

APPLIED MICROBIOLOGY AND INFECTION CONTROL INCLUDING SAFETY

Instructions to the candidates:

- 1. Do not write anything on question paper except Roll Number, otherwise it shall be deemed as an act of indulging in unfair means and action shall be taken as per rules.*
- 2. Use separate answer book for each section.*

Duration: 3 Hours

Total Marks: 75

Section-A (Applied Microbiology)

Q.1 Long/Essay type questions (Attempt any one) (1x10=10 Marks)

- a. Describe structure and classification of microbes.
- b. Explain concepts and principles of microbiology and its importance in nursing.

Q.2 Short notes (Attempt any three): (3x5=15 Marks)

1. Types of staining
2. Immunoglobulins
3. Types of vectors
4. Immunization schedule

Q.3 Very short questions (Attempt any three):(3x2=6 Marks)

1. VDRL test
2. Name four species of malarial parasites
3. Laboratory diagnosis of typhoid
4. Rhinovirus

Q.4 Answer the following MCQs: (6x1=6 Marks)

Q.1 The flagella and pili originated from:

1. Cell wall
2. Cytoplasmic membrane
3. Capsule
4. Cytoplasm

Q.2 Droplet nuclei are transmitted by:

1. Water
2. Air
3. Food
4. Milk

Q.3 Koplik's spots on buccal mucosa are seen in which of the following infections:

1. Mumps virus
2. Influenza virus
3. Measles virus

4. Para influenza virus

Q. 4 Which of the following vector is Involved in the transmission of leishmaniasis?

1. Sandfly
2. Tic
3. Mite
4. Mosquito

Q.5 Who is known as the father of microbiology:

1. Edwin John Butler
2. Antony Van Leeuwenhoek
3. Ferdinand Cohn
4. Robert Koch

Q.6 Prokaryotic cell lacks:

1. DNA
2. Ribosome
3. Mitochondria
4. Plasma Membrane

Section-B (Infection Control Including Safety)

Q.1 Long/Essay type questions (Attempt any one) (1x10=10 Marks)

- a. Define personal protective equipment (PPE). Write the importance and types of PPE. Explain the role of nurse in infection control and prevention. <https://www.ruhsonline.com>
- b. Write the types of specimens. Explain the principles and collection techniques of specimen collection.

Q.2 Short notes (Attempt any three) (3x5=15 Marks)

1. Bio medical waste management
2. Hand hygiene
3. International patient safety goal
4. Types of isolation

Q.3 Very short questions (Attempt any three)(3x2=6 Marks)

1. Infection control team
2. Types of disinfection
3. Prevention of DVT
4. Name the five steps of 5s

Q.4 Answer the following MCQs: (7x1=7 Marks)

1. Which of the following is not a method of dry heat sterilization:
 1. Flaming

2. Hot air oven
3. Incineration
4. Pasteurization

Q.2 What does HAZMAT stand for:

1. Hazardous materials
2. Hair care materials
3. Healthy materials
4. Safety materials

Q.3 Which of the following chemical agent is used for fumigation:

1. Alcohol
2. Iodine
3. Formaldehyde
4. Carboic acid

Q.4 Transfer of infection from another patient or a member of hospital staff is known as:

1. Environmental infection
2. Parenteral infection
3. Iatrogenic infection
4. Cross infection

Q.5 The hot air oven is operated at:

1. 121° C for 15 min
2. 160° C for 60 min
3. 100° C for 30 min
4. 80° C for 30 min

Q.6 Which type of disinfectant is most effective against spores?

1. Alcohol based hand rub
2. Bleach solution
3. Iodine based antiseptic
4. Quaternary ammonium compound

Q.7 A patient with a compromised immune system requires which type of precaution to prevent infection:

1. Protective isolation
2. Reverse isolation
3. Standard precaution
4. Droplet precaution