

**CORRESPONDENCE COURSE OF
THE U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL**

EXAMINATION #1

SUBCOURSE MED 153 -- Field Sanitation Team Certification Course.
CREDIT HOURS -- 40 hours.
TEST ASSIGNMENT -- Lessons 1 through 15.

THIS EXAMINATION CONSISTS OF 50 ITEMS.

INSTRUCTIONS: Each of the following questions or incomplete statements is followed by a group of lettered responses. Select the one response that best answers the question or best complete the statement. On the answer sheet blacken the space corresponding to the answer of your choice.

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1. Historically, casualties caused by disease non-battle injuries (DNBI) have a serious impact on military operations.
 - a. True.
 - b. False.
2. To what does the term “medical threat” refer?
 - a. Potential enemy actions and environmental situations that could adversely affect the combat effectiveness of friendly forces.
 - b. Any actual condition that can cause injury.
 - c. Real danger.
 - d. A five-step process used in identifying hazards.
3. The term “disease non-battle injuries (DNBI)” refers to?
 - a. A person injured by enemy bullets.
 - b. A person killed in action.
 - c. A person who is not a battle casualty, but who is lost to his organization by reason of disease or injury.
 - d. A person who is lost to his organization by enemy captivity.
4. The forerunner of the Field Sanitation Team was established during _____ when it became apparent that the control of malaria was beyond the capabilities of medical units.
 - a. WW I.
 - b. WW II.
 - c. Korea.
 - d. Vietnam
5. If a unit has no organic or attached medical personnel available to serve as the field sanitation team, which of the following minimum criteria must be used to select members?
 - a. Minimum of two soldiers.
 - b. One member must be a noncommissioned officer (NCO).
 - c. All members will have a minimum of 6 months remaining in the unit.
 - d. All of the above.
6. The four major medical threat consist of the following with the exception of:
 - a. Heat.
 - b. Cold.
 - c. Land mines.
 - d. Diarrheal diseases.

7. Normally a period of _____ is required for heat acclimatization.
- 10 to 14 days.
 - 5 to 7 days.
 - 1 to 5 days.
 - 3 to 5 days.
8. Over the counter medications can impair the body's ability to handle heat stress.
- True.
 - False.
9. Heat stroke results from:
- Not wearing your socks.
 - Drinking too much water.
 - The sun's radiation.
 - When the body's heat balance mechanism collapses.
10. Cold injuries only occur during freezing temperatures.
- True.
 - False.
11. Cold injuries may be divided into freezing and nonfreezing types. A freezing type is:
- Chilblains.
 - Frostbite.
 - Trench foot.
 - Immersion foot.
12. Frostbite can occur when the skin is exposed to an actual temperature of ____ F or below.
- 55°
 - 40°
 - 32°
 - 45°
13. Trench foot results from:
- Prolonged exposure to a wet, cold condition in temperatures usually below 50° F.

- b. Prolonged exposure to a dry, cold condition, or the outright immersion of the feet in water with a temperature usually below 65° F.
- c. Prolonged exposure to a wet, cool condition, or the outright immersion of the feet in water with a temperature usually below 60° F.
- d. None of the above.

14. The temperature is 20 degrees F, and the estimated wind speed is 20 mph. What is the wind-chill factor? Use the wind-chill chart below to determine your answer.

- a. -19 ° F
- b. -25 ° F
- c. -10 ° F
- d. -67 ° F

Table 2-5. Windchill Chart

ESTIMATED WIND SPEED (IN MPH)	ACTUAL TEMPERATURE READING (°F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	EQUIVALENT CHILL TEMPERATURE (°F)											
CALM	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	18	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-121
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(WIND SPEEDS GREATER THAN 40 MPH HAVE LITTLE ADDITIONAL EFFECT.)			LITTLE DANGER IN LESS THAN ONE HOUR WITH DRY SKIN. MAXIMUM DANGER OF FALSE SENSE OF SECURITY.				INCREASING DANGER DANGER FROM FREEZING OF EXPOSED FLESH WITHIN ONE MINUTE.				GREAT DANGER FLESH MAY FREEZE WITHIN 30 SECONDS.	
NOTE: 1. TRENCH FOOT AND IMMERSION FOOT MAY OCCUR AT ANY POINT ON THIS CHART. 2. F = 9/5 C + 32.												

15. Proper disposal of garbage and waste is a critical factor in the control of the filth fly and cockroach.

- a. True.
- b. False.

16. In reference to insect and arthropod repellents, which of the following is a true statement:

- a. Treat military field uniforms, tent liners, and bed nets with permethrin.
- b. Apply DEET insect repellent to all exposed skin, to include eyes and lips.
- c. The application of 5% permethrin can be safely done while wearing the uniform
- d. None of the above.

17. The following statements demonstrate the proper wear of the uniform with the exception of:

- a. Blouse BDU trousers inside your boots.
- b. T-shirt should be worn tucked into your BDU trousers at all times.
- c. Wear a tight fitting uniform.
- d. Wear sleeves down.

For items 18 through 23, match the arthropod in Colum A with its common habitat in Colum B.

COLUM A	COLUM B
18. Lice.	a. Standing water.
19. Mosquitoes.	b. Tall grass.
20. Cockroaches	c. Animal/human waste, garbage.
21. Fleas.	d. Hairy parts part of the body, along with clothing.
22. Ticks and mites.	e. Cracks and crevices that provide warmth; moisture, and food.
23. Flies.	f. Nets and beds of animals.

24. The components of the DOD arthropod repellent system are:

- a. Treatment of uniforms with permethrin, use of DEET on skin, and proper wear of the uniform.
- b. Pesticides, insecticides, and herbicides.
- c. Army, Air Force, and Navy.
- d. Pesticides, medications, and record screening.

25. The 400 gallon water trailer may be rechlorinated if necessary using:

- a. 12 iodine tablets.
- b. 10 bottles of calcium hypochloride.
- c. 5 half-gram spoonfuls of calcium hypochloride with one half canteen cup of water.
- d. Both a and b together.

26. Calcium hypochloride is being used to disinfect the water in your canteen. If a NBC canteen cap is used, how many capfuls will you use?

- a. Use one cap of the solution.
- b. Use three caps of the solution.
- c. Use four caps of the solution.
- d. Use five caps of the solution.

27. When chlorine or iodine is not available, bring water to a rolling boil for _____ minutes for safe water consumption.

- a. 2
- b. 3
- c. 4
- d. 5-10

28. In tactical situations, boiling water for just _____ seconds will kill most harmful organisms.

- a. 5
- b. 15
- c. 20
- d. 30

29. Field latrines must be at least _____ meters or more from food operations.

- a. 75
- b. 100
- c. 110
- d. 150

30. Field latrines must be at least _____ feet or more from a water source.

- a. 100
- b. 25
- c. 40
- d. 50

31. The temperature range for the temperature danger zone is from 41° to 139 ° F.

- a. True.
- b. False.

32. When hot food is brought to your unit in field-insulated containers, the temperature of the food should be at least:

- a. 125 ° F.
- b. 130 ° F.
- c. 135 ° F.
- d. 140 ° F.

For items 33 through 40, match the disease in Column A with the insect that carry the diseases in Column B. You might not use all the insects listed. In addition, some insects may be used more than once.

COLUMN A

COLUMN B

- | | |
|----------------------|-------------------------------|
| 33. Malaria. | a. Sand fly. |
| 34. Yellow fever. | b. Tick. |
| 35. Dengue fever. | c. <u>Culex</u> mosquito. |
| 36. Encephalitis. | d. Housefly. |
| 37. Sand fly fever. | e. <u>Anopheles</u> mosquito. |
| 38. Leishmaniasis. | f. Body louse. |
| 39. Epidemic typhus. | g. <u>Aedes</u> mosquito. |
| 40. Bubonic plague. | h. Rodent flea. |

41. Under ordinary field conditions the chlorine residual required is _____ at the point of production and distribution and at least _____ at the point of consumption.

- a. 10 ppm, 5 ppm.
- b. 5 ppm, 3 ppm .
- c. 2 ppm, 1 ppm.
- d. None of the above.

42. If the chlorine residual is less than the desired level in a 5-gallon water jug, you will add 1 half-gram spoonful of calcium hypochloride to a half canteen cup of water and stir the slurry solution. How much must be added to raise the residual to the required level for a safe consumption?

- a. ½ of the solution.
- b. 2/3 of the solution.
- c. The entire solution.

d. None of the above.

43. Pail latrines should be used when?

- a. Chemical toilets are not available.
- b. The water table is too close to the surface of the ground.
- c. All of the above.
- d. None of the above.

44. For a short bivouac which of the following latrines will not be used?

- a. Cat hole.
- b. Chemical toilets.
- c. Straddle trench.
- d. All the above.

45. Food-borne disease outbreaks can be attributed to which of the following:

- a. Failing to keep a safe product temperature.
- b. Not protecting foods from contamination.
- c. Improper procedures and practices of food handlers.
- d. All the above.

46. The contact time required for satisfactory disinfection of 400-gallon water trailer while using chlorine is:

- a. 5 minutes.
- b. 10 minutes.
- c. 20 minutes.
- d. 30 minutes.

47. When checking the food temperature before serving, the temperature must be _____ or above for hot foods and _____ or below for cold foods.

- a. 140 ° F / 40 ° F.
- b. 130 ° F / 45 ° F.
- c. 120 ° F / 50 ° F.
- d. 110 ° F / 40 ° F.

48. How many iodine tablets are needed to disinfect a one-quart canteen?

- a. Two iodine tablets.
- b. Three iodine tablets.
- c. Four iodine tablets.
- d. Six iodine tablets.

49. When soldiers are wearing MOPP gear, how many degrees should you add to the WBGT index to prevent heat injuries?

- a. 5.
- b. 10.
- c. 30.
- d. 40.

50. You are checking rodent traps in a company area. In one of the traps you find a dead rodent with a slender body, pointed nose, and large eyes and ears. Its tail is longer than its head and body length combined. What should you identify this rodent as?

- a. House mouse.
- b. Norway rat.
- c. Roof rat.
- d. Field mouse.