



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF NURSING & MIDWIFERY SCIENCES
END OF SEMESTER APRIL 2023 EXAMINATIONS**

COURSE CODE AND TITLE: BSN 125 PARASITOLOGY AND VIROLOGY

DATE: 9TH AUGUST 2023

Duration: 2 HOURS

Start: 9:00 A.M.

Finish: 11:00 A.M.

INSTRUCTIONS

1. This exam is out of 70 marks
2. This Examination comprises THREE Sections. Section I: Multiple Choice Questions (25 marks) Section II: Short Answer Questions (35 marks)
3. Answer ALL Questions.

SECTION I: MULTIPLE CHOICE QUESTIONS

(30 MARKS)

1. The specimen for the diagnosis of trichomoniasis in female is: -
 - A. Urine
 - B. Lymph node biopsy
 - C. Vaginal discharges
 - D. Cervical biopsy

2. The stool of the patient infected with this parasite is described as steatorrheic or gruelly: -
 - A. Isospora belli
 - B. Cryptosporidium hominis
 - C. Entamoeba histolytica
 - D. Giardia lamblia

3. Flask shaped ulcers in the large intestine is associated with: -
 - A. Giardia lamblia
 - B. Ancylostoma duodenale
 - C. Entamoeba histolytica
 - D. Trichuris trichura

4. The usual infective stage of trematodes to man is the: -
 - A. Cercariae
 - B. Cyst
 - C. Metacercariae
 - D. Sporozoite

5. The parasite whose migrating larvae breaks the pulmonary capillaries of man is: -
 - A. Ancylostoma braziliense
 - B. Ascaris lumbricoides
 - C. Enterobius vermicularis
 - D. Trichuris trichiura

6. The infective stage of Schistosoma to man is: -
 - A. Cercariae
 - B. Embryonated egg
 - C. Metacercariae
 - D. Miracidium

7. Obstructive uropathy is associated with infection of the following parasite: -
 - A. Schistosoma haematobium
 - B. Schistosoma japonicum
 - C. Schistosoma mansoni
 - D. Schistosoma mekongi

8. The parasite associated with microcephaly is: -
- A. Plasmodium falciparum
 - B. Toxoplasma gondii
 - C. Trypanosoma brucei rhodesiense
 - D. Leishmania donovani
9. Perianal itching is associated with the following parasites: -
- A. Strongyloides stercoralis
 - B. Enterobius vermicularis
 - C. Trichuris trichura
 - D. Schistosoma mansoni
10. This parasite can be transmitted transplacentally: -
- A. Entamoeba histolytica
 - B. Plasmodium falciparum
 - C. Loa loa
 - D. Echinococcus granulosus
11. The recommended for the treatment of onchocerciasis is: -
- A. Oxamniquine
 - B. Praziquantel
 - C. Diethylcarbamazine (DEC)
 - D. Ivermectin
12. The following statement is TRUE Concerning Loa loa: -
- A. Causes blindness
 - B. Infection is found in West Africa and Central America
 - C. Diethyl carbamazine (DEC) is the drug of choice in treating the infection
 - D. Chrysops are the vectors of the parasite
13. Use of latrines for disposal of human feces is useful in prevention of transmission of the following parasites: -
- A. Onchocerca volvulus
 - B. Balantidium coli
 - C. Toxoplasma gondii
 - D. Echinococcus granulosus
14. The following parasitic infection is associated with megaloblastic anaemia: -
- A. Echinococcus granulosus
 - B. Taenia solium
 - C. Taenia saginata
 - D. Diphyllbothrium latum

15. Winter bottom sign is associated with infection by the following parasite: -

- A. Leishmania donovani
- B. Wuchereria bancrofti
- C. Trypanosoma brucei gambiensei
- D. Trypanosoma cruzi

16. The main clinical feature of Hepatitis A is: -

- A. Rash
- B. Limb paralysis
- C. Jaundice and abdominal discomfort
- D. Upper respiratory tract infection

17. The unique form that rabies virus takes is: -

- A. Virus has dumbbell appearance
- B. Shaped like a bullet
- C. Star shaped
- D. Virion is pleomorphic

18. There is no vaccine against HIV because: -

- A. The virus is antigenically variable
- B. Such a vaccine would be too expensive
- C. The virus can be controlled by a change in sexual habits
- D. Latency can abrogate any vaccine effect

19. The following virus can remain latent in the host for years: -

- A. HIV
- B. Polio virus
- C. Influenza virus
- D. Herpesvirus

20. The current Human Papillomavirus (HPV) vaccine: -

- A. Induces a virus neutralizing antibody response
- B. Is used as a therapeutic vaccine
- C. Triggers tumour specific cell mediated response
- D. Is oncogenic risk associated

21. The most reliable detection test for Hepatitis E is: -

- A. ELISA test for IgG anti-HEV
- B. Polymerase chain reaction for detection of HEV RNA
- C. Western blot assay for IgM anti-HEV
- D. ELISA test for IgM anti-HEV

22. This is incorrect regarding Hepatitis A virus: -

- A. It causes hepatocellular carcinoma
- B. Its transmitted feco-orally
- C. It is one of the most stable viruses that infects humans
- D. It's a Picornaviridae family virus

23. Reverse transcriptase inhibitors include the following EXCEPT: -

- A. Lamivudine
- B. Tenofovir
- C. Nevirapine
- D. Dolutegravir

24. Cervical cancer is associated with the following Human Papillomavirus (HPV) genotype:

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- A. HPV 1
- B. HPV 54
- C. HPV 6
- D. HPV 20

25. Clinical symptoms of measles include the following except: -

- A. Cough
- B. Runny nose
- C. Sore throat
- D. Swollen salivary glands

SECTION II: SHORT ANSWER QUESTIONS

(35 Marks)

1. State five (5) different ways through which parasitic nematodes may be transmitted to humans and give a specific example of a parasite for each (5 Marks)
2. Describe five (5) different control and prevention strategies for the control of gastrointestinal helminth infections (5 Marks)
3. State five (5) complications associated with severe *Plasmodium falciparum* infection (5 Marks)
4. Describe five (5) complications associated with *Ascaris lumbricoides* infection (5 Marks)
5. Describe the steps involved in viral replication (5 Marks)
6. Describe 3 characteristics of viral hemorrhagic fevers and give 2 examples (5 Marks)
7. Discuss risk factors associated with Hepatitis B virus (HBV) infection. (5 Marks)