1-5. Match the word or phrase with the meaning. Put the letter on the left next to the chemical property or definition on the right.

<table>
<thead>
<tr>
<th>A. Boiling Point</th>
<th>D. Weight of a liquid compared with an equal volume of water</th>
</tr>
</thead>
<tbody>
<tr>
<td>B. pH</td>
<td>C. Used to describe the flammability of a liquid</td>
</tr>
<tr>
<td>C. Flash Point</td>
<td>B. Tells you how corrosive a material is</td>
</tr>
<tr>
<td>D. Specific Gravity</td>
<td></td>
</tr>
<tr>
<td>E. Vapor Pressure</td>
<td>E. Tendency for a solid or liquid to evaporate into the air</td>
</tr>
</tbody>
</table>

_C__ 6. The only agency that sets legally enforceable chemical exposure limits is:

A. American Conference of Governmental Industrial Hygienists
B. National Institute for Occupational Safety and Health
C. Occupational Safety and Health Administration
D. None of the above is correct.

_B__ 7. Which of the following statements about a self-contained breathing apparatus (SCBA) is correct?

A. SCBAs are not commonly used in emergency response.
B. The bottle/air pack is equipped with an alarm to warn the user when the air is getting low.
C. Special training is not required for wearing an SCBA.
D. All of the above are correct.
_A__ 8. Level C protection is required when:
   A. An air purifying respirator can be used
   B. The contaminants are unknown
   C. The highest level of skin protection is required
   D. None of the above is correct.

_B__ 9. You can prevent contamination during decontamination procedures by doing all of the following except:
   A. Minimize contact with the hazardous material
   B. Walking through pools of the hazardous material
   C. Wearing disposable outer garments
   D. Using remote sampling techniques

_A__ 10. When sizing up the scene of a hazardous materials emergency, the emergency responder should gather the following information:
   A. All of the following
   B. Source and size of the spill or release
   C. Characteristics of the scene
   D. Potential hazards of the hazardous material

_D__ 11. OSHA requires that an Emergency Response Plan includes which of the following:
   A. Emergency recognition and prevention
   B. Evacuation routes and procedures
   C. Decontamination procedures
   D. All of the above must be included.

_D__ 12. A hazardous material is any substance that can cause damage to:
   A. People
   B. Property
   C. Environment
   D. All of the above

_A__ 13. A flammable liquid is an example of what type of hazard?
   A. Chemical
   B. Biological
   C. Physical
   D. None of the above
_A__14. Under the HAZWOPER standard, a worker who is responsible only for recognizing a hazardous material emergency and reporting it to the appropriate authority must be trained to the:
   A. Awareness Level
   B. Operations Level
   C. Technician Level
   D. Specialist Level

_B__15. Of the following, which is the correct action when monitoring at the scene of a hazardous materials emergency?
   A. Enter downwind from the release to reduce exposure.
   B. Begin monitoring at a distance where no contaminant is expected.
   C. Monitor for flammables first and then oxygen.
   D. If the readings change dramatically, hold your ground and collect more data.

_D__16. Level A protection is required when:
   A. There is no potential for splash
   B. Skin absorption is not a concern
   C. Minimal protection is required
   D. Skin absorption may likely result in serious harm

A__17. The area that is free of contamination is called the:
   A. Cold Zone
   B. Warm Zone
   C. Hot Zone
   D. Exclusionary Zone

_B__18. As an emergency responder trained at the operations level you are able to perform all of the following tasks wearing the correct CPC and respirator except:
   A. Put absorbing material ahead of the flow of a spill
   B. Plug and patch a leaking drum or pipe
   C. Build a dike to keep the chemical spill from spreading
   D. Participate in the decontamination of CPC and respirators of other responders

_C__19. During an emergency response, the Command Post is set up in the:
   A. Contamination Reduction Zone
   B. Warm Zone
   C. Cold Zone
   D. Hot Zone
20. Under the Occupational Safety and Health Act (OSHA), a worker has the right to:
   A. All of the following actions/information
   B. Request an OSHA inspection of the workplace
   C. Give information to or speak with an OSHA inspector
   D. Know if a citation has been issued

21. In the NFPA 704 labeling system, a W indicates that the material:
   A. Is flammable
   B. Is explosive
   C. Reacts with water
   D. Is a biological hazard

22. Which of the following statements is correct regarding fit tests for respirator use?
   A. Fit tests must be provided at least once every two years.
   B. A beard can affect the seal between the respirator and the worker’s face.
   C. If the worker has had dental work or a facial injury, a new fit test is not required.
   D. All of the above

23. If emergency responders are wearing level A to enter the Hot Zone, the decontamination line workers should wear which level of protection?
   A. Level D
   B. Level C
   C. Level B
   D. Level A

24. Which of the following statements about decontamination of tools and equipment is correct?
   A. Rubber components of SCBAs may be scrubbed with an appropriate decon solution to remove contaminants.
   B. Wooden tools are easy to decontaminate.
   C. If monitoring equipment becomes contaminated, it will require special decon procedures.
   D. Both A and C are correct.

25. While inspecting unknown drums for hazards, which of the following activities should be performed?
   A. do all of the following
   B. look for labels and radiation symbols
   C. Position yourself to maximize ventilation sources
   D. Look for evidence of leaks or spills
26. Indicate which of the following statements are correct regarding wearing Chemical Protective Clothing (CPC):
   A. CPC provides excellent fire protection.
   B. Tape where sleeves and gloves come together in Levels B or C.
   C. Most materials do not breathe so open a zipper if you get too hot.
   D. Both B and C are correct.

27. – 29. Use your 2016 ERG book or app to answer the following three questions:

   You are called to respond to a leaking tote on the dock. The metal, 400 gallon tote has the placard shown here:

   ![Placard Image]

   27. The chemical is:
      A. Methyl Ethyl Ketone
      B. Ammonia
      C. Ethyl Benzene
      D. Ethyl Acetate

   28. When the Fire Chief arrives, he/she directs you to isolate the area as an immediate precautionary measure how many feet in all directions?
      A. 150
      B. 1,000
      C. 2,500
      D. 5,000

   29. The greatest hazard to response personnel using incorrect PPE from this chemical is:
      A. pH/corrosivity
      B. Toxic gas emitted because of reactivity with concrete floor
      C. Flammability
      D. It sinks in water and can permeate boots
_B__30. If you see a skull and crossbones on a label that meets the new OSHA labeling standard, the material is:
   A. Explosive
   B. Fatal or toxic
   C. Oxidizer
   D. Gas under pressure

_B__31. A hazardous material emergency is a spill or release that:
   A. Involves any product, regardless of the hazard
   B. Cannot be controlled without outside help
   C. Is larger than 10 gallons
   D. Can be controlled by employees in the immediate area

_D__32. Air monitoring must be conducted at a hazardous materials emergency in order to:
   A. Detect whether potential hazardous conditions exist
   B. Measure the concentration of hazardous materials
   C. Assist in planning response actions
   D. All of the above are correct

_A__33. Which of the following statements about Supplied Air Respirators (SAR) is correct for a HazMat response?
   A. When using an SAR, you must also wear an escape bottle.
   B. You are allowed to wear a beard with full facepiece.
   C. A certified escape bottle has 10 minutes of air.
   D. Compressor air intakes to the SAR can be located anywhere.

_A__34. The area where inner gloves are removed by responders is called the:
   A. Cold Zone
   B. Warm Zone
   C. Hot Zone
   D. Support Zone
D__35. One of the following statements is not part of a correct permit-required confined space SOP:
   A. The confined space should be monitored before entering it.
   B. Enter the confined space only after a permit containing information on hazards has been signed by the responsible party.
   C. The confined space must be monitored during work to detect any changes in air quality.
   D. Individual radios carried by workers into the confined space may substitute for a safety attendant posted outside.

B__36. Under the ICS, the person most likely to monitor the condition of the entry team is the:
   A. Incident Commander
   B. Safety Officer
   C. Liaison Officer
   D. Planning Officer

C__37. Radiation is an example of what type of hazard?
   A. Chemical
   B. Biological
   C. Physical
   D. None of the above

C__38. Under OSHA, a worker is responsible for:
   A. Selecting personal protective equipment
   B. Reporting injuries to an OSHA inspector
   C. Following the employer’s safety rules
   D. Paying all safety fines issued by OSHA

B__39. An infectious hospital waste is an example of what type of hazard?
   A. Chemical
   B. Biological
   C. Physical
   D. None of the above is correct.

D__40. Which of the following procedures is required for fire prevention?
   A. Use non-sparking tools.
   B. Observe no smoking rules.
   C. Ensure fire suppression equipment is available.
   D. All of the above are correct.
_D_ 41. Which of the following statements about air purifying respirators (APRs) is correct?
   A. APRs consist of a face piece, an exhalation valve, and one or more filtering units
   B. They work by filtering the air before it enters the body.
   C. Chemical filters must be selected for the exposures expected.
   D. All of the above are correct.

_A_ 42. When inspecting CPC, you should check for:
   A. All of the following.
   B. Cuts or holes in the seams of the fabric.
   C. Weakness in zipper or valve seals.
   D. Signs of contamination.

_A_ 43. The physical removal of contaminants may include the following:
   A. Scraping, brushing or washing the PPE
   B. Using a chemical to remove the contaminant
   C. Disinfecting the PPE
   D. All of the above

_B_ 44. When you perform lockout of energized equipment, all of the following are required
   except:
   A. Each person who works on the equipment must install his/her own lock
   B. Anyone can remove any lock once the lockout procedure is completed.
   C. The lockout procedure must be reviewed and updated annually.
   D. The equipment can be re-energized only after all locks have been removed.

_D_ 45. During an emergency response, the immediate area where the release has occurred
   is the:
   A. Cold Zone
   B. Warm Zone
   C. Contamination Reduction Zone
   D. Hot Zone

_B_ 46. Under HAZWOPER, a worker who responds to a hazardous material emergency
   and performs basic containment and confinement actions must be trained to the:
   A. Awareness Level
   B. Operations Level
   C. Specialist Level
   D. Technician Level

_D_ 47. What options/activities could help reduce exposures to hazardous materials?
   A. Wear the appropriate personal protective equipment.
   B. Substitute a less hazardous material.
   C. Use local exhaust ventilation.
   D. All of the above could reduce exposure.
_C__48.Level B protection is required when:
   A. The highest level of skin protection is necessary.
   B. An air purifying respirator can be used.
   C. The highest level of respiratory protection is required.
   D. All of the above are correct.

_C__49.A semi-tank trailer with a small circular diameter and reinforcing exterior rings (shown below) is likely carrying:

A. Flammable Liquid
B. Water
C. Acid or Caustic
D. Explosive

_A__50. The federal agency responsible for protecting the health and safety of workers on the job is the:
   A. Occupational Safety and Health Administration
   B. Department of Transportation
   C. Environmental Protection Agency
   D. Department of Energy