

**102105T4HSS**

**HEALTH SERVICE SUPPORT PROVIDERS LEVEL 5**

**MED/CU/HSS /CR/01/5/A**

**PARTICIPATE IN INFECTION PREVENTION AND CONTROL**

**WRITTEN ASSESSMENT**

**Time: 3 hours**

## INSTRUCTIONS TO CANDIDATES

*Maximum marks for each question are indicated in brackets ( ).*

*This paper consists of* ***THREE*** *sections: A, B and C.*

*Answer questions as per instructions in each section.*

*You are provided with a separate answer booklet*.

**This paper consists of SEVEN (7) printed pages**

**Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing**

**SECTION A:** (20 marks)

***(Each question in this section is 1 mark)***

1. When serving patients in the ward with a chronic infection, a new organism may set up to introduce another infection this is called; (1 Mark)
2. Primary infection
3. Secondary infection
4. Tertiary infection
5. Chronic infection
6. The following microorganism can be removed by routine hand hygiene; (1 Mark)
7. Transient flora
8. Transmittable flora
9. Contagious flora
10. Residual flora
11. One of the following disease is spread by rats; (1Mark)
12. Cholera
13. Malaria
14. Tuberculosis
15. Plaque
16. Hospital instruments are made of different materials which require special methods of sterilization. The sets of instruments that can be autoclaved are; (1 Mark)
17. Needle holders, retractors, syringes
18. Dissecting forceps, syringes, needles
19. Retractors, needle holders, dissecting forceps
20. Needle holders, needles, retractors
21. The correct way of drying hands after hand washing is; (1 Mark)
22. In a circular motion covering wrist to finger tips in one direction
23. In a circular motion covering all areas of the finger downwards to the wrist
24. Lightly part and allow hands to dry from the wrist to the fingers
25. Dry hands thoroughly
26. The risk of instruments to cause diseases are classified according to their level of invasion in the patient’s body. High risk instruments are: (1 Mark)
27. Instruments that come into contact patients intact skin
28. Instruments that penetrate patients intact skin but do not come in to contact with mucous membrane
29. Instruments that penetrate patient’s inner tissues cells
30. Instruments that involve removal of soil and organic material
31. The physical barriers used to prevent transmission of infection to health care workers include: (1Mark)
32. Face masks, gloves
33. Windows, gowns
34. Antiseptics and disinfectants
35. Hand washing
36. Virulence is: (1 Mark)
37. Pathogens ability to establish an infection
38. Multiplication of microorganism within a host
39. The ability of a microorganism to cause damage to the host
40. Host ability to fight against an infection
41. Waste segregation is the process of sorting hospital waste into different categories for disposal. It is done at; (1 Mark)
42. The disposal site
43. The end point
44. The generation point
45. The collection point
46. A Carrier in infection cycle is: (1 Mark)
47. The pathogens capacity/ability to establish an infection
48. An organism infected with an infectious disease agent but displays no symptoms
49. An infectious agent that is capable of being transmitted to a client by direct or indirect contact
50. Invasion and multiplication of micro – organisms in body tissue that results in cellular injury.
51. To avoid spread of infectious diseases one is expected to use one of the following thermometers; (1 Mark)
52. Mercury thermometer
53. Digital thermometer
54. Infrared thermometer
55. Rectal thermometer
56. Standard precautions are followed in hospitals because: (1 Mark)

A. Hospitals are extremely clean and this precaution is required

B. Most patients in the hospital are a source of infection

C. Health care workers are the only susceptible hosts of infections from patients

D. It has been said by the WHO

1. The following statement is correct regarding a patient who has been suspected to have acquired a nosocomial infection. (1 Mark)
2. Acquired the infection while in hospital
3. Should not be monitored following departure from hospital
4. Should be considered non-infectious by health workers
5. Should be treated at home
6. The process of eliminating all microorganisms including their spores from an object is; (1 Mark)
7. Sanitation
8. Sterilization
9. Disinfection
10. Decontamination
11. Disease transmission is continuous in nature. The three factors necessary for a disease transmission cycle to be complete are: (1 Mark)
    1. Host, soil, insect
    2. Reservoir, mosquitoes, people
    3. Agent, host, environment
    4. Environment, water, food
12. Gloves used to change a patient’s bed linen are disposed in; (1Mark)
13. Red bin
14. Yellow bin
15. Green bin
16. Black bin
17. Guidelines for Disposal of Medical Waste states that: (1 Mark)
18. Keep containers in convenient places
19. Keep containers in a hidden place
20. Remove the waste if not in the proper bin
21. Do not Use washable, leak-proof containers
22. Select a high level disinfectant used in health facilities from the choices given; (1 Mark)
23. Iodine
24. Chlorhexidine
25. Isopropyl
26. Cidex
27. The color coded bin for disposing paper wrappings in the hospital is: (1 Mark)
28. Black
29. Blue
30. Red
31. Yellow
32. The multiplication of microorganism on or within a host that results in cellular injury is; (1 Mark)
33. Colonization
34. Infection
35. Normal flora
36. Transient flora

**SECTION B:**(40 marks)

***Answer ALL questions in this section.***

1. State **Three (3)** general policies for health workers when handling sharps. (3 Marks)
2. Outline **Three (3)** precautions one should observe when storing sterile instruments. (3 Marks)
3. State the difference between antiseptic solution and disinfectants solutions used in hospital giving **one (1)** example for each. (4 Marks)
4. Highlight **Three** **(3)** importance of decontamination of instruments in a health care facility. (3 Marks)
5. Chlorine is the most commonly used disinfectant for decontamination. Given manufacturer’s concentration to be 10%. And the required concentration is 0.5%. Calculate the ratio of chlorine to water concentration; (4 Marks)
6. List **Three** **(3)** details that you include on a sterile pack label. (3 Marks)
7. Waste segregation is important to prevent contamination in the hospital. Explain the color code for the different types of hospital waste. (4 Marks)
8. Outline **Three (3)** factors affecting the efficacy of disinfection and sterilization of hospital instruments. ( 3 Marks)
9. Hand washing is essential in the prevention of infection in a hospital. List **Two (2)** moments of hand washing in a hospital. ( 2 Marks)
10. When decontaminating hospital apparatus, we use different types of chemicals almost daily. Explain **Four** **(4)** personal precautions to be observed while using chemicals in hospital. ( 4 marks)
11. State **Three (3)** importance of proper waste disposal. (3 marks)
12. State **Four (4)** standard precautions of infection prevention according to World Health Organization as applied in the hospitals. (4 Marks)

**SECTION C:** (40 marks)

***Answer any Two (2) questions in this section***

1. Waste is generated during patient care in a hospital.
2. Explain FIVE (5) categories of hospital wastes (10 marks)
3. Describe any **FIVE (5)** steps used in waste management (10 Marks)
4. Rodents and other pests are a source of infection in the hospital set up. Discuss **TEN** **(10)** procedures done in the health facility to control pests and rodents. (20 Marks)
5. List **FIVE (5)** Personal Protective Equipment stating the purpose of each and two instances when it is used. (20 Marks)