



(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
2023/2024 ACADEMIC YEAR**

**FOR THE DEGREE OF
BACHELOR OF SCIENCE IN GLOBAL HEALTH AND TRAVEL
MEDICINE/OSH
BACHELOR OF SCIENCE IN COMMUNITY HEALTH**

COURSE CODE: NCO125

COURSE TITLE: MEDICAL MICROBIOLOGY

LECTURER: DR. STEFFI SCHATZ

DATE: 09/04/2024

TIME: 9-11 AM

INSTRUCTIONS TO CANDIDATES

**ALL QUESTIONS IN THE THREE SECTIONS (A, B AND C) ARE COMPULSORY
DURATION: 3 HOURS**

MMUST OBSERVES ZERO TOLERANCE TO EXAMINATION CHEATING

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

Choose the most appropriate answer

1. Herpes virus is a...
 - a. SS-RNA Virus
 - b. DS- DNA Virus
 - c. SS-DNA Virus
 - d. retro-virus
2. Lyme disease is caused by
 - a. Borrelia
 - b. Fusobacteria
 - c. Mycobacteria
 - d. Streptococci
3. Penicillin is a...
 - a. Glycopeptid AB
 - b. β -lactam AB
 - c. bacteriostatic
 - d. Tetracycline
4. What does well directed Antibiotica therapy mean?
 - a. treatment according the symptoms
 - b. Antibiotogramm
 - c. oral administered therapy
 - d. intravenous administered therapy
5. Which of the following statement is applicable?
 - a. sterilization is the process of killing microorganism and spores
 - b. sterilization is the process of killing microorganisms
 - c. sterilization is the process to prevent the spread of diseases from one person to another
 - d. sterilization is the reduction of germs
6. Which diseases/Symptoms do adenoviruses cause?
 - a. pneumonia, cold like
 - b. liver disease
 - c. HIV
 - d. skin rashes, bumps of the skin
7. A disease called Q-fever is caused by...
 - a. nocordia
 - b. Coxiella
 - c. mycoplasma
 - d. coccoides immitis
8. HIV is an...
 - a. airborne disease
 - b. bloodborne disease
 - c. contact disease
 - d. a vector borne disease
9. What is the reservoir of H.-influenza?
 - a. urogenital tract

- b. respiratory tract
 - c. digestive system
 - d. skin
10. Which of the infection of following germs is prevented through vaccination?
- a. Bordatella pertussis
 - b. Neisseria gonorrhoe
 - c. Nocordia
 - d. Rickettsia
11. Which of the following gram negative germs is oxidase positive?
- a. Pseudomonas
 - b. Helicobacter
 - c. Vibrio
 - d. E.coli
12. Bacillus is..
- a. gram positiv
 - b. gram negativ
 - c. non spore forming
 - d. coccus
13. Saprophytes are...
- a. destructors and compose anorganic material from organic material
 - b. live on cost of the host
 - c. live together with the host in symbiosis
 - d. viruses
14. This is a vector caused disease..
- a. Diphteria
 - b. Pertussis
 - c. Lyme disease
 - d. HIV
15. What are symbionts?
- a. parasites
 - b. life together with the host for both benefits
 - c. Saprophytes
 - d. Viruses
16. What is the colour of a gram negative bacteria?
- a. green
 - b. red
 - c. blue violet
 - d. black
17. What is Corynebacterium?
- a. a gram positive non spore forming rod
 - b. gram positive spore forming rod
 - c. gram negative diplococci
 - d. gram negative rod
18. Mycobacterium causes which disease?
- a. Diphteria
 - b. Tuberculosis
 - c. Leprosis

- d. Enterocolitis
- 19. Which disease is caused by clostridium?
 - a. Tetanus
 - b. Diphtheria
 - c. Enterocolitis
 - d. Endocarditis
- 20. An infection with Blastomyces dermatididis can be treated with..
 - a. amphotericin B
 - b. acyclovir
 - c. tetracycline
 - d. ampicillin

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

Answer all the questions

- 1. State the term infection ! 2marks
- 2. Define the term «bacteria» ! 2 marks
- 3. State criteria how bacteria can be classified! 8 marks
- 4. List the clinical features which are caused by an infection with Staphylococcus aureus! 5 marks
- 5. List the 5 methods to prevent and control bacterial diseases! 5 marks
- 6. Explain sterilization! 2 marks
- 7. Describe the chain of infection! 8 marks
- 8. Name the reservoir and the antigen structures of clostridium tetani? 8 marks

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

Answer all the questions

- 1. A) Describe the pathogenesis of an infectious disease! 10 marks
- B) Highlight the 4 phases and the steps of the pathogenesis in relation to the host response! 10 marks
- 2. A) What are the effects of antibiotics on the bacterial cell? 10 marks
- B) Name 5 types of Antibiotics and their mode of operation at bacterial cells! 10 marks

END