

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Quiz for Module 3: Aseptic Technique

This section must be completed by all researchers whose procedures have the potential to cause infection in their animals.

- \_\_\_\_\_ 1. Suitable cold sterilization of re-usable, stainless steel needles for injecting PIT Tags can be accomplished by cleaning in alcohol and leaving it for 1 hour in tincture of iodine
  - a. True
  - a. False
  
- \_\_\_\_\_ 2. Surgical implantation of cannulae that are rinsed or dipped in disinfectants or antiseptics rather than properly sterilized by autoclave or gas can cause problems including overt infection, subclinical illness, and or collection of unreliable or compromised data
  - a. True
  - b. False
  
- \_\_\_\_\_ 3. Sterilization refers to the complete destruction of all forms of microbial life by chemical or physical processes. Very few chemical agents are able to achieve true sterilization of a surface or object
  - a. True
  - b. False
  
- \_\_\_\_\_ 4. Antiseptics are mild enough that they can, when properly used, be applied to living tissue
  - a. True
  - b. False
  
- \_\_\_\_\_ 5. Hydrogen peroxide is an excellent antiseptic which is obvious when you see the bubbles form after applying it to the wound.
  - a. True
  - b. False
  
- \_\_\_\_\_ 6. Quaternary ammonium compounds are common ingredients in commercially available disinfectants used in animal facilities for cleaning floors, wall, counter tops, etc.
  - a. True
  - b. False
  
- \_\_\_\_\_ 7. Placement of an indwelling venous catheter may or may not require general anesthesia (depends upon the animal and protocol) but it must be placed following the principles of asepsis
  - a. True
  - b. False

- \_\_\_\_\_ 8. Chlorhexidine (Nolvasan) solution is an effective disinfectant (germicide) when recommended dilutions are used. IT will therefore be more potent and effective if used undiluted
- True
  - False
- \_\_\_\_\_ 9. People are often confused about the need for aseptic technique. Many believe it is only needed to protect animals from serious pathogens that can cause serious wound infections or illness to the animal. However, the real concern is accidental inoculation of the wound with common environmental organisms, or the unwanted transfer of agents between animals, some of which may be so benign that overt clinical problems are not seen but research results are affected. Which of the following organisms are examples of what we should be worried about?
- Pseudomonas and Proteus
  - Streptococcus and Staphylococcus
  - E Coli
  - Some blood borne infections such as hepatitis B
  - Fungi like Aspergillus spp.
  - All of the above
- \_\_\_\_\_ 10. Sterilization of items using steam under pressure
- Requires the use of an autoclave or, if used carefully, a pressure cooker
  - Is a safe effective, and relatively inexpensive way of sterilizing surgical instruments
  - Requires 15 minutes of exposure to 250F and 15 lbs/square inch to be effective
  - All of the above
- \_\_\_\_\_ 11. Although full aseptic technique is the preferred approach for inoculations, catheter placement, and surgical procedures, it is not always practical in a field research setting. Which of the following procedures can be dropped from a field study?
- Use of sterile surgical gloves
  - Use of pre-sterilized needles, syringes, or catheters
  - Use of appropriate analgesics
  - All of the above
  - None of the above
- \_\_\_\_\_ 12. For recovery surgery, all surfaces in the surgery room or surgery area must be cleaned and disinfected prior to starting. Which of the following statements are true?
- This is necessary only for dedicated surgery rooms, not for rodent or bird surgery in the lab
  - Ideal disinfectants for the room and surfaces might include quaternary ammonium compounds
  - 70% alcohol is an excellent degreaser, but if used by itself is insufficient for proper disinfection of a surgery area
  - All of the above
  - B and C only

- \_\_\_\_\_ 13. To properly cold sterilize instruments or implants you must
- Use a glutaraldehyde based product
  - Ensure a minimum of 10 hours contact time
  - Ensure that instruments are clean and that there is no organic material present prior to immersing in the sterilant
  - Completely rinse instruments in sterile water or saline before use
  - All of the above
  - B and C only
- \_\_\_\_\_ 14. Preparation of a surgical site or implant site on fish and amphibians should
- Always be conducted like mammals and birds using three washes of iodine soap, alcohol rinse, and straying or painting with full strength providone iodine
  - Be ignored because fish and amphibians do not get infections
  - Take into consideration the type of skin on your subject such that you minimize the chance of infection and damage to the skin and protective mucous layers
  - None of the above
- \_\_\_\_\_ 15. Gas sterilization (using ethylene oxide) is an effective method of sterilizing materials that might be damaged in an autoclave. Which is true about ethylene oxide
- It is a carcinogen and must be used only in appropriate equipment
  - After sterilization, the packs must be allowed to air out before use
  - It can be used to sterilize metal items like dremel tools
  - All of the above