



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCE
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY
END OF MAY-AUGUST 2024 TRIMESTER EXAMINATIONS**

UNIT CODE: PHT 124 UNIT NAME: MEDICAL PARASITOLOGY (SPECIAL EXAM)

**DATE: TUESDAY/ 13TH/ AUGUST
TIME: TWO HOURS
START: 6PM STOP: 8PM**

INSTRUCTIONS (physical exams)

1. Do not write on this question paper
(Marks and questions distribution as per program curriculum.)

INSTRUCTIONS (Online examinations)

1. This exam is marked out of 70 marks
2. This Examination comprises 3 Sections
3. This online exam shall take 2 Hours
4. Late submission of the answers will not be accepted
5. Ensure your web-camera is on at all times during the examination period
6. No movement is allowed during the examination
7. Idling of your machine for 5 min or more will lead to lock out from the exam
8. The Learning Management System (LMS) has inbuilt integrity checks to detect cheating
9. Any aspect of cheating detected during and or after the exam administration will lead to nullification of your exam
10. In case you have any questions call the invigilator for this exam on Tel. 0705833434 and or the Head of Department on Tel 0720491032
11. For adverse incidences please write an email to: amiu.examinations@amref.ac.ke

SECTION I: MULTIPLE CHOICE QUESTIONS

(30 MARKS)

Attempt ALL questions

1. The larval form of *Trichinella* can be destroyed by _____
 - A. Smoking of meat
 - B. Deep freezing of meat
 - C. Drying of meat
 - D. Salting of meat
2. Which protozoan is responsible for causing "*Amoebic Dysentery*"?
 - A. *Trichomonas vaginalis*
 - B. *Giardia lamblia*
 - C. *Entamoeba histolytica*
 - D. *Leishmania donovani*
3. Sexes are always separate in _____
 - A. Cestodes
 - B. Trematodes
 - C. Nematodes
 - D. Protozoa
4. LD bodies are _____
 - A. Amastigotes of *Leishmania donovani* inside RBCs.
 - B. Giant cells seen in leishmaniasis.
 - C. Degenerative lesions seen in leishmaniasis.
 - D. Amastigotes of *Leishmania donovani* inside macrophages.
5. Which statement is TRUE regarding *Entamoeba histolytica* is?
 - A. The trophozoites are infective to man.
 - B. Mature cyst has eccentric nucleolus.
 - C. It can cause primary amoebic encephalitis.
 - D. Cysts are resistant to chlorine concentration used in drinking water.
6. Coenurus is the larval form of _____
 - A. *Taenia solium*
 - B. *Taenia multiceps*
 - C. *Echinococcus granulosus*
 - D. *Echinococcus multilocularis*
7. Malaria pigment is formed by _____
 - A. Parasite
 - B. Bilirubin
 - C. Haemoglobin
 - D. All of the above

8. Motility of *Trichomonas vaginalis* is described as _____
- A. Amoeboid
 - B. Jerky
 - C. Falling leaf
 - D. Lashing
9. Which parasite enters, the body by piercing the skin?
- A. *Trichuris trichiura*
 - B. *Ascaris lumbricoides*
 - C. *Necator americanus*
 - D. *Plasmodium falciparum*
10. Which protozoan group possesses a unique organelle called an apicoplast?
- A. Amoebas
 - B. Ciliates
 - C. Flagellates
 - D. Apicomplexans
11. Chiclero's ulcer is caused by _____
- A. *Leishmania mexicana* complex.
 - B. *Leishmania braziliensis* complex.
 - C. *Leishmania tropica*.
 - D. *Leishmania infantum*
12. Which of the following statements is true in respect to trematodes?
- A. Dorsoventrally flattened.
 - B. Intermediate host is snail.
 - C. Hermaphrodite except schistosomes.
 - D. All of the above.
13. *Toxoplasma gondii* lives inside the _____
- A. Lumen of small intestine.
 - B. Lumen of large intestine.
 - C. Reticuloendothelial cell and many other nucleated cells.
 - D. RBC.
14. Which is the treatment of choice for benign tertian malaria?
- A. Sulfamethoxazole – pyrimethamine.
 - B. Quinine
 - C. Mefloquine
 - D. Chloroquine
15. Which of the following parasite passes its life cycle through three hosts?
- A. *Fasciola hepatica*
 - B. *Fasciola buski*
 - C. *Schistosoma haematobium*
 - D. *Diphylobothrium latum*

16. Which of the following is not a flagellate?
- A. *Naegleria fowleri*
 - B. *Leishmania donovani*
 - C. *Giardia lamblia*
 - D. *Dientamoeba fragilis*
17. Loeffler's syndrome may be seen in infection with _____
- A. *Ancylostoma duodenale*
 - B. *Ascaris lumbricoides*
 - C. *Trichinella spiralis*
 - D. *Trichuris trichiura*
18. All the following are correct regarding fertilized egg of *Ascaris* EXCEPT
- A. It is always bile stained.
 - B. Covered by an outer mamillated coat.
 - C. Floats in saturated solution of salt.
 - D. Does not float in saturated solution of salt.
19. In humans, malarial parasites multiply by _____
- A. Binary fission
 - B. Budding
 - C. Gametogony
 - D. Schizogony
20. The longest tapeworm found in man _____
- A. *Diphyllobothrium latum*
 - B. *Taenia saginata*
 - C. *Taenia solium*
 - D. *Echinococcus granulosus*
21. Which protozoan parasite causes Human African sleeping sickness?
- A. *Plasmodium falciparum*
 - B. *Trypanosoma cruzi*
 - C. *Trypanosoma brucei*
 - D. *Leishmania donovani*
22. Which of the following nematodes lays eggs containing larvae?
- A. *Trichinella spiralis*
 - B. *Enterobius vermicularis*
 - C. *Brugia malayi*
 - D. *Ascaris lumbricoides*
23. Which of the following is not a characteristic of protozoa?
- A. Unicellular
 - B. Eukaryotic
 - C. Multicellular
 - D. Heterotrophic

24. The following are zoonotic disease EXCEPT:
- A. Leishmaniasis
 - B. Balantidiasis
 - C. Scabies
 - D. Taeniasis
25. The common name for *Ascaris lumbricoides* is _____
- A. Roundworm
 - B. Hookworm
 - C. Threadworm
 - D. None of the above
26. A 6-year-old girl is emaciated with a hemoglobin level of 6 g/dl. Her face appears puffy with swollen eyelids and edema over feet and ankles. There are no laboratory facilities available. The most likely cause of the child's condition is _____
- A. Schistosomiasis
 - B. Cercarial dermatitis
 - C. Ascariasis
 - D. Hookworm disease
27. Vector for *Trypanosoma cruzi* is _____
- A. Reduviid bug
 - B. Tsetse fly
 - C. Sandfly
 - D. Hard tick
28. Pigs are reservoir for _____
- A. *Taenia solium*
 - B. *Diphyllobothrium latum*
 - C. *Trichinella spiralis*
 - D. *Ancylostoma duodenale*
29. Which of the following is not a cestode?
- A. *Diphyllobothrium latum*
 - B. *Taenia saginata*
 - C. *Schistosoma mansoni*
 - D. *Echinococcus granulosus*
30. The common name for *Enterobius vermicularis* is _____
- A. Threadworm
 - B. Pinworm
 - C. Roundworms
 - D. Whipworm

SECTION II: SHORT ANSWER QUESTIONS

(20 MARKS)

Attempt ALL questions

31. [4 Marks] Explain the role of a vector in the transmission of protozoan diseases.
32. [4 Marks] Describe congenital toxoplasmosis.
33. [4 Marks] Differentiate between trophozoite and cyst forms of protozoa.
34. [4 Marks] Explain the difference between nematodes and trematodes in terms of morphology and life cycle.
35. [4 Marks] Describe how are helminth infections diagnosed in a clinical setting.

SECTION III: LONG ANSWER QUESTION

(20 MARKS)

Attempt ANY TWO (2) questions

36. [10 Marks] Describe the life cycle of *Plasmodium falciparum* parasites.
37. [10 Marks] Discuss the importance of sanitation and hygiene practices in the prevention of helminth infections.
38. [10 Marks] Describe the concept of "Zoonotic helminthiasis" and provide examples of zoonotic helminths.

*******END*******