

Chapter 6
Control of Microorganisms

1. Which of the following are accepted methods for sterilization?
(A) Autoclaving
(B) X-rays
(C) Gamma rays
(D) UV rays

2. Which of the following statements about control of microbial growth are CORRECT?
(A) Nonionizing radiation leads to thymine dimers formation in DNA
(B) Spirochetes and mycoplasma can pass through membrane filters (0.22–0.45 μm)
(C) Use of high concentration of salts and sugars to preserve food is a chemical method of microbial control
(D) Thermophilic bacteria can survive pasteurization

3. Which of the following can be sterilized in an autoclave?
(A) Gloves
(B) Plastics
(C) Culture media
(D) Dressing material

4. The antimicrobial activity of phenolics are reduced at which of the following conditions?
(A) acidic pH
(B) alkaline pH
(C) low temperatures
(D) presence of soap

5. Which of the following agents cause death to the cell by coagulation of cytoplasmic proteins?
(A) Alcohols
(B) Mercury
(C) Silver
(D) Chlorine

6. Which of the following are acridine dyes?
(A) Crystal violet
(B) Tryptoflavine
(C) Malachite green
(D) Quinacrine mustard

7. Which of the following are related to Beta-propiolactone chemical agent?
(A) Sterilizing instruments
(B) Heat sensitive
(C) Good penetration
(D) Tissue grafting

8. Which of the following actions are affected by antimicrobial agents?

- (A) Cell wall synthesis
 - (B) Nucleic acid synthesis
 - (C) Protein synthesis
 - (D) Capsule formation
9. Which of the following agent are used to disinfect skin?
- (A) Quaternaries
 - (B) Chlorhexidine
 - (C) Cetrimide
 - (D) Ethylene oxide
10. Mark the CORRECT match.
- (A) Luria broth – membrane filtration
 - (B) Ampicillin – 70% alcohol treatment
 - (C) 1% glucose in phosphate buffer – autoclaving at 15 psi for 15min
 - (D) Plastic syringe – γ -ray irradiation

Answer

- 1. (A), (B), (C)
- 2. (A), (B), (D)
- 3. (A), (C), (D)
- 4. (B), (C), (D)
- 5. (B), (C)
- 6. (B), (D)
- 7. (A), (B), (D)
- 8. (A), (B), (C)
- 9. (A), (B), (C)
- 10. (B), (C), (D)