



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)  
UNIVERSITY EXAMS**

**SCHOOL OF NURSING, MIDWIFERY AND PARAMEDICAL SCIENCES**

**MAIN CAMPUS**

**END OF TRIMESTER EXAMS  
2021 / 2022 ACADEMIC YEAR**

**FOR THE DEGREE OF MIDWIFERY**

**COURSE CODE: NMM 225 LECTURER: DR. STEFFI SCHATZ**

**COURSE TITLE: VIROLOGY AND MYCOLOGY**

**DATE: 13<sup>TH</sup> OF APRIL 2023**

**TIME: 3-6 PM**

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**INSTRUCTIONS TO CANDIDATES**

**ALL QUESTIONS IN THE THREE SECTIONS (A, B AND C) ARE  
COMPULSORY**

**DURATION: 3 HOURS**

NMM : Virology,  
Mycology

**SECTION A: MULTIPLE CHOICE QUESTIONS (MCQs); 20 MARKS**

**Choose the most appropriate answer**

1. The genetic material of a virus is composed of
  - A) DNA
  - B) RNA
  - C) DNA or RNA
  - D) DNA and RNA
2. The Baltimore classification of Viruses is based on
  - A) The morphology
  - B) The size
  - C) The manner of the synthesis of the m-RNA
  - D) The appearance in a stain
3. What are Herpes viruses?
  - A) Single stranded DNA Virus
  - B) Double stranded DNA Virus
  - C) Single stranded RNA virus
  - D) Single stranded RNA reverse transcriptase Virus
4. Which Baltimore class is Corona virus?
  - A) I
  - B) III
  - C) V
  - D) IV
5. What does REO-Virus mean?
  - A) Respiratory- enteric-orphan Virus
  - B) Reorganized Virus
  - C) Enterovirus
  - D) None of the above
6. HI- Virus is a...
  - A) Reovirus
  - B) Retrovirus
  - C) Picornavirus
  - D) Togavirus
7. Which of the following Virus contains a single stranded DNA?
  - A) Herpes virus
  - B) Poxvirus
  - C) Adenovirus
  - D) Parvovirus
8. Which part of the human body is mostly affected by Varicella Zoster Virus?
  - A) Respiratory System
  - B) Genital system
  - C) Skin
  - D) CNS

9. Which of the following Viruses causes an inflammation of the liver?
  - A) HBC
  - B) HIV
  - C) Papilloma Virus
  - D) Herpes Virus
10. A Virus which causes an effect called "mononucleosis" is called..
  - A) Epstein Barr Virus
  - B) Parvovirus
  - C) Rotavirus
  - D) HIV
11. Which applies for Fungi's? They are...
  - A) Eukaryotes
  - B) Prokaryotes
  - C) Animals
  - D) Archaeobacteria
12. What is the reservoir of Blastomyces dermatidis?
  - A) Soil
  - B) Standing water
  - C) Fomites
  - D) Herbivores
13. What is Aspergillus?
  - A) A yeast
  - B) A mold
  - C) A virus
  - D) A bacterium which supports a fungicidal infection
14. Which of the following statement is right?
  - A) Infections with fungi's are mostly affecting immune compromised patients
  - B) Infections with fungi's are highly infectious
  - C) Infections with fungi's are simple to treat
  - D) Infections with fungi's causing a lifelong immunity
15. An infection with Blastomyces dermatididis can be treated with..
  - A) Amphotericin B
  - B) Acyclovir
  - C) Tetracycline
  - D) Ampicillin
16. Which parts of the body can be affected by Candida?
  - A) The mouth cavity
  - B) The genital organs
  - C) The mouth cavity and the genital organs
  - D) The respiratory system
17. Onychomycosis is a disease which affects
  - A) The skin
  - B) The nails
  - C) The gastrointestinal system
  - D) The genital system
18. Which fungi infections should be treated systemically?

NMM : Virology,  
Mycology

- A) Tinea corpora
  - B) Tinea cruris
  - C) Tinea capitis
  - D) Candidiasis
19. What does probiotic means?
- A) Preventive treatment of intestinal tract infections by the use of fungi's
  - B) A type of antibiotic
  - C) A drug against fungi's
  - D) The preform of an antibiotic
20. How can Viruses be identified?
- A) With the microscope
  - B) With a stain procedure
  - C) Via PCR test
  - D) With the naked eye

**SECTION B: SHORT ANSWER QUESTIONS (SAQS); 40 MARKS**

**Answer all the questions**

- |  |         |
|--|---------|
| 1. Explain the term "Virus"!                             | 4 marks |
| 2. Explain the phases of the life cycle of a virus!      | 8 marks |
| 3. Explain the components of a virus by using a drawing! | 8 marks |
| 4. Describe how viruses can be identified?               | 8 marks |
| 5. Explain the term "fungus"!                            | 4 marks |
| 6. Draw and explain the structure of fungus!             | 8 marks |

**SECTION C: LONG ANSWER QUESTIONS (LAQS); 40 MARKS**

**Answer all the questions**

1. A) Describe unspecific clinical symptoms of the infection with a virus and explain which parts of the body can be affected by viral infections. Name 3 examples for viruses and their specific diseases! 10 marks
- B) Explain the type, the structure, the transmission and the clinical signs of an infection with the HI-virus! 10 marks
2. A) Describe "Candidiasis" and explain clinical features, affected parts of the body and effective treatments methods! 10marks
- B) Describe the pathogenesis of an infection with Dermatophytes, different types of diseases and the treatment procedures! 10 marks

END