

# ACES/CEVOL 2017 Basic Course Examination

This is 13-page, 51-question open book examination designed to test your knowledge of the questions and/or your ability to find answers in your ACES Basic Certification Student Workbook. This is not an easy test.

When you have selected the correct answers, please return the test to [david@cevol.org](mailto:david@cevol.org) for grading. Please return a list of question numbers and your correct answers for grading. Or give Bob N6TCE or David N5FDL your marked hard copy test in person. Whatever works best for you. We are pleased to make accommodations for anyone needing them.

Scores of 80 percent or more get a certificate. Under 80 percent gets counseling from Bob N6TCE to get you to a passing score.

Questions? [david@cevol.org](mailto:david@cevol.org)

1. Why are repeaters used for local emergency communications?
  - A. For better audio fidelity
  - B. Duplex mode provides stereo audio
  - C. Extended range
  - D. The FCC requires the use of a repeater on VHF frequencies
  
2. When should you use your legal FCC-issued callsign?
  - A. At the beginning of each transmission
  - B. Every 10 minutes and at the end of each transmission
  - C. Every 10 minutes and at the end of each communication
  - D. Never, always use your tactical callsign

3. How should you speak when transmitting a message during an emergency?

- A. Quickly, using abbreviations to save time
- B. Slowly, using a calm voice and plain language
- C. Slowly, using a loud voice for full modulation
- D. Yelling into the mic to achieve maximum drive

4. Which of the following should not be counted in a radiogram check?

- A. Punctuation
- B. Single-letter words, such as 'a' or 'I'
- C. Words in the signature
- D. The “ARL” prefix to a numbered text

5. What is book traffic?

- A. Canned, low-priority bulk messages
- B. Traffic concerning sensitive financial data
- C. Messages printed and bound for archival
- D. Messages with multiple recipients

6. What does the term “Roger” mean?

- A. “Message received”
- B. 10-4
- C. “Yes” or “Correct”
- D. “Send the next message”

7. Formal messages might be used when:
- A. The message is very short
  - B. The message is non-critical
  - C. A record of the message might be needed
  - D. The message contains amateur callsigns
8. List three methods of activation commonly used for response teams:
- A. Phone Tree, Paging, USPS
  - B. Text Alert, Reverse 911, Offset
  - C. Paging, LiTZ, Phone Tree
  - D. CTCSS, USPS, Long Tone Zero
9. What is an advantage of using a Phone Tree for alerting personnel:
- A. Only requires one person to alert everyone
  - B. All telephones operate when the power is out
  - C. Simple to implement and use
  - D. Does not require infrastructure to be intact
10. Upon notice of activation, what should your first step be?:
- A. Immediately initiate contact via radio
  - B. Immediately make sure your family is secure
  - C. Charge the batteries for your hand-held radio
  - D. Make a list of needed medicines

11. Identify a disadvantage of using a local voice net as a form of alerting emergency personnel:

A. It is a slow method since alerted members then have to call other members to alert them

B. One transmission alerts the entire team

C. Requires everyone to monitor the frequency

D. Can be used with almost any type of radio

12. What does PPE stand for?

A. Private Phone Emergency

B. Personal Protective Equipment

C. Personal Phone Equipment

D. Private Personal Equipment

13. Which of the following are positive goals to keep in mind with regard to disaster psychology?

A. Take adequate breaks

B. Maintain proper hydration and nutrition

C. Take advantage of support services

D. All of the above

14. Which of the following is a type of net?

A. Relay Net

B. Tactical Net

C. Logging Net

D. Preamble Net

15. Which of the following is not a responsibility of the NCS?
- A. Coordinating communications between stations
  - B. Resolving disputes
  - C. Logging
  - D. Tracking who is on frequency
16. How should a net participant station offer to relay a weak station?
- A. Speak to the weak station on reverse
  - B. Say “break, I will relay you, go ahead”
  - C. Ask the station to speak louder
  - D. Say “relay” and wait for the NCS to acknowledge you
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18. Which type of net generally does not have a net control station?
- A. Tactical Net
  - B. Public Information Net
  - C. Directed Net
  - D. Open Net

19. At what point should you secure your station and leave?
- A. When you are tired and want to go home
  - B. When you hear the EOC staff discussing items unrelated to the response
  - C. After securing permission from net control and EOC staff
  - D. After you have been working for 8 hours
20. If you are having difficulty hearing radio traffic in a noisy EOC, what should you do?
- A. Turn the radio speaker volume to the loudest position
  - B. Demand everyone in the room to be quiet
  - C. Use a headset or move to a quieter location, if possible
  - D. Leave the EOC and go home
21. If you are asked to transmit nuclear missile launch codes over a 2-meter repeater, what might you suggest?
- A. Using a foreign accent to obscure the codes
  - B. Use an encryption protocol over packet radio
  - C. Use another means of transmitting the message
  - D. Reading the codes twice, to be sure they are received correctly
22. If you are asked to transmit the condition, symptoms, and name of a hospital patient over the radio, what rules might you need to be aware of?
- A. The FCC rules part 97
  - B. The HIPAA requirements
  - C. The quality of your FM transmitter's audio
  - D. How to pronounce the medical terms

22. If someone asks you to send a message you find confusing, what should you do?
- A. Alter the message so that it is easier to understand
  - B. Only change punctuation and capitalization
  - C. Advise the sender that the message may need revision
  - D. Transmit the message as-is, no questions asked
24. What is an example of a governmental served agency?
- A. Internal Revenue Service
  - B. American Red Cross
  - C. State of Oregon
  - D. REACT
25. What is an example of a non-governmental served agency?
- A. City of Hillsboro
  - B. American Red Cross
  - C. State of Oregon
  - D. MARS
25. Which amateur emergency service is sponsored by the ARRL?
- A. MARS
  - B. ARES
  - C. RACES
  - D. American Red Cross

26. Which volunteer emergency service primarily uses CB, MURS, and FRS radios?
- A. REACT
  - B. ARES
  - C. RACES
  - D. MARS
27. What overarching group structure is used by California and other municipalities to manage communications resources?
- A. ARES
  - B. ACS
  - C. ASMB
  - D. RACES
28. What is one limitation of a handheld radio:
- A. It is too small to produce good audio
  - B. It has limited power output
  - C. It cannot operate on the popular 6-meter band
  - D. It cannot utilize an external antenna
29. What is one benefit of a base station radio?
- A. It can be easily moved to a different station
  - B. It has very low idle power requirements
  - C. It uses heavy gauge wire
  - D. It often has a good antenna

30. If you are adding another transceiver to an existing station already using 2-meters, what might you do to reduce interference?
- A. Use shielded coax
  - B. Use a different band, like 70-cm
  - C. Use a different mode, such as AM or SSB
  - D. Turn your antenna 90 degrees to give it a different polarization to the other one
31. Which of the following type of rechargeable battery is commonly used by amateur radio operators?
- A. Dry cell
  - B. CiA BiMetal
  - C. Gallium Sulfate
  - D. NiMH
32. Which of the following battery chemistries tolerates “float charging?”
- A. NiCd
  - B. NiMH
  - C. Lead acid
  - D. LiPo
33. Which antenna might you choose for operation in a windy field?
- A. Ground plane on a tripod
  - B. Wire J-pole hung from a tree
  - C. Magnet mount on a rock
  - D. Yagi on a telescopic mast

35. Which of the following items belong in a 72-hour extended deployment kit?
- A. Water
  - B. Medical supplies
  - C. Light source
  - D. All of the above
35. Which of the following probably should not be a permanent part of a 24-hour kit?
- A. Handheld radio
  - B. Extra batteries
  - C. Generator
  - D. External antenna
37. What is your first concern when activated during an emergency?
- A. Checking your go-kit for readiness
  - B. Feeding the dog
  - C. Charging your batteries
  - D. Ensuring that your family is safe
39. Which of the following is probably not a part of a family disaster plan?
- A. Establishment of a distant relative or friend to serve as a rendezvous contact
  - B. Prearrangements with coworkers to cover for you at work
  - C. A plan for communicating with local and distant family or friends
  - D. Supplies necessary for you and your family to camp out for several days

40. List the command staff positions in an ICS structure:

- A. IC, Comm Leader, Public Information, Safety Officer, Liaison Officer
- B. IC, Public Information Officer, Safety Liaison, Operations, Planning
- C. IC, Public Information Officer, Liaison Officer, Safety Officer
- D. Planning Chief, Logistics Chief, Finance Chief, Operations Chief

41. In ICS, the Chain of Command refers to:

- A. A management concept that insures each staff member only has one superior to answer
- B. A method by which ICS-213 message forms are hand carried between units
- C. An orderly line of authority within the ranks
- D. A chain worn by the Incident Commander to indicate who is in charge of the incident

43. Unity of Command may be defined as:

- A. An orderly line of authority within the ranks
- B. Officers from all involved jurisdictions meeting in an area to establish command
- C. Each individual answers to only one supervisor
- D. A common goal and objectives shared by area commanders

44. An Amateur Radio Operator specifically assigned to one member of the incident command team for the purpose of relaying information could be considered what resource function?

- A. Communications Resource Function - Digital
- B. Communications Resource Function - HF
- C. Communications Resource Function - Shadow
- D. Communications Resource Function – Base

45. Commercial communicators generally:

- A. Never use two-way radios
- B. Do not provide their own equipment
- C. Are licensed individually
- D. Troubleshoot and maintain their own equipment

46. Casual communications do not deal with:

- A. What you are going to make for dinner
- B. Traffic on the highway
- C. Life and death matters
- A. Antenna performance

47. Your local agency expects you to:

- A. Be a trained communications resource
- B. Be prepared and equipped to provide communications
- C. Help solve communications problems
- D. All of the above

48. Which of the following best describes amateur communications as opposed to commercial communications?

- A. Amateur communicators have the ability to program their own radio
- B. Amateurs typically provide and maintain their own equipment
- C. Amateurs are licensed individually
- D. All of the above

49. Which of the following best describes your role as an emergency communications volunteer?

- A. To make strategic decisions on behalf of your served agency
- B. To be a trained communications resource
- C. To provide the media reports of incident status
- D. To help interpret messages received over the radio

50. You have a 5-watt hand held radio. It can be safely operated from a automobiles auxiliary plug?

- A. True
- B. False

51. You have a 100 Watt Mobile HF Radio and it will be 10 feet from the 12 Volt Power Source. You can use:

- A. 18AWG wire and a 30-amp fuse
- B. 16 AWG wire and a 50-amp fuse
- C. 12 AWG wire and a 30-amp fuse
- D. 10 AWG wire and a 30-amp fuse