Hygiene and Infection Control Quiz I

1. Which of the following are reasons for the decline of an aging body to fight infections?
   a. Weakened skin facilitates entry of micro-organisms into soft tissue and blood stream
   b. Diminished lung capacity and reduced cough reflex
   c. Protective mucosa lining of the stomach becomes weakened
   d. Poor nutritional intake compromises the immune system
   e. All of these are reasons for the reduced resistance to infections

2. What percent of older people admitted to hospital are malnourished?
   a. 10 to 20 percent
   b. 20 to 30 percent
   c. 30 to 40 percent
   d. 40 to 60 percent
   e. 60 to 80 percent

3. Which of the following are general factors that can increase the risk of infection in older people in community and hospital settings?
   a. Undergoing surgery or invasive procedures
   b. Presence of invasive, indwelling devices
   c. Underlying illness or disease
   d. Exposure to colonized and infected patients
   e. All of these are general risk factors

4. Which of the following are general factors that can increase the risk of infection in older people in community and hospital settings?
   a. Patient movement between wards and care facilities
   b. High bed occupancy rates
   c. Poor staff to patient ratios
   d. Inadequate cleaning supplies or equipment
   e. Lack of adequate resources for decontamination
   f. ALL of these are general risk factors
5. Which of the following statements is true about Group A beta-hemolytic streptococcus (Streptococcus pyogenes)?
   a. Normal inhabitant of the upper respiratory tract
   b. Commonest bacterial cause of throat infections
   c. Can cause invasive skin / soft tissue infections
   d. Can cause bloodstream infections
   e. All of these statements are true

6. In which of the following ways can microorganisms leave the reservoir?
   a. Secreted via the skin
   b. Secreted via mucous membranes
   c. Respiratory tract secretions and droplets
   d. Blood and body fluids
   e. Hands of healthcare staff
   f. All of these are correct

7. Which mode of infection transmission is due to microorganisms being transferred to other patients from contaminated equipment and via the hands of healthcare staff?
   a. Direct / indirect contact
   b. Airborne
   c. Ingestion
   d. Inoculation

8. Pathogens expelled from the respiratory tract through coughing and sneezing are an example of what mode of infection transmission?
   a. Direct / indirect contact
   b. Droplets
   c. Ingestion
   d. Inoculation

9. What mode of infection transmission is due to contaminated hands being moved to the mouth?
   a. Direct / indirect contact
   b. Airborne
   c. Ingestion
   d. Inoculation
10. Which mode of infection transmission is due to splashes of blood/body fluids into the mucosa or the contamination of non-intact skin with infected blood/body fluids?

   a. Direct / indirect contact  
   b. Airborne  
   c. Ingestion  
   d. Inoculation

11. Which of the following are basic standard precautions for infection control?

   a. Hand hygiene  
   b. Personal protective equipment and clothing  
   c. Safe handling of sharps  
   d. Management of spillages (blood/body fluids)  
   e. All of these are basic standard precautions

12. Which one of the following is considered the MOST important intervention in infection control?

   a. Hand hygiene of healthcare staff  
   b. Personal protective clothing  
   c. Safe use and disposal of sharps  
   d. Prevention of infections associated with catheters

13. The advantages of alcohol hand rubs for hand hygiene and infection control are: (Check all that apply).

   a. Easier on the skin than soap and water  
   b. Rapid hand decontamination between patients  
   c. Portable – can be taken to point of care  
   d. Works well with non-intact skin

14. What is the purpose of wearing gloves and gowns? (Check all that apply).

   a. Protect the healthcare worker  
   b. Prevent transmission of pathogens  
   c. Reduces hand washing requirements  
   d. Looks professional and identifies healthcare staff
15. Nurses must wear gloves when: (Check all that apply).

   a. Handling sharp or contaminated instruments
   b. Risk of exposure to blood or body fluids
   c. Making beds
   d. Assisting with patient mobility
   e. Recording vital signs

16. What infection control precautions must be in place when patients are source isolated or cohort nursed?

   a. Hand washing facilities must be available with the room
   b. Alcohol hand rub must be available at the point of care
   c. Gloves and gowns must be available at the entrance
   d. Containers must be available for disposal of clinical and domestic waste
   e. Dedicated toilet facilities or commodes must be available
   f. All of these must be in place for effective infection control

17. Use of proton-pump inhibitors such as omeprazole has been implicated as a possible contributing factor in cases of infection.

   True    False

18. Hand washing is NOT necessary when a nurse wears gloves.

   True    False

19. Gloves must be put on immediately before contact / treatment, and removed and disposed of immediately afterwards.

   True    False

20. Gloves can be reused after they are washed in warm soap and water.

   True    False

21. Gowns should be worn with patients that perspire excessively to prevent contamination and infection transmission.

   True    False
22. Gowns must be put on immediately before contact / treatment, and removed and disposed of immediately afterwards.

True    False

23. Gowns must be changed in between patients.

True    False

24. Infections show the same signs and symptoms in older people as with younger patients.

True    False

25. There is no relationship between length of hospital stay and risk of infection.

True    False

26. Steroids – used for treatment of asthma or rheumatoid arthritis – alter the immune system.

True    False

27. “Pilli” enable bacterial cells to move towards a source of nutrients or to evade the host’s immune response.

True    False

28. Endogenous infections are infections arising from the patient’s own resident bacteria.

True    False

29. Outbreaks of viral gastroenteritis, such as Norovirus infections, in which older people are severely affected, are difficult to control because the virus can survive in the environment for up to 12 days.

True    False
30. Few bacteria produce toxins.
   True  False

31. Bacteria may possess capsules which help protect the organism from defensive actions of the immune system, and from the effects of certain antibiotics.
   True  False

32. “Virulence” refers to an organism’s ability to cause infection.
   True  False

33. All bacteria cause serious infections.
   True  False

34. The use of indwelling urethral catheter to manage urinary incontinence or to monitor urinary output reduces the risks of infection.
   True  False

35. Healthcare-associated infections are defined as infections caused by any infectious agent acquired as a result of a person’s treatment or intervention within a healthcare setting.
   True  False
Answer Key to Hygiene Quiz I

Q01  e
Q02  d
Q03  e
Q04  f
Q05  e
Q06  f
Q07  a
Q08  b
Q09  c
Q10  d
Q11  e
Q12  a
Q13  a b c  Alcohol rubs are astringent and can sting if they come into contact with skin that has minor cuts or abrasions.
Q14  a b  Gloves and gowns protect the nurse and reduce transmission of microorganisms.
Q15  a b  Wearing gloves is NOT recommended for routine nursing activities.
Q16  f
Q17  T  Especially with Clostridium difficile.
Q18  F  Failure to wash or decontaminate hands following removal of gloves spreads microorganisms to other patients and equipment.
Q19  T
Q20  F  Gloves are classified as medical devices and MUST NOT be reused.
Q21  F  Sweat is not likely contaminated with pathogenic microorganisms.
Q22  T
Q23  T  Gowns must be changed to prevent transmission of microorganisms from one patient / environment to another.
Q24  F  Infections can be difficult to identify in older people because the normal clinical manifestations may be absent due to a weakened
immune response and instead present with relatively non-specific complaints such as lack of appetite, confusion and malaise.

Q25  F  The longer a patient stays in hospital, the greater the risk he / she will be exposed to infected patients that may result in healthcare associated infection.

Q26  T

Q27  F  Pilli (fimbria) enable bacterial cells to adhere to host cells; flagella (tails) enable the bacterial cells to move.

Q28  T  These are transferred on the patient’s hands from one body site to another.

Q29  T  Therefore contact with frequently touched surfaces such as door handles, call bells, equipment, and furnishing in toilets can result in transmission of Norovirus via the fecal-oral route.

Q30  F  Many bacteria produce toxins, which are either shed from the living organism or released in large quantities when the organism is dead or dying, having been destroyed by the host’s immune system or having been killed by antibiotics.

Q31  T

Q32  F  “Pathogenicity” refers to an organism’s ability to cause infection; “virulence” is the organism’s ability to overwhelm the host’s immune responses and cause severe infection or disease.

Q33  F  The spectrum of illness and disease that bacteria cause is diverse, ranging from asymptomatic colonization to infections that may be mild, severe or potentially life threatening.

Q34  F  Use of catheters INCREASES the risk of urinary tract infection developing.

Q35  T