unpaid professionals.
- B. provide immunity from prosecution for neglect.
- C. replace the Volunteer Protection Act.
- D. provide an affirmative defense if a provider is sued for rendering care.

Answer: D

4. The HIPPA standards:

- A. protect the patient from negligent care.
- B. protect the unpaid professional from frivolous suits.
- C. protect the patient from improper release of health information.
- D. protect SAR providers but not SAR organizations.

Answer: C

5. Searchers are obligated to leave a property if:

- A. the land to be searched is not posted but permission is denied.
- B. the land is posted but the owner consents.
- C. the land is not posted and the owner is unknown.
- D. they see someone waving them away.

Answer: A

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6. All clues found in a search area:
- A. are criminal evidence.
 - B. must be collected and handled with a chain of custody.
 - C. should be left untouched.
 - D. should be treated as if they were evidence, if a crime is suspected.

Answer: D

7. The policy of “do no harm” is generally imposed on:
- A. only medically certified SAR providers.
 - B. only licensed medical professionals.
 - C. all SAR providers.
 - D. only law enforcement officials.

Answer: C

8. A standard of care:
- A. is the same for all SAR providers.
 - B. may be different for medically trained SAR providers.
 - C. is a legally defined national standard.
 - D. is variable depending on a patient’s injuries.

Answer: B

9. If a SAR organization claims to provide a service that is only provided by a few specially qualified members, the principle of _____ may be violated.
- A. simple abandonment
 - B. engendered reliance
 - C. implied consent
 - D. express consent

Answer: B

10. A member’s failure to respond to a SAR mission is classified as:
- A. abandonment.
 - B. battery.
 - C. negligence.
 - D. none of the above.

Answer: D

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Chapter 5:

1. The loss of heat to the environment is referred to as:
- A. radiation.
 - B. homeostasis.
 - C. heat transfer.
 - D. body regulation.

Answer: C

2. An inactive person requires a minimum of how many liters of water a day to keep all body systems functioning properly?
- A. 1-2
 - B. 2-3
 - C. 3-4
 - D. 4-5

Answer: A

3. SAR providers may require as much as _____ liters of water a day in extreme environments.
- A. 2-3
 - B. 4-5
 - C. 6-7
 - D. 8-10

Answer: D

4. What is the required daily caloric intake for an average (165-lb.) SAR provider?
- A. 1500
 - B. 2500
 - C. 3300
 - D. 3700

Answer: D

5. The body's primary method of regulating its temperature involves finely adjusting the flow of heated blood between its core and periphery.
- A. True
 - B. False

Answer: A

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6. To prevent convective heat loss, air movement around the body must be:
- A. eliminated or reduced.
 - B. increased.
 - C. channeled.
 - D. none of the above.

Answer: A

Chapter 6:

1. The highest priority in an emergency situation is:
- A. obtaining water.
 - B. obtaining food.
 - C. maintaining a positive mental attitude.
 - D. signaling for help.

Answer: C

2. Water is a higher priority in an emergency than:
- A. food.
 - B. body shelter.
 - C. rest.
 - D. positive mental attitude.

Answer: A

3. The necessities of life should be prioritized in an emergency in terms of:
- A. their expense
 - B. length of time a person can live without each item.
 - C. their availability in an emergency.
 - D. their nutritional value.

Answer: B

4. Energy conservation and waste removal are two needs satisfied by:
- A. water
 - B. positive mental attitude.
 - C. rest.
 - D. signals.

Answer: C

5. Select the answer that best reflects the priorities of life in terms of their importance.
- A. food, water, rest
 - B. oxygen, positive mental attitude, water
 - C. water, food, body shelter
 - D. positive mental attitude, body shelter, rest, food

Answer: D

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6. You and another day hiker have lost your bearings on an afternoon's walk on a backcountry trail. To your current regret, both of you neglected to bring the essentials and failed to stop when you realized that you were uncertain of your exact position. Night is falling and temperatures will drop quickly. In terms of survival, what is your HIGHEST priority?

- A. obtaining food
- B. obtaining water
- C. erecting a shelter
- D. signaling for help

Answer: C

7. In terms of survival, what is your LOWEST priority?

- A. obtaining food
- B. obtaining water
- C. erecting a shelter
- D. signaling for help

Answer: A

8. The stage of the human response to a life-threatening situation in which muscles tighten, sweat glands constrict, the pulse quickens, and adrenaline begins to flow is called:

- A. alarm.
- B. reaction.
- C. response and options.
- D. rest.

Answer: B

9. The sequence in which the different stages occur in response to a life-threatening situation is:

- A. reaction, alarm, response and options, rest.
- B. rest, alarm, response and options, reaction.
- C. alarm, reaction, response and options, rest.
- D. rest, reaction, alarm, response and options.

Answer: C

10. The stage of behavior that occurs in response to a life-threatening situation and is most commonly recognized as the "fight or flight" syndrome is:

- A. response and options.
- B. rest.
- C. reaction.
- D. alarm.

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Answer: A

11. You and your area search dog are searching for victims in the debris field of a recent alpine winter avalanche. You and the dog are sharply focused when you hear a sharp, reverberating “crack” on the mountain above you and feel the rumble of sliding snow. The first stage of your initial response to this life-threatening situation is:

- A. rest.
- B. anxiety.
- C. alarm.
- D. rest.

Answer: C

12. Relief is the only thing to sweep over you as you and your dog watch the avalanche roar harmlessly past you and your colleagues to stop in the valley below. All of you were able to maneuver clear of the slide’s path. The excitement of the moment combines with your earlier exertions to temporarily drain you of your energy. Your knees feel so weak that you sit in the snow to gather yourself back together. The stage of a life-threatening situation into which you have now entered is:

- A. anxiety.
- B. rest.
- C. alarm.
- D. response.

Answer: B

13. The surroundings and patterns of behavior in which the average person customarily operates is referred to as:

- A. defensive living.
- B. comfort zone.
- C. functional comfort.
- D. personal preparedness.

Answer: B

14. A searcher placed outside of his or her “comfort zone” in an emergency is likely to experience a sense of:

- A. relaxation and calm.
- B. stress and anxiety.
- C. strong self-confidence.
- D. anger and frustration.

Answer: B

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15. The prepared searcher seeks to _____ his or her personal comfort zone through _____.

- A. expand/study
- B. shrink/study and review
- C. expand/self-discipline and practice
- D. shrink/physical training

Answer: C

16. A practice that is LEAST likely to result in an increased comfort zone is:

- A. carefully adhering to cultivated routines.
- B. trying new or different experiences.
- C. experiencing high levels of stress.
- D. resolving challenging situations.

Answer: C

17. Means of controlling fear include:

- A. affirmative self-talk.
- B. gathering as much information as possible.
- C. having a number of options or contingencies in your plan.
- D. all of the above.

Answer: D

18. Which of the following is NOT a means to help control fear?

- A. defining fears and recognizing them
- B. practicing good leadership skills
- C. involving others in complex tasks
- D. avoiding the fear mechanism

Answer: D

19. All of following are means to control fear EXCEPT:

- A. learning quick, logical decision-making skills.
- B. use of spiritual faith.
- C. removal of yourself physically and mentally from the situation.
- D. talking positively to yourself about your actions in the situation.

Answer: C

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20. In the survival situation plan, the “O” stands for:
- A. sizing up the situation through direct Observation.
 - B. developing Opportunities for your response.
 - C. identification of Obvious drawbacks to your plan.
 - D. Overhaul your equipment for an emergency response.

Answer: A

21. The mnemonic _____ represents a means to find answers in an emergency.
- A. “TOPS”
 - B. “POTS”
 - C. “STOP”
 - D. “POST”

Answer: C

22. The “S” in the mnemonic for the survival situation plan stands for:
- A. “Study”
 - B. “Service”
 - C. “Supply”
 - D. “Stop”

Answer: D

23. The correct order in which terms appear in the mnemonic taught as a means to find answers in an emergency is:
- A. Plan/Observe/Stand by/Think
 - B. Stop/Think/Observe/Plan
 - C. Think/Observe/Plan/Stand by
 - D. Plan/Observe/Think/Stop

Answer: B

24. “Positive mental attitude” may be referred to as:
- A. “Will to live.”
 - B. “Keeping your head on your shoulders.”
 - C. “Self-knowledge.”
 - D. “Self-reliance.”

Answer: A

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25. "Will to live" and "whole person concept" are the two areas of the concept of:
- A. positive mental attitude.
 - B. emergency management.
 - C. search management.
 - D. adaptive lifestyle.

Answer: A

26. The "whole person concept" is defined as:
- A. a school of core body fitness training.
 - B. a holistic philosophy of mental fitness.
 - C. the inter-relationship between mental and physical body processes.
 - D. a concept involving search management.

Answer: C

27. Two searchers have become separated from their crews at different times but under identical circumstances: limited food, limited water, darkness, and an approaching blizzard. One is very pessimistic about his chances of making it through the night. He is unable to gather his thoughts and create a plan for self-preservation. The second repeatedly tells himself, "I know I can beat this...I know I can beat this...I KNOW I can beat this!" He keeps a clear head and manages to put together a survival plan. Based on what you have read here, the thing that is MOST likely to contribute to the SECOND searcher's survival is:
- A. better equipment.
 - B. positive mental attitude.
 - C. experience in alpine survival.
 - D. prior planning.

Answer: B

28. Nearly all survival situations end within:
- A. 12 hours.
 - B. 48 hours.
 - C. 72 hours.
 - D. 1 week.

Answer: C

29. What percentage of successful survival experiences last over 3 days?
- A. 31%-40%
 - B. 21%-30%
 - C. 5%-10%
 - D. less than 5%

Answer: D

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30. You and a team member are caught out on a mission in the beginning of a driving rain and with an immobilized patient. You and the other searcher gather together your materials: parachute cord, dead tree limbs, a plastic tarp, some fresh tree boughs, and a heavy garbage bag. He proposes constructing a lean-to with the fresh tree boughs plus some more that you and he will cut. You recommend instead that the two of you construct something with the tarp. Why?
- A. His plan involves too much material, violating the consideration of minimizing resource use.
 - B. The consideration of using a small and simple shelter is violated.
 - C. It is difficult to build a truly weatherproof shelter from natural materials.
 - D. The plan violates the tenets of the Leave No Trace philosophy.

Answer: C

31. You and another day hiker are stranded in the desert on a hot spring afternoon, having climbed out of a slot canyon to avoid a flash flood. The other hiker sets about gathering sticks and rocks to build a shelter. You decide instead take cover in the shadows beneath a nearby rock overhang spacious enough for you both. You ask the other hiker to stop what he or she is doing because:
- A. taking shelter is a waste of time. Flash floods don't last for more than a few hours.
 - B. the rock overhang gives you a shelter that takes best advantage of usable materials, takes no time or effort to build, and minimizes your fluid loss through sweating.
 - C. finding shelter material in the desert can be too great a challenge.
 - D. disturbing rocks in the desert exposes him or her to the risk of being bitten by a snake.

Answer: B

32. You are improvising a shelter in a rocky forest on a chilly autumn night. You have used your tarp, two tree limbs, and lengths of parachute line to make a simple, low "pup"—or tarp-tent. Your shelter "floor" is a quarter-acre sized piece of flat granite that makes up the forest floor. Standing back to admire your work, you realize that it needs a few more touches. You empty your pack at the shelter entrance. Next, you fill the pack with dry leaves. You pour these leaves into the shelter and spread them into a thick mat. You then spread out your empty pack and some of its larger contents (extra plastic, poncho, etc.) into a pallet on top of the leaves. Now satisfied, you crawl into the shelter for a restful sleep. Why did you do what you did with the leaves and pack?
- A. The leaves and pack contents made for a softer, spongier bed.
 - B. Keeping the pack contents inside protected them from theft by raccoons.
 - C. Spreading the pack contents around makes them more accessible in an emergency.
 - D. The leaves and pack contents create an insulation layer.

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Answer: D

33. With which means of water purification can you use the water's odor or flavor to gauge if the purification is likely effective?

- A. iodine
- B. hypochlorite (bleach)
- C. purification tablets
- D. charcoal filtration

Answer: B

34. Which means of water purification calls for different amounts of purification for clear or cloudy water, and uses a potent poison?

- A. iodine
- B. hypochlorite
- C. boiling
- D. charcoal filtration

Answer: A

35. You've drunk all the water in your pack on a hot summer backcountry search. Your crew finds a small stream. You dig through your pack only to find that your water purification tablets are missing—you didn't replace the ones you used on last week's overnight hike. Your pack has a number of other things, though. Which would be the best for water purification?

- A. biodegradable soap
- B. packets of salt
- C. rubbing alcohol
- D. bottle of iodine crystals

Answer: D

36. The least often occurring color in a natural environment is:

- A. blaze orange.
- B. safety yellow.
- C. royal blue.
- D. arctic white.

Answer: C

37. The optimal length-to-width ratio of ground letters or signals made to attract aerial searchers is:

- A. 1:1.
- B. 3:1.
- C. 6:1.
- D. 9:1.

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Answer: C

38. A means of improving the visibility of a signal is:

- A. adding motion to the signal.
- B. locating it in close proximity to terrain or vegetation that is the same color as the signal.
- C. aligning it so that shadows are cast by it.
- D. both A and C.

Answer: A

39. You're explaining to a newer crew member exactly how to construct a spot for human waste disposal in the field. How deep do you tell him or her to dig it?

- A. around an inch deep, or just in the "duff" layer of leaves and needles
- B. around 4 inches deep, or well within the organic layer of soil
- C. around 6 inches deep, but no deeper than the organic layer of soil
- D. around 9 inches deep, or down into the mineral layer of soil

Answer: C

40. Another crew member asks where to locate a temporary spot for human waste disposal in the field. Where do you tell him or her to do so?

- A. in a spot that has a great deal of foot traffic and is more than 50 feet from camp
- B. in a spot that is around 100 feet from the trail and unlikely to have other people to pass through
- C. in a spot within 50 feet of a water source to allow for personal hygiene needs
- D. in a spot that is at least 200 feet from the campsite and water sources, with little traffic

Answer: D

41. Your crew is in the field at the site of a crashed plane. Your crew is to secure the area overnight until investigators arrive. You, as crew leader, are giving your three-member crew some instructions for human waste disposal. You tell them to:

- A. dig three individual cat-holes so as to minimize impact at any one place.
- B. dig a single cat-hole for the crew so as to minimize impact over a wider area.
- C. dig a "trench" latrine to accommodate your entire crew for the entire stay.
- D. dig a new "trench" latrine for each day your crew is there.

Answer: A

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42. At a “trench” latrine, each user should:

- A. leave behind the shovel to minimize the amount of weight carried by the crew.
- B. leave behind the shovel in order to cover the waste with dirt.
- C. leave behind the crew’s roll of toilet paper for community use.
- D. leave behind the crew’s roll of toilet paper to minimize waste production.

Answer: B

43. Articles of waste such as leftover food and empty food wrappers in the field should be disposed of by:

- A. burning.
- B. burying.
- C. concealing in a crevice or a boulder field.
- D. packing them out and disposing of them properly.

Answer: D

44. The feet should be bathed/rinsed/soaked only:

- A. morning and evening.
- B. at rest breaks.
- C. at lunchtime.
- D. at the end of the day.

Answer: D

45. Water used for brushing your teeth or gargling:

- A. can be taken directly from the body of water.
- B. should be purified just as your drinking water is.
- C. can be spit back into the body of water.
- D. should be re-purified before disposal.

Answer: B

46. Bathing should be done in:

- A. slow-moving bodies of water for sake of bather safety.
- B. fast-moving bodies of water to carry away suds and gray water.
- C. a spot away from the water source, and with biodegradable soap.
- D. a spot in which the rinse or “gray” water can disposed of in a cat-hole, and with a small quantity of the chemical anti-bacterial detergents from the first aid kit.

Answer: C

Chapter 7:

1. What natural fiber material best maintains its insulative properties when wet?
- A. cotton
 - B. wool
 - C. silk
 - D. down

Answer: B

2. Cotton is an inappropriate material to be worn by SAR providers.
- A. True
 - B. False

Answer: B

3. The rate of heat transfer in clothing depends on:
- A. the amount of dead air spaces trapped within the clothing and layers.
 - B. water and moisture within the layers.
 - C. the amount of air that passes through the material.
 - D. all of the above.

Answer: D

4. When considering clothing systems, SAR providers should also consider:
- A. hats.
 - B. gloves.
 - C. gaiters.
 - D. all of the above.

Answer: D

5. What are the five layers of clothing recommended for SAR providers?
- A. underwear, clothing, insulation, clothing, shell
 - B. underneath, wicking, clothing, insulation, shell
 - C. underwear, wicking, insulation, clothing, shell
 - D. none of the above

Answer: B

6. A waterproof, non-breathable shell layer could also be called a:
- A. vapor barrier.
 - B. GORE-TEX®.
 - C. micropore laminate.
 - D. none of the above.

SAR TECH II Chapter Questions Study Guide

Answer: A

7. The clothing layer should saturate and encourage the evaporation of perspiration.

- A. True
- B. False

Answer: A

8. Generally when dry, nylon fleece, polyester pile and batting, goose down, and wool all have similar insulation values for the same thickness.

- A. True
- B. False

Answer: A

9. Cordura[®] is a type of:

- A. polyester
- B. cotton
- C. Capilene[™]
- D. nylon

Answer: D

10. Polyester fibers are hollow, don't absorb moisture, and, much like nylon, are poor at wicking moisture.

- A. True
- B. False

Answer: A

Chapter 8:

1. Of the following options, which is the most desirable place to be during a thunderstorm?

- A. picnic area
- B. under large isolated trees
- C. on exposed ridges
- D. under head-high clumps of trees

Answer: D

2. If left untreated, frostnip can lead to:

- A. hyperthermia.
- B. frostbite.
- C. chilblain.
- D. poison ivy.

Answer: B

3. Treatment for all heat-related injuries includes:

- A. rewarming.
- B. eliminating exposure.
- C. rapid hydration.
- D. salt tablets.

Answer: B

4. The best treatment for snake bites is:

- A. a constriction band.
- B. a tourniquet.
- C. to identify, immobilize, and evacuate.
- D. to suction.

Answer: C

5. When crossing a stream, which is NOT a proper technique:

- A. not crossing the stream directly above or close to deep or rapid waterfalls
- B. avoiding rocky places, since a fall may cause serious injury
- C. having a plan of action for making the crossing
- D. traveling perpendicular to the flow

Answer: D

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6. If you find yourself in fast-moving water swimming downstream after a fall, make sure to put your feet down and ditch your pack and try and stand up and move to safety.

- A. True
- B. False

Answer: B

7. The three types of deserts are:

- A. mountain, barren, and sandy.
- B. rocky, sandy, and dune.
- C. ridge, sandy, and basin.
- D. mountain, rocky plateau, and sandy.

Answer: D

8. Specific skills that are necessary for desert SAR include:

- A. knowledge of heat stress and the impact on body and mind.
- B. not conserving your energy.
- C. wearing a light-colored pack.
- D. having enough salt tablets for your task.

Answer: A

9. On mixed rock and ice climbs:

- A. wear crampons until you get to the rock areas and then remove them.
- B. try to find a route that has just ice or just rock.
- C. wear crampons throughout the entire climb if the terrain is 50% or more suitable for crampons.
- D. wear crampons throughout the entire climb if the terrain is 25% suitable for crampons.

Answer: C

Chapter 9:

1. The 24-hour pack is important because:
- A. it allows the SAR provider to be self-reliant.
 - B. helps the SAR provider to maximize his or her effectiveness.
 - C. helps the SAR provider to maintain comfort.
 - D. all of the above.

Answer: D

2. Body protection equipment helps us to minimize distractions and improve comfort and safety.
- A. True
 - B. False

Answer: B

3. Weight of fresh water is:
- A. 1 pound per gallon.
 - B. 8 pounds per gallon.
 - C. 8.5 pounds per gallon.
 - D. 6.3 pounds per gallon.

Answer: C

4. Which of the following are reasons to have a SAR ready pack?
- A. self-reliance
 - B. assist SAR provider or subject
 - C. maintain comfort for SAR provider
 - D. all of the above

Answer: D

5. When carrying food on a SAR mission, what type do you NOT want to carry?
- A. protein bars
 - B. trail mix
 - C. "meal" type
 - D. energy gel

Answer: C

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6. The intake of fluid is crucial to the SAR provider. What is one step that a SAR provider could take to maintain his or her necessary fluid level?
- A. Take salt tablets.
 - B. Drink only during break sessions.
 - C. Add drink mixes to improve taste.
 - D. Drink only when you feel thirsty.

Answer: C

7. In what situation does the ready pack become worthless?
- A. when it is not where it is needed
 - B. when it becomes too heavy to carry
 - C. when you return from a mission
 - D. when you have found the victim

Answer: A

8. What is the minimum number of sources of water a SAR provider should carry?
- A. 3
 - B. 2
 - C. 1
 - D. 4

Answer: B

9. Which of the following would NOT be considered a “pocket item”?
- A. compass
 - B. camp stove
 - C. radio
 - D. gloves

Answer: B

10. Which of the following equipment would not be suitable for SAR work?
- A. heavy-duty hiking boots
 - B. leather gloves
 - C. ripstop BDU clothing
 - D. ski jacket

Answer: D

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11. Which type of insect repellent is most often recommended?

- A. Skin-So-Soft®
- B. netting
- C. DEET
- D. deodorant soaps

Answer: C

12. Ideally, insulating ground pads should be:

- A. lightweight.
- B. compact.
- C. good insulators.
- D. all of the above.

Answer: D

13. What is the number one drawback for using down in a sleeping bag?

- A. It loses insulation when wet.
- B. It is lightweight.
- C. It has good compressibility.
- D. It is breathable.

Answer: A

14. Sleeping bags are generally compared by:

- A. quality of construction.
- B. effective temperature range.
- C. loft effect.
- D. total length.

Answer: C

15. Loft is a term generally used to specify what?

- A. compressibility
- B. insulating temperature
- C. total thickness
- D. bag construction

Answer: C

16. Which of the four types of sleeping bag shapes is the most efficient in design?

- A. rectangular
- B. mummy
- C. wedge
- D. oval

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Answer: B

17. Which is the most common type of baffling used in backpacking sleeping bags?

- A. cross-stitch baffling
- B. shingle construction
- C. box construction
- D. ribbon baffling

Answer: B

18. Which of the following would NOT help increase warmth in a sleeping bag?

- A. sleeping in a layer of dry clothes
- B. improving ground insulation
- C. using a vapor barrier
- D. sleeping on clean bare soil

Answer: D

19. What is the biggest disadvantage of using a tarp for a shelter?

- A. little insect protection
- B. weight
- C. not breathable material
- D. too visible

Answer: A

20. Approximately what percent of the weight of most tents is found in the pole system?

- A. 60%
- B. 50%
- C. 45%
- D. 40%

Answer: B

21. Which of the following eating utensils is NOT needed by SAR providers in their ready pack?

- A. bowl
- B. cup
- C. spoon
- D. fork

Answer: D

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22. What is the advantage of having a metal bowl or cup?
- A. easy to clean
 - B. heat transfer
 - C. weight
 - D. engrave your name on it

Answer: A

23. Which of following is a good characteristic to have in a water bottle?
- A. wide mouth
 - B. colorful
 - C. thin/flexible material
 - D. half gallon or larger size

Answer: A

24. When choosing boots for SAR work, what is NOT an important consideration?
- A. ankle support
 - B. non-slip soles
 - C. proper fit
 - D. color

Answer: D

25. When choosing a flashlight for SAR work, one should chose:
- A. bright, "white-hot" light.
 - B. medium bright light.
 - C. "law enforcement" types.
 - D. colored lens lights.

Answer: B

26. Which type of knife is better suited for SAR work?
- A. tactical boot knife
 - B. small, compact, single black knife
 - C. large, solid hunting knife
 - D. Swiss army multi-blade knife

Answer: D

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27. Which type of pack is better suited for SAR work?
- A. large external pack
 - B. internal frame pack that extends below waistline
 - C. external frame pack with numerous exterior pockets
 - D. internal frame packs that fit close to the body

Answer: D

28. Where should heavy items be placed in your pack?
- A. high and on top
 - B. away from your back
 - C. close to your back
 - D. low and away from your back

Answer: C

Chapter 10:

1. Contour lines:

- A. are found on planimetric maps.
- B. indicate the elevation of the terrain directly under the lines.
- C. are black.
- D. are intended to accentuate the perimeter of features.

Answer: B

2. Which of the “north” arrows on a USGS topographic map points toward the North Pole?

- A. grid north
- B. north declination
- C. true north
- D. magnetic north

Answer: C

3. What is magnetic declination?

- A. distance magnetic north moves annually
- B. the difference between true north and grid north
- C. the difference between true north and magnetic north
- D. the difference between magnetic north and grid north

Answer: C

4. In what direction does the direction-of-travel arrow on a compass point?

- A. north
- B. south
- C. the direction you are traveling
- D. none of the above

Answer: C

5. What is the difference between an azimuth and a back azimuth?

- A. They are the same.
- B. They 90 degrees apart.
- C. They are 180 degrees apart.
- D. They are 270 degrees apart.

Answer: C

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6. Calculate the magnetic bearing from a true bearing of 180 degrees obtained from a map with a declination of 8 degrees east.

- A. 188 degrees
- B. 172 degrees
- C. cannot be solved—need more information
- D. 2 degrees

Answer: B

7. You have traveled 200 meters on a bearing of 0 degrees then 400 meters on a bearing of 90 degrees. You have no map. Can you get back? What course would you take to return to your starting point?

- A. Yes; 180 degrees for 200 meters then 90 degrees for 400 meters
- B. Yes; 270 degrees for 200 meters then 180 degrees for 400 meters
- C. No; it cannot be done without a map.
- D. Yes; 270 degrees for 400 meters then 180 degrees for 200 meters

Answer: D

8. An advantage of GPS units is:

- A. their line-of-sight reception from satellites
- B. their ability to reliably substitute for map and compass
- C. their modest battery life
- D. their ability to accurately ascertain and track locations

Answer: D

9. In order to determine distances on a topographic map, you would use the _____ located at the bottom of the map.

- A. contour interval
- B. bar scale
- C. agonic line
- D. parallel of latitude

Answer: B

10. The preferred maps used by most ground search and rescue teams are:

- A. planimetric maps
- B. pictorial relief maps
- C. topographical maps
- D. street maps

Answer: C

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11. The direction-of-travel arrow located on a compass:
- A. tells the user which direction the compass should point.
 - B. indicates which way is true north instead of magnetic north.
 - C. points in the direction of travel when the compass is oriented.
 - D. tells the user how to orient the compass as an orienting line.

Answer: C

12. An imaginary line on the Earth's surface connecting points where the magnetic declination is zero as of a given date is a:
- A. contour line.
 - B. declination line.
 - C. agonic line.
 - D. grid north line.

Answer: C

13. Map scale indicates:
- A. the ratio or proportion of the horizontal distance on the map to the corresponding horizontal distance on the ground.
 - B. the distance in height between one contour line and the one next to it.
 - C. the actual size of the map.
 - D. the elevation above sea level.

Answer: A

14. The brown lines on a woodland topography map illustrate:
- A. roads and highways.
 - B. bodies of water.
 - C. contour interval.
 - D. updated areas of urban sprawl.

Answer: C

15. On a 1:24,000 scale map, one inch equals _____ feet.
- A. 5280
 - B. 1500
 - C. 2000
 - D. 2400

Answer: C

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16. In order to correct magnetic WEST declination when converting from a compass to a map, you must:
- A. subtract declination.
 - B. add declination.
 - C. add from the agonic line.
 - D. neither add nor subtract for declination because declination will not affect the compass user.

Answer: B

17. The declination diagram on the map that you are using indicates there is a magnetic declination of 9° west. You follow a compass heading of 355° (magnetic) to travel from a church to a distant peak. Arriving at the peak, you notice that there are many similar peaks in the area and you want to determine which one on the map you are on.

In order to use the compass as a protractor, you must know your proper heading on the map from the church (starting point). You draw a line on the map that indicates the route that you just traveled. What would your compass bearing be on the map?

- A. 355°
- B. 4°
- C. 346°
- D. 343°

Answer: C

18. You are hiking through a wooded area on a 24° magnetic bearing and there is a large obstruction in your path. In order to get around the obstruction, you turn right 90° . Your new compass bearing would be _____. You travel this heading approximately 100 feet; you would then turn _____ for a compass heading of _____ until you could pass the obstruction. Once you have passed the obstruction, you would turn _____ 90° and walk _____ feet before turning right with a compass bearing of 24° magnetic and continue on your original direction of travel.

- A. 294° , right, 24° , right, 100
- B. 114° , right, 24° , right, 100
- C. 114° , left, 24° , left, 100
- D. 294° , left, 204° , right, 100

Answer: C

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9. A space-based radio-navigation system consisting of satellites and a network of ground stations used for monitoring and control is called:

- A. UTM.
- B. GPS.
- C. SMDRT.
- D. UMS.

Answer: B

Contours have certain general characteristics; these are not rules but guidelines that may be helpful in answering questions 19 through 23.

20. Contour lines that are close together indicate:

- A. valleys.
- B. steep terrain.
- C. saddles.
- D. streams.

Answer: B

21. Lines that have a "V" shape indicate:

- A. steep terrain.
- B. stream beds and narrow ridges.
- C. saddles.
- D. open space areas.

Answer: B

22. What do hatchures on contour lines indicate?

- A. hills
- B. mesa
- C. depressions
- D. flat terrain

Answer: C

23. A mile equals _____ feet.

- A. 3258
- B. 5280
- C. 2580
- D. 5820

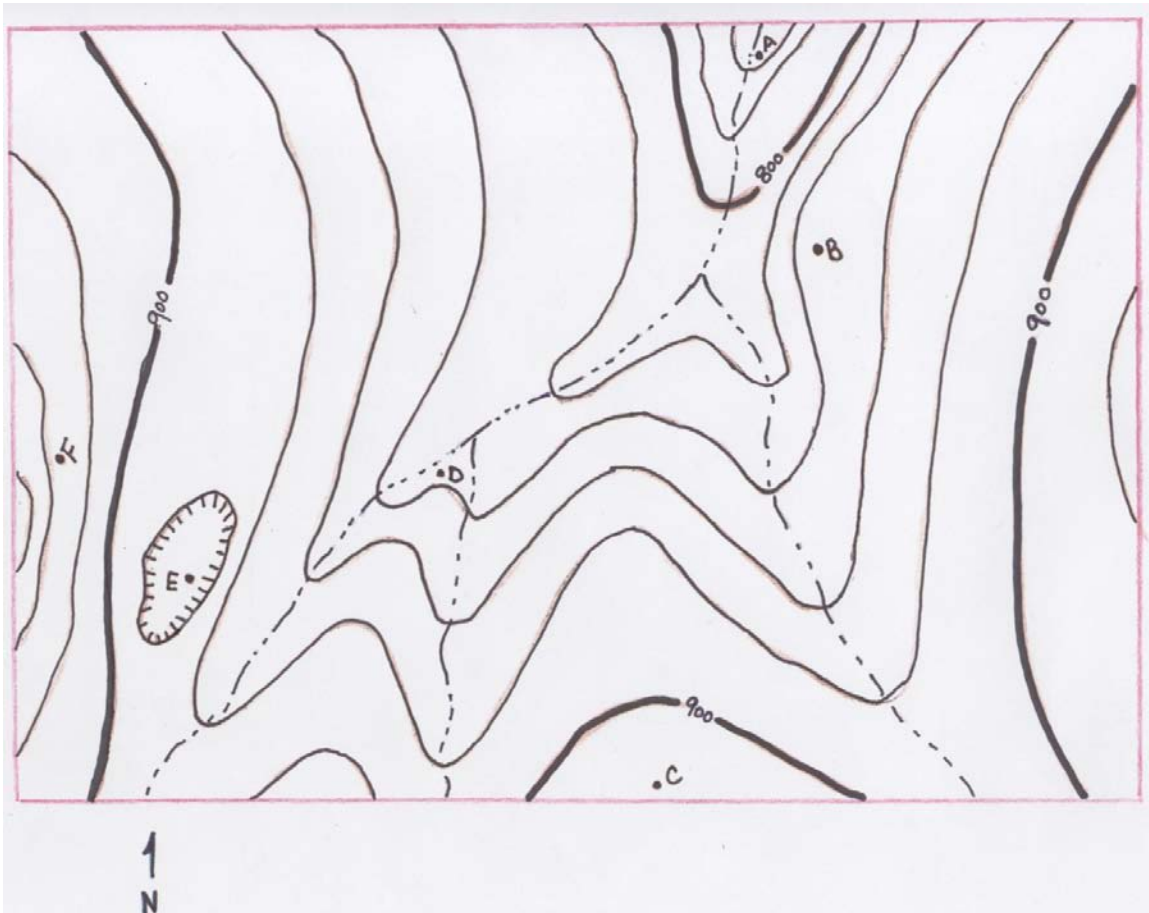
Answer: B

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24. The back azimuth of a course heading of 275° is:

- A. 75° .
- B. 85° .
- C. 95° .
- D. 105° .

Answer: C



Use the topography map above to answer questions 25-31.

25. The approximate elevation at Point A is:

- A. 840-860 feet.
- B. 740-760 feet.
- C. 800-900 feet.
- D. 820-840 feet.

Answer: B

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26. The approximate elevation at Point B is:

- A. 880-900 feet.
- B. 840-860 feet.
- C. 920-940 feet.
- D. 860-880 feet.

Answer: B

27. The approximate elevation at Point C is:

- A. 880-900 feet.
- B. 900-920 feet.
- C. 920-960 feet.
- D. 860-880 feet.

Answer: B

28. The approximate elevation at Point D is:

- A. 840-860 feet.
- B. 760-780 feet.
- C. 820-840 feet.
- D. 800-820 feet.

Answer: C

29. The approximate elevation at Point E is:

- A. 880-900 feet.
- B. 860-880 feet.
- C. 900-920 feet.
- D. 920-940 feet.

Answer: B

0. The intermittent "blue" line with dashes illustrates:

- A. road/trail.
- B. pipeline.
- C. seasonal stream.
- D. contour line.

Answer: C

31. The contour interval on the topography map above is:

- A. 60 feet.
- B. 40 feet.
- C. 20 feet.
- D. 30 feet.

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Answer: C

32. A back azimuth is calculated by adding 180° to the azimuth when it is _____ than 180° , or by subtracting 180° if the azimuth is _____ than 180° .

- A. more, less
- B. less, more
- C. equal, less
- D. equal, more

Answer: B

33. A unit of linear measurement equal to the length of a step or stride is called:

- A. slope.
- B. pace.
- C. angle.
- D. meridian.

Answer: B

34. If you travel on a course heading on Leg 1 at 29° for 50 paces; then Leg 2 at 263° for 63 paces; and then Leg 3 at 10° for 90 paces, what would your return heading and paces be for each leg?

- A. $190^\circ/90$ paces, $83^\circ/63$ paces, $209^\circ/50$ paces
- B. $190^\circ/63$ paces, $83^\circ/90$ paces, $209^\circ/50$ paces
- C. $83^\circ/90$ paces, $190^\circ/63$ paces, $209^\circ/50$ paces
- D. $209^\circ/90$ paces, $190^\circ/63$ paces, $83^\circ/50$ paces

Answer: A

35. The geographic coordinate system (latitude/longitude) uses a grid system that covers the entire globe. Which way do parallels run?

- A. east-west
- B. west-north
- C. north-south
- D. south-east

Answer: A

Chapter 11:

1. In SAR, a resource is a(n):

- A. horse.
- B. piece of equipment available for use.
- C. qualified asset that is ready for use or can be drawn upon for aid.
- D. none of the above.

Answer: C

2. Resources can be categorized as:

- A. human, equipment, and administrative.
- B. human, animal, informational, and investigation.
- C. human, animal, informational, equipment, and technology.
- D. none of the above.

Answer: C

3. Three types of trained human search resources are:

- A. trackers, psychics, and law enforcement.
- B. trackers, hasty teams, and grid search crews.
- C. investigators, news reporters, and clergy.
- D. all of the above.

Answer: B

4. In wilderness search and rescue, thermal imaging devices may be used to sense the body heat of the missing person(s).

- A. True
- B. False

Answer: A

5. FLIR (forward looking infrared) units are used to scan wide areas and are often used from aircraft platforms.

- A. True
- B. False

Answer: A

6. Communications support can be obtained from:

- A. local amateur radio clubs.
- B. CB clubs.
- C. emergency management agency.
- D. all of the above.

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Answer: D

Chapter 12:

1. Which two forms of travel may be required during SAR incidents?

- A. tactical and passive
- B. technical and passive
- C. technical and non-technical
- D. climbing and walking

Answer: C

2. When encountering steep slopes:

- A. it is easier to traverse them turning at the end of each traverse and stepping off in a new direction with the downhill foot.
- B. it is easier to take more rest stops in order to save your energy.
- C. it is easier to traverse them by turning at the end of each traverse and stepping off in the new direction with the uphill foot.
- D. it is easier to go straight up the hill in order to save time.

Answer: C

3. One of the two fundamental rules regarding wilderness travel is not to keep your body weight over your feet.

- A. True
- B. False

Answer: B

4. On most trails at average walking speeds, the distance that searchers should keep between them is about:

- A. 10 to 15 feet.
- B. 3 to 6 feet.
- C. 6 to 10 feet.
- D. 15 to 20 feet.

Answer: C

5. Smart route planning prior to starting a mission may:

- A. enable more efficient travel.
- B. give searchers more time to rest.
- C. provide searchers with scenic views.
- D. none of the above.

Answer: A

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6. On average, searchers should rest ____ every hour.
- A. 5 minutes
 - B. 10 minutes
 - C. 15 minutes
 - D. none of the above

Answer: B

Chapter 13:

1. _____ is simply defined as following someone or something by stringing together a continuous chain of their sign.
- A. Bracketing
 - B. Sign cutting
 - C. Tracking
 - D. Track traps

Answer: C

2. Tracks are usually easiest to see:
- A. when the sun is at a low angle as in early morning or late afternoon.
 - B. in the middle of the day.
 - C. when it is rainy and cold.
 - D. when the sky is cloudy.

Answer: A

3. _____ tracking involves the tracker seeing each step while proceeding no further than the last visible track and using the stride to determine where next to look for sign.
- A. Sign cutting
 - B. Step-by-step
 - C. Sump
 - D. Track trap

Answer: B

4. Tracking does not require much equipment but does require:
- A. speed.
 - B. sight, patience, perseverance, and determination.
 - C. a K-9 team in order to be effective.
 - D. both A and C

Answer: B

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5. _____ is looking for sign in order to establish a starting point from which to track.
- A. Bracketing
 - B. Jump tracking
 - C. Track traps
 - D. Sign cutting

Answer: D

6. The step-by-step method of tracking uses:
- A. a K-9 team and grid searchers.
 - B. a three-person team composed of a point person and two flankers.
 - C. whoever is available in staging.
 - D. none of the above.

Answer: B

7. The area where the victim was last known to have been:
- A. has little or no bearing on a tracker finding sign.
 - B. has the highest chance of containing tracks or other evidence useful to the tracker.
 - C. can be used by the tracker to determine direction of travel.
 - D. both B and C

Answer: D

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Chapter 14:

1. Instructions on how to handle evidence or clues should be given:
 - A. by the team leader as clues are found.
 - B. during the briefing.
 - C. during the debriefing.
 - D. during notification phase.

Answer: B

2. Which of the following is NOT one of the five types of clues?
 - A. physical
 - B. events
 - C. analytical
 - D. situational

Answer: D

3. Injured subjects should never be assessed or treated before law enforcement arrives on scene.
 - A. True
 - B. False

Answer: B

4. Which of the following is NOT one of the three characteristics on which clue detection is based?
 - A. the sensor
 - B. the Incident Commander
 - C. the search object
 - D. the environment

Answer: B

5. List five pieces of information from a subject profile that may help predict the behavior of the lost person.

Answer: habits, experience, age, fears/phobias, health, history, meds, hobbies, addictions

6. List three ways to document clues.

Answer: sketch, collect, photograph, witness

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7. Determining probability of detection helps us to:
- A. estimate how thoroughly a segment has been searched.
 - B. prepare for the briefing.
 - C. determine the point last seen.
 - D. determine the last known point.

Answer: A

Chapter 15:

1. You are responsible for yourself and your crew as you travel to an incident out of town. Upon your arrival, your first responsibility is to:
- A. check in with the appropriate personnel.
 - B. ensure that everyone has the appropriate amount of water and food.
 - C. ascertain the whereabouts of the staging area.
 - D. have the crew to conduct equipment checks on their pack contents.

Answer: A

2. ALL of the statements below are TRUE about a crew mission briefing EXCEPT:
- A. The Planning Section, or its delegate, conducts it.
 - B. It is an opportunity to pass information upward to search management.
 - C. It is when information about safety hazards are communicated.
 - D. It is a summary of the past and present circumstances of the incident.

Answer: B

3. As a searcher, you should expect ALL of the following EXCEPT:
- A. Information about the subject (name, description, etc.) will be communicated at the briefing.
 - B. Briefings are conducted in an oral as well as written manner.
 - C. Clue considerations are discussed in the briefing.
 - D. The briefing will be conducted immediately following completion of the assignment.

Answer: D

4. Crew mission debriefings are usually conducted by which section?
- A. Planning
 - B. Operations
 - C. Logistics
 - D. Finance/Administration

Answer: A

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5. Which of the following is FALSE about crew mission debriefings?
- A. Their purpose is to funnel information from search crews back to management.
 - B. They are conducted by the Plans Section.
 - C. They are conducted only with team leaders and higher ranks.
 - D. They are conducted to determine search conditions.

Answer: C

6. Check-out occurs:
- A. upon arrival at the search.
 - B. upon leaving from the mission base or staging area for the assignment.
 - C. upon departing the incident.
 - D. upon returning to the staging area.

Answer: C

7. On a search crew, the person responsible for tracking the crew's whereabouts in relation to the search area and the incident base is the:
- A. team leader.
 - B. timekeeper.
 - C. tally.
 - D. navigator.

Answer: D

8. On a search crew, this person is responsible for maintaining information about the distance traveled in relation to the search area and the incident base:
- A. the team leader
 - B. the timekeeper
 - C. tally
 - D. navigator

Answer: C

9. On a search crew, this person is responsible for ensuring that crew tasks are conducted properly:
- A. team leader
 - B. timekeeper
 - C. tally
 - D. navigator

Answer: A

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10. On a search crew, the person responsible for acting as a crew “scribe” and recording the chronology of events that occur on the assignment is called the:
- A. team leader.
 - B. timekeeper.
 - C. tally.
 - D. navigator.

Answer: B

11. The instructions issued to you as a crew leader tell you that your crew will employ indirect search tactics. ALL of these are indirect EXCEPT:
- A. fact finding and interviews
 - B. walking trails inside the search area
 - C. using strobe lights on the edge of the search area
 - D. posting searchers at likely exit points from the search area

Answer: B

12. The investigation that a sheriff’s deputy might do at a search would be characterized as a _____ search tactic because it _____.
- A. direct; does not involve a field searcher
 - B. direct; specifically searching for the subject or clues
 - C. indirect; is not performed by a field searcher
 - D. indirect; does not involve specifically searching for the subject or clues

Answer: D

13. Search management has fully utilized its resources and tactics without finding the subject. A remaining tactic involves no field searching specifically for the subject, but includes continued investigation and periodic use of the former search area as a training site for search crews. Management refers to this tactic as:
- A. loose grid search.
 - B. search suspension.
 - C. continuous limited search.
 - D. non-area search.

Answer: C

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14. Tactics such as route blocks, track traps, and patrols are referred to as _____, even though they may occur inside the search area, and are considered _____ tactics.

- A. containment; indirect
- B. attraction; indirect
- C. containment; direct
- D. attraction; direct

Answer: A

15. You have just been assigned to a crew of field searchers on a search. The crew you are on is composed of two to four skilled searchers who have had a great deal of training and are capable of moving very quickly over the terrain to which you will be assigned. Your tasking is to search a travel route that the subject may have used. Your crew is said to be on a(n):

- A. grid search.
- B. area search.
- C. hasty search.
- D. trail patrol.

Answer: C

16. A hasty search is considered to be one in which there:

- A. involves less thoroughness in exchange for wider geographic coverage in less time through use of a control line.
- B. are only trail patrols and road blocks employed.
- C. is an effort to find clues and define the search area, and requires few resources to conduct.
- D. involves moving a group of searchers in a very organized, systematic formation to obtain the highest probability of detection.

Answer: C

17. You and your crew are systematically circling the subject's point last seen in an effort to find the first clue from which to track. Your crew is using the technique of:

- A. sign cutting.
- B. route search.
- C. grid search.
- D. patrolling.

Answer: A

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18. Operations Section has given your three-person crew the assignment of searching a particular segment. You realize from the assignment that your crew's technique will be to purposefully roam assigned search lanes, with searchers independently moving laterally as well as forward to check likely spots within their lane. These searchers are skilled in navigation and clue detection. The tactic that you are using is:

- A. hasty search.
- B. route search.
- C. loose grid searching.
- D. tight grid searching.

Answer: C

19. Having finished your assignment and having been debriefed, Operations wants the same crew you had to conduct another search. You will have your trained crew members interspersed at regular intervals with unskilled searchers that are now assigned to you. All of you will be in narrow search lanes. Your searchers will generally maintain their parallel and equally spaced lanes. The goal is very thorough search with high coverage. You are to conduct:

- A. hasty searching.
- B. route searching.
- C. loose grid searching.
- D. tight grid searching.

Answer: D

20. You and the same crew from Question 19 are together at another incident. This time, you are tasked to work in conjunction with other search crews. Time won't be an issue in this instance because there is no live subject to find. What you seek to find will often be very small objects. Maintaining a chain of custody of anything found will also be especially important this time. A risk with this technique is that management has only one chance; the environment may be so disrupted afterward that anything missed in this search will probably never be found again. The technique here is:

- A. route searching.
- B. evidence searching.
- C. containment.
- D. tracking.

Answer: B

21. You are the crew leader of a crew assigned to do an area search. In all area searches regardless of type, a _____ runs perpendicular to the search crew's general direction of travel throughout the assignment and defines which direction the individual searchers will look for guidance.

- A. feature

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- B. compass bearing
- C. control line
- D. base line

Answer: C

22. One of your priorities is to determine from where your crew will start. You either use your task assignment or your observations of terrain as a starting point. You determine the direction of travel and designate a line perpendicular to that direction. Your crew lines up in the appropriate spacing along the line after you have named the person who will keep the team on the right direction of travel. The line that defines the starting points for each crew member and is perpendicular to that direction of travel is the:

- A. line of departure.
- B. compass bearing.
- C. base line.
- D. control line.

Answer: C

23. The general name for the person to whom the other searchers look for directional guidance during the course of the assignment is the:

- A. crew leader.
- B. guide person.
- C. tally counter.
- D. sign cutter.

Answer: B

24. If you instruct your crew to “guide right,” in which direction will the crew look to maintain the direction of travel?

- A. left
- B. right
- C. center
- D. rear

Answer: B

25. _____ can be used to create an artificial line that substitutes for a natural feature to provide guidance to the search crews.

- A. Trail tape or ribbon
- B. The Trail watcher line
- C. A hiking trail
- D. A creek

Answer: A

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26. You are a team leader and your control operations assign a 10-guide right-30 formation. In what direction is your guide person?

- A. the crew's front
- B. the left
- C. the right
- D. the rear

Answer: C

27. In a 5-guide right-30 formation, what average distance have you been instructed to place between searchers?

- A. 5 feet
- B. 15 feet
- C. 30 feet
- D. 60 feet

Answer: C

28. In a 5-guide right-30 formation, how many searchers in total are on your team if the team leader is on the control line?

- A. 5
- B. 9
- C. 11
- D. 30

Answer: A

29. If your instructions were to use "10-compass 15-30," what would be your guide?

- A. a guide person 15 searchers down the line
- B. a compass bearing of 10 degrees
- C. a compass bearing of 15 degrees
- D. a compass bearing somewhere between 15-30 degrees, depending on terrain and ground cover

Answer: C

30. If your instructions had been to maintain a searcher interval of 20 meters, how far apart would you report in the debriefing that your searchers were in the assignment?

- A. 20 meters
- B. roughly 20 meters
- C. 40 meters
- D. It may vary depending on the terrain and ground cover experienced during the assignment.

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Answer: D

You are a team leader for some Venturing scouts in an area search at Mount Rainier National Park in the Pacific Northwest (USA). Your instructions include information searching a "7-Area-124."

31. In which of the three parts do you find instructions on the number of searchers in your control line?

- A. first part
- B. second part
- C. third part
- D. none of the parts

Answer: A

32. In which of the three parts do you find instructions on the spacing between searchers?

- A. first part
- B. second part
- C. third part
- D. none of the parts

Answer: C

33. In which of the three parts might you find a compass bearing to be used as your direction of travel?

- A. first part
- B. second part
- C. third part
- D. none of the parts

Answer: C

34. You are a crew leader assigned to a particular search segment in an incident in the Southern Appalachian Mountains (USA). The heavy undergrowth of Rhododendron and Mountain Laurel presents a challenge to finding clues. Your duties include determining the greatest typical distance at which a crew member could see a clue that your subject might have had. This distance is called:

- A. best spacing (BS).
- B. mean greatest visibility (MGV).
- C. probability of detection (POD).
- D. average maximum detection range (AMDR).

Answer: D

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35. How is AMDR (average maximum detection range) determined?

- A. Using a tape measure, one searcher holds the tape at the clue while the other measures the distance where they can no longer see the first searcher. The distance between the two searchers is recorded as the correct determination.
- B. Like above, but the searchers take turns recording the distance measured and repeat this step eight times. The average of the distances by the two searchers is recorded as correct determination.
- C. Using one or more searchers, a typical clue is put down in the forest. Each searcher walks away from the clue and estimates the distance at which they think the clue will no longer be visible. The estimated distance is recorded as correct determination.
- D. Using one or more searchers, a typical clue is put down in the forest. Each searcher follows a bearing away from the clue until it cannot be seen, makes note of the distance to that point using pace count, and continues for another 50-100 meters. The searcher makes a right turn and walks around the clue until they are on a bearing 45 degrees greater than the original one and walks toward the clue until they can see it. The distance from that point to the clue is measured through pace count. Each searcher repeats this process until each has accumulated around eight of these measurements. The average of all the measurements is the correct determination.

Answer: D

36. The purpose of the determination of AMDR is to:

- A. make a quantitative measure of search conditions.
- B. make a quantitative measure of search success.
- C. make a qualitative measure of search conditions.
- D. make a qualitative measure of search success.

Answer: A

37. The pattern of observation known as the “searcher cube” refers to:

- A. actively looking for clues in an area a half-sweep-width long and a half-sweep-width wide.
- B. attempting to estimate how many clues could be observed in a hypothetical square in your search segment.
- C. making a practice of looking upward, downward, and in a 360° circle around you.
- D. putting searchers into a four-cornered formation for a grid search.

Answer: C

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38. You can improve your ability to maintain your spacing as well as your correct position on the control line if you:

- A. Assign numbers to each searcher and tape these numbers onto their backs.
- B. periodically shoot azimuths up and down the control line.
- C. memorize the names, faces, and the color of the clothing worn by the searchers to your immediate left and right on the line.
- D. regularly refer back to your team leader for spacing and position information.

Answer: C

39. In talking with non-search personnel, the good searcher should always:

- A. feel comfortable in talking to the media and the subject's family whether or not his or her assignment requires them to do so.
- B. talk to the media, the subject's family, and bystanders in the field as necessary.
- C. interview hikers and other potential witnesses that you encounter on your assignment.
- D. Avoid discussing anything with anyone not on your crew.

Answer: C

40. A way for one crew member to significantly hamper another crew member's ability to operate at night is to:

- A. assign the member to the position of navigator.
- B. shine his or her headlight into the other's eyes.
- C. instruct the member of the crew to turn his or her headlight beam at a downward angle.
- D. have him or her act as the team's scribe.

Answer: B

41. Each of the following statements about competent searchers is true EXCEPT:

- A. They have a ready pack and know its contents.
- B. They follow the rule: "Be prepared."
- C. They believe that even a piece of equipment they don't know how to use is still worth bringing.
- D. They know how to utilize the contents of your pack.

Answer: C

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42. Your personal equipment should be checked and readied in which stage of the SAR incident?

- A. call-out
- B. preplanning and preparation
- C. critique
- D. debriefing

Answer: B

43. One aspect that is NOT a part of necessary preplanning and preparation is:

- A. knowledge of exact details of the next mission.
- B. equipment checks.
- C. physical conditional.
- D. maintenance of a proper mental attitude.

Answer: A

Chapter 16:

1. A rope used to support people is called a:
- A. sisal.
 - B. utility line.
 - C. lifeline.
 - D. rescue line.

Answer: C

2. Of the main types of rope construction in use, _____ is the most commonly used construction in rescue work.
- A. braided
 - B. laid
 - C. kernmantle
 - D. none of the above

Answer: C

3. Webbing can be used in a variety of ways by rescuers, including:
- A. as an anchor component to attach the rope to an object.
 - B. to secure an injured person to a litter.
 - C. used to make an improvised harness.
 - D. all of the above

Answer: D

4. The figure eight family of knots is a good choice for rescue work because
- A. they are easy to tie and untie.
 - B. they slip when loaded.
 - C. they are easy to remember and teach to others.
 - D. both A and C

Answer: D

5. A water knot is used:
- A. to attach rope to an object.
 - B. to join ropes of different diameter.
 - C. primarily when working with webbing.
 - D. any time knots are tied around wet areas.

Answer: C

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6. When using carabineers for rescue work, one of the primary considerations should be:

- A. color.
- B. a locking mechanism.
- C. size.
- D. none of the above.

Answer: B

7. When transporting patients in a litter, you should:

- A. keep them informed of the situation and progress.
- B. ignore them so they will not ask questions.
- C. include them in your conversation and call them by name.
- D. both A and C

Answer: D

8. A “bend” knot is made by:

- A. tying the cordage around something.
- B. joining two ends of cordage/webbing together.
- C. making a loop with cordage.
- D. none of the above.

Answer: B

9. Aluminum carabiners are _____ than steel ones.

- A. more expensive
- B. lighter
- C. more compact
- D. none of the above

Answer: B

10. The primary ingredient in manufacturing rescue rope is:

- A. cotton
- B. hemp
- C. manila
- D. nylon

Answer: D

11. “Kernmantle” means:

- A. sheath within a core.
- B. core in sheath.
- C. expensive.
- D. rescue rope.

Answer: B