

Question Paper

Exam Date & Time: 09-Mar-2023 (10:07 AM - 11:30 AM)



MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD SEMESTER B.Sc. NURSING DEGREE EXAMINATION - MARCH 2023
SUBJECT: MICR 201 – APPLIED MICROBIOLOGY & INFECTION CONTROL AND SAFETY

Marks: 62

Duration: 167 mins.

SECTION A - APPLIED MICROBIOLOGY (31 MARKS)

Answer all the questions.

Essay:

1. A 40 year old patient developed fever and yellowish discolorization of eyes, one month after blood transfusion. Physical examination revealed enlargement of the liver. Investigation of blood samples revealed seromarkers of a DNA virus.

1A) Describe the general properties of the causative agent. (2)

1B) Discuss the various modes of transmission of this virus. (3)

1C) With the help of a graph, explain the seromarkers detected in this case. (5)

2. Short note:

2A) Classify culture media and explain the uses of blood agar. (5)

2B) With the help of a diagram, explain the gram positive and gram negative bacterial cell wall. (5)

2C) List the serological tests with an example for each type. (5)

3. Short answers:

3A) Explain the term medical asepsis. (2)

3B) Describe the general properties of Mycobacterium tuberculosis. (2)

3C) Classify immunity. (2)

SECTION B - INFECTION CONTROL AND SAFETY (31 MARKS)

Answer all the questions.

Essay:

4A) Describe the vulnerable patients in the hospital. (2)

4B) Explain the complications that are prone to develop by the vulnerable patients during their hospital stay. (3)

4C) Explain the nurses role in preventing harm for vulnerable patients during their hospital stay. (5)

5. **Short note:**

- 5A) Describe the indications for hand hygiene in the hospital. (5)
- 5B) Classify sterilization. Explain the working principle of autoclave. (5)
- 5C) Describe the importance of waste management in preventing infection in the hospital. (5)

6. **Short answers:**

- 6A) Describe various sources of healthcare associated infections. (2)
- 6B) Explain the measures to be adopted for the prevention of healthcare associated infection. (2)
- 6C) List any FOUR multi drug resistant strains of bacteria. (2)

-----End-----