

Question Paper

Exam Date & Time: 02-May-2023 (10:13 AM - 11:30 AM)



MANIPAL ACADEMY OF HIGHER EDUCATION
THIRD SEMESTER B.Sc. NURSING DEGREE EXAMINATION - MAY 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.

1. A 35-year old manual labourer presented to OPD with productive cough since 3 weeks and evening rise of temperature. Sputum was blood tinged. Special staining of the sputum sample revealed acid fast bacilli.
 - 1A) List the general properties of the causative agent. (2)
 - 1B) Explain the pathogenesis of this condition. (3)
 - 1C) Describe the sample collection method and laboratory diagnosis of this infection. (5)
2. **Short note:**
 - 2A) Explain the different types of culture methods. (5)
 - 2B) With the help of a diagram explain the structure of a virus. (5)
 - 2C) Classify immunity with examples. (5)
3. **Short answers:**
 - 3A) List TWO contributions of Robert Koch. (2)
 - 3B) State the various modes of transmission of HIV infection. (2)
 - 3C) Classify hypersensitivity reactions. (2)

SECTION B -INFECTION CONTROL AND SAFETY (31 MARKS)

Answer all the questions.

4. **Essay:**
 - 4A) Describe the types of restraining the patient. (3)
 - 4B) Describe the purposes of restraining the patient. (2)
 - 4C) Explain the nurses role in restraining the patient. (5)
5. **Short note:**
 - 5A) Describe the standard precautions to be followed to prevent transmission of infection in the hospital. (5)
 - 5B) List any **SIX** disinfectants and describe its uses in health care setting. (5)
 - 5C) Explain the types of hospital waste with relevant example for each type. (5)
6. **Short answers:**
 - 6A) Describe the measures to prevent surgical site infection in the hospital. (2)
 - 6B) Explain any two strategies to prevent Catheter Associated Urinary Tract Infections (CAUTI). (2)
 - 6C) List the mechanisms of antibiotic resistance in bacteria. (2)

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