



***Wilderness Recertification Course
Study Guide***

Name: _____

Please read the questions carefully and be as specific as possible on the short answer and essay questions.

Section I – Short Answers

1. What is a physician advisor?
2. List 5 signs and symptoms of internal bleeding?
3. When should CPR be discontinued in a remote wilderness setting?
4. List in order, the methods of controlling external blood loss.
5. Please describe the physiological difference between heat stroke and heat exhaustion.
6. What mechanism of injury (MOI) could result in a flail chest and how would you treat it? Why is this injury so dangerous to the patient?
7. What 4 criteria must a patient meet in order to qualify for a focused spinal exam (clearing the spine)?

8. List 3 types of shock and give an example of each.

9. What are some signs and symptoms of a traumatic brain injury?

10. Please explain what the "E" stands for in the ABCDE's of the initial assessment.

11. What is the wilderness protocol for evacuating 2nd and 3rd degree burns?

12. Acute abdominal pain accompanied by which signs and symptoms are considered high priority field evacuations?

13. Please explain how women can get urinary tract infections and how they can prevent them.

Section II – Multiple Choice

14. Oxygen carried in the blood is exchanged for carbon dioxide and other waste materials through the walls of the:
 - A. Veins
 - B. Arteries
 - C. Capillaries
 - D. Arterioles
 - E. Venules

15. Venous bleeding should be suspected when the blood is:
 - A. Bright red and flowing steadily from the wound
 - B. Dark maroon and spurting from the wound
 - C. Dark maroon and flowing steadily from the wound
 - D. Bright red spurting from the wound

E. Blue blood and spurting from the wound

16. Pain in the flank of the back (kidneys) accompanied by fever could suggest which of the following:

- A. Epididymitis
- B. Pneumothorax
- C. Urinary tract infection
- D. Hemothorax
- E. B & C

17. What is true about splinting fractures?

- A. Splint joints above and below fracture site
- B. Check for circulation before and after splinting
- C. Always re-align the fracture before splinting
- D. Always splint with hard rigid materials
- E. A & B

18. Shoulder dislocations can be very painful and cause:

- A. Permanent nerve damage
- B. CVA (stroke)
- C. Low blood pressure
- D. Truncal Ataxia (loss of muscle coordination and balance)
- E. Anaphylactic shock

19. A heart attack can be best defined as:

- A. Cardiac arrest
- B. Death of heart muscle tissue
- C. Angina pectoris
- D. Arteriosclerosis
- E. Hemothorax

20. Scorpions and Black widows inject:

- A. Neurotoxins
- B. Hemolytic toxins
- C. Hypovolemic toxins
- D. Spontaneous toxins
- E. Non of the above

21. The **most important** thing to remember when dealing with conscious cervical spine injury is:

- A. To maximize the patients comfort
- B. To induce vomiting while supine
- C. To minimize any twisting of the spine during patient manipulation
- D. To drain cerebral spinal fluid from hematomas
- E. To prevent priapisms

22. When conducting a focused spinal exam (attempting to “clear the spine”) you should:
- A. Check circulation, motor and sensory responses in all 4 extremities
 - B. Palpate each vertebrae feeling for deformity and listening for verbal responses to localized tenderness
 - C. Check for appropriate sensation using a sharp/dull sensory test
 - D. Asking questions about the MOI
 - E. All of the above
23. Acute Mountain Sickness (AMS) can mimic:
- A. Hangover
 - B. The flu
 - C. Dehydration
 - D. Exhaustion
 - E. All of the above
24. Nitroglycerine is a medication prescribed to people suffering from:
- A. Heart attack
 - B. Angina pectoris
 - C. Stroke
 - D. Hemothorax
 - E. A & B
25. Peripheral edema is a condition that seems to occur more commonly in women. It is best described as:
- A. Swelling of the face and extremities due to altitude
 - B. Swelling of the lower respiratory tract due to altitude
 - C. Swelling around the brain stem due to altitude
 - D. Retinal hemorrhaging due to altitude
 - E. None of the above
26. Diamox® (acetazolamide) can be used as a prophylaxis for:
- A. AMS
 - B. Asthma
 - C. Diabetes
 - D. Heart disease
 - E. Acidosis
27. Hypoglycemia is:
- A. A condition resulting from lack of sugar causing ketoacidosis
 - B. A condition resulting from lack of insulin
 - C. A condition resulting from too many white blood cells
 - D. A condition resulting from lack of sugar
 - E. A & C

28. A fellow hiker took a significant fall while scrambling up a boulder field in mid-July. Upon assessment, you note that the person lost consciousness for about 10 seconds ("U" on AVPU scale) before returning to full alertness (A&Ox4). No significant injuries are discovered; the person has no past medical history and is not taking any medications. You are 8 miles from the trailhead, and the sun is setting. You are concerned, and should decide to:

- A. Let the patient go to sleep, and re-evaluate in the morning
- B. Monitor the patient for 24hrs while waking the patient every 2hrs for assessment
- C. Set up camp and watch for signs of nausea and vomiting, altered mental status and loss of visual acuity.
- D. Monitor the patient while treating for shock by elevating the legs 12 inches
- E. B & C

29. Immediate evacuation protocol for a traumatic brain injury in the back country is if:

- A. A person remains unconscious for more than 2 minutes and returns to A&OX3 while asking repetitive questions.
- B. Significant signs of increasing ICP
- C. Basilar skull fracture
- D. Battle signs
- E. All of the above

30. Who gets an O.P.A.?

- A. Anyone who is unconscious
- B. Anyone unconscious without a gag reflex
- C. Anyone unconscious with a gag reflex
- D. Anyone who has trouble breathing
- E. All of the above

31. The upper right abdominal quadrant contains?

- A. Colon, small intestine, ureter, appendix
- B. Liver, spleen, kidney, stomach, colon, pancreas
- C. Liver, colon, spleen, gall bladder
- D. Colon, small intestine, kidney, pancreas
- E. Liver, kidney, colon, pancreas, gall bladder

32. The ongoing assessment includes?

- A. Monitoring vitals
- B. ABC's
- C. Reassess SOAP notes
- D. All of the above
- E. None of the above

33. What are the signs and symptoms of an infection?
- A. Red streaks from wound radiating to heart
 - B. Blisters
 - C. Pus in wound
 - D. A and B
 - E. A and C
34. Which of the following is **not** considered a high-risk wound?
- A. Animal bite
 - B. Puncture
 - C. Amputation
 - D. Open fracture
 - E. Abrasion
35. Paradoxical movement of the chest wall usually indicates which one of the following?
- A. Tension pneumothorax
 - B. Flail chest
 - C. Pulmonary embolism
 - D. Thrombophlebitis
 - E. Severe asthma attack
36. In addition to hypovolemic shock, eviscerations are dangerous because?
- A. Anaphylactic shock
 - B. Loss of core temperature
 - C. High risk wound
 - D. A and B
 - E. B and C
37. Which is **not** a sign of giardia?
- A. Loss of appetite
 - B. Weight loss
 - C. Sulfur burps
 - D. Stomach cramps
 - E. Excessive urination
38. If a student approaches you complaining of pain upon urination and a fever, what could it be?
- A. Testicular torsion
 - B. UTI
 - C. Appendicitis
 - D. Epididymitis
 - E. All of the above

39. A 20 year-old male with an open mid-shaft femur fracture on the right leg has the following vitals:

LOC: A&Ox3

PR: 92

RR: 22

BP: Strong radial pulse

SCTM: Pale, cool and clammy

CSM: Diminished circulation on the right leg

What is the most important thing to do FIRST?

- A. Pull manual traction
- B. Immobilize leg
- C. Take radial pulse
- D. Stop the bleeding
- E. Clean the wound

Section III – Essay Questions BE SPECIFIC.

40. You and a friend are on a 3-day backcountry ice-climbing trip in Rocky Mountain National Park. On the 2nd day your friend complains of not being able to feel his toes. Upon further inspection you deduct that 3 toes on the left foot and 2 toes on the right foot have a full thickness frostbite injury. You are 8 miles from the nearest trailhead and the sun is setting in 4 hours. How would you treat your friend's injuries?

41. You are the leader of a 12- person winter expedition in Colorado (above 10,000ft). One of your students seemed to be suffering of shortness of breath while traveling today. This evening, you notice that your student is short of breath at rest and recently coughed up pink frothy sputum. He complains of a slight headache, weakness, dizziness and general malaise. You are 7 miles out and 2500ft descend to the trailhead. You have a satellite phone. It is 6pm and you are all travelling on skis with full packs. What do you suppose this student is suffering from and what would you do to treat him?

42. You and 6 friends are on the 10th day of a 30-day backcountry expedition in Alaska in mid-August. One of your expedition members complains of lower abdominal pain, severe diarrhea, vomiting, and general malaise. You are ~ 12 hrs from the nearest road and 20 from the nearest phone. What do you do? Explain your assessment and treatment in detail, as well as your plan of action.

43. You and your friend are hiking the Hermit Trail in Grand Canyon National Park in mid-July. Your friend suddenly complains of a headache, feels nauseous, tired and weak. Through SAMPLE you find out that she has allergies to penicillin, has asthma, takes an inhaler daily, ate a bagel and yogurt at 6am and drank 6 liters of water. You are 5 miles from the car and it is 4pm. What is your diagnosis and how would you help your friend?

44. You and your friend are on a 4-day backpacking trip through Death Hollow in Escalante National Monument in late summer. Suddenly you step off the trail into a vegetated area to rest and a snake bites you on the lower leg. You did not get a good look at the snake but you vaguely remember a buzzing sound before the attack. Upon further inspection the bite site has two distinct puncture wounds and the site is painful and swelling quickly. Since you are the only certified WFR what do you tell your friend to do to help you?