



**AMREF INTERNATIONAL UNIVERSITY**  
**SCHOOL OF MEDICAL SCIENCES**  
**DEPARTMENT OF NURSING AND MIDWIFERY SCIENCES**  
**KENYA REGISTERED COMMUNITY HEALTH NURSING**  
**END OF SEPTEMBER -DECEMBER 2022 SEMESTER EXAMINATION**

**DNS 113: MICROBIOLOGY, PARASITOLOGY AND IMMUNOLOGY**

**DATE: 8<sup>TH</sup> NOVEMBER 2022**

**TIME: 2 Hours**

**Start: 9:00am**

**Finish: 11:00am**

**INSTRUCTIONS**

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section A: Multiple Choice Questions  
Section B: Short Answer Questions and Section C: Long
3. Answer ALL Questions. Do not write on the question paper.

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

**1. Eukaryotes: -**

- A. Reproduce asexually
- B. Hemenolepis nana
- C. Have membrane bound nucleus
- D. Bacillus Anthracis

**2. Gram positive cocci: -**

- A. Have no capsule
- B. Are spiral in shape
- C. Do form spores
- D. Cannot be killed through boiling

**3. Sore throats infection is commonly associated with: -**

- A. Streptococcus pyogenes
- B. Neisseria meningitides
- C. Vibrio cholerae
- D. Candida albicans

**4. Genus clostridia members are: -**

- A. Commonly associated with ophthalmia neonatorum
- B. Spore forming
- C. Aerobic
- D. Non-toxin producing

**5. Myasthenia gravis is a type of: -**

- A. Hypersensitivity type I reaction
- B. Hypersensitivity type II reaction
- C. Hypersensitivity type III reaction
- D. Hypersensitivity type IV reaction

**6. Chronic active infection is commonly associated with elevation of: -**

- A. IgG antibodies
- B. IgM antibodies
- C. IgA antibodies
- D. IgE antibodies

**7. The Lab diagnosis of Ancylostoma Duodenale is through: -**

- A. Identification of ova in stool
- B. Physical examination
- C. History taking
- D. Magnetic Resonance Imaging (MRI)

**8. Flagellate type of protozoa include: -**

- A. Trichomonas Vaginalis and Giardia lamblia
- B. Trypanosoma gambiense and Balantidium coli
- C. Entamoeba histolytica and Plasmodium falciparum
- D. Balantidium coli and Entamoeba histolytica

**9. Naturally acquired active immunity is acquired after recovery from: -**

- A. Malaria
- B. Mumps
- C. Rabies
- D. Yellow fever

**10. Reverse Barrier nursing is recommended for patients with: -**

- A. Leukemia
- B. Typhoid
- C. Malaria
- D. Marasmus

**11. Antigenic material that helps scientists to recognize viruses is: -**

- A. Protein
- B. Nuclear material
- C. Spores
- D. Glycoproteins

**12. Bacterial cells are: -**

- A. Serotonin
- B. Unicellular
- C. Multicellular
- D. Associated with sexual reproduction

**13 Bacille Calmette Guerin (BCG) vaccine is a form of a:-**

- A. Live attenuated vaccine
- B. Killed vaccine
- C. Vaccine containing immunoglobulins
- D. Toxoid vaccine

**14. The diagnostic test used to identify a drug of choice to treat an infection is: -**

- A. Stool microscopy
- B. Culture and sensitivity
- C. Urinalysis
- D. Plasmapheresis

**15. Tuberculosis is: -**

- A. Airborne disease
- B. Waterborne disease
- C. Vector borne disease
- D. Food borne disease

**16. Roundworms include: -**

- A. Ascaris lumbricoides and Enterobius vermicularis
- B. Diphyllotrium latum and Taenia saginata
- C. Taenia solium and Schistosoma haematobium
- D. Echinococcus granulosus and Taenia saginata

**17. The following is a form of superficial mycosis: -**

- A. Oral candidiasis
- B. Taenea Capitis
- C. Cryptococcosis
- D. Madura foot

**18. Protozoa: -**

- A. Are unicellular and smaller in size than bacteria
- B. Freely live in the air and water
- C. Have the ability to exist in form of cysts in the soil
- D. Contain chlorophyll thus can synthesize their own food

**19. The following is a flatworm: -**

- A. Enterobius vermicularis
- B. Schistosoma haematobium
- C. Taenia saginata
- D. Diphyllbothrium latum

**20. The general characteristics of genus Neisseria include: -**

- A. Gram negative, non-motile and fastidious to grow
- B. Coma shaped, motile and pleomorphic
- C. Coccobacilli, flagellated and gram negative
- D. Kidney shaped, non-motile and non-sporing

**SECTION B: SHORT ANSWER QUESTIONS (30 MARKS)**

1. State five (5) differences between a virus and bacterial cell (5 Marks)
2. Outline five (5) general characteristics of protozoa (5 Marks)
3. State any five (5) micro-organisms associated with infections in man (5 Marks)
4. Outline five (5) predisposing factors to worms infestation among children (5 Marks)
5. Describe the viral replication cycle (7 Marks)
6. State ant three (3) causes of low immunity (3 Marks)

**SECTION C: LONG ANSWER QUESTIONS (20 MARKS)**

1. Describe the measures you will take as a nursing manager to reduce hospital acquired infections in your health facility (20 Marks)