



**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 (MAIN 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. Consumption of uncooked pork is likely to cause which of the following helminthic disease.
 - A. *Taenia saginata*
 - B. *Taenia solium*
 - C. *Hydatid cyst*
 - D. *Trichuris trichiura*
2. A teenager who plays with dogs developed skin rash, eosinophilia, and an enlarged liver and spleen for 1 year. The most likely cause of this infection is _____
 - A. Trichinosis
 - B. Schistosomiasis
 - C. Toxoplasmosis
 - D. Visceral larva migrans
3. Which protozoan is responsible for causing "Amoebic Dysentery"?
 - A. *Trichomonas vaginalis*
 - B. *Giardia lamblia*
 - C. *Entamoeba histolytica*
 - D. *Leishmania donovani*
4. Coenurus is the larval form of _____
 - A. *Taenia solium*
 - B. *Taenia multiceps*
 - C. *Echinococcus granulosus*
 - D. *Echinococcus multilocularis*
5. Prolonged parasitism in malaria is due to _____
 - A. Antigenic variation
 - B. Intracellularity of parasite
 - C. immunosuppression
 - D. Sequestration
6. Two hosts are required in _____
 - A. *Taenia solium*
 - B. *Entamoeba histolytica*
 - C. *Trichuris trichiura*
 - D. *Giardia lamblia*
7. Motility of *Trichomonas vaginalis* is described as _____
 - A. Amoeboid
 - B. Jerky

- C. Falling leaf
D. Lashing
8. Highest incidence of anemia in the tropics is due to _____
A. Hookworm
B. Thread worm
C. Nematodes
D. Guinea worm
9. Non-nuclear DNA present in addition to nucleus in protozoan parasite is _____
A. Chromatid body
B. Karyosome
C. Kinetoplast
D. Basal body
10. Which of the following acts as the main reservoir of *Balantidium coli* infection?
A. Man
B. Monkey
C. Pig
D. Cow
11. The following statements regarding congenital toxoplasmosis are correct EXCEPT.
A. Most severe form of congenital infection occurs if it is acquired in 1st trimester.
B. Chorioretinitis and hydrocephalus are common manifestations in congenital infections.
C. Presence of Toxoplasma-specific IgM antibodies in an infant are suggestive of congenital infection.
D. Most severe form of congenital infection occurs if it is acquired in 3rd trimester
12. Which of the following nematodes lays eggs containing larvae?
A. *Trichinella spiralis*
B. *Enterobius vermicularis*
C. *Brugia malayi*
D. *Ascaris lumbricoides*
13. Malaria is not seen in patients with.
A. G-6-P-D deficiency
B. Sickle cell trait
C. Duffy negative blood group
D. All the above
14. Definitive host is one _____
A. In which sexual multiplication takes place and harbours adult form.
B. In which asexual multiplication takes place and harbours adult form.
C. In which sexual multiplication takes place and harbours larval form.
D. In which asexual multiplication takes place and harbours adult form

15. Chronic amoebic keratitis is seen in _____
- A. *Entamoeba histolytica*
 - B. *Acanthamoeba*
 - C. *Naegleria fowleri*
 - D. Haemoflagellates
16. Winterbottom sign in sleeping sickness which refers to _____
- A. Unilateral conjunctivitis
 - B. Posterior cervical lymphadenitis
 - C. Narcolepsy
 - D. Transient erythema
17. 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
18. Which one following test is used for diagnosis of *Giardia lamblia* infections?
- A. Enterotest
 - B. Casoni's test
 - C. Parasight F test
 - D. Napier's test
19. Sputum examination is commonly done for detecting the eggs of _____
- A. *Strongyloides stercoralis*
 - B. *Entamoeba histolytica*
 - C. *Paragonimus westermani*
 - D. *Ascaris lumbricoides*
20. In humans, malarial parasites multiply by _____
- A. Binary fission
 - B. Budding
 - C. Gametogony
 - D. Schizogony
21. The longest tapeworm found in man is _____
- A. *Diphyllobothrium latum*
 - B. *Taenia saginata*
 - C. *Taenia solium*
 - D. *Echinococcus granulosus*
22. *Entamoeba histolytica* trophozoites multiply by _____
- A. Binary fission
 - B. Schizogony

- C. Gametogony
D. All of the above
23. Which parasite enters, the body by piercing the skin?
A. *Trichuris trichiura*
B. *Ascaris lumbricoides*
C. *Necator americanus*
D. *Plasmodium falciparum*
24. Which of the following is not a characteristic of protozoa?
A. Unicellular
B. Eukaryotic
C. Multicellular
D. Heterotrophic
25. Which stain demonstrates the oocyst of *Cryptosporidium* best?
A. Haematoxylin-eosin
B. Gram's stain
C. Kinyoun modified acid fast stain
D. Modified trichrome stain
26. Most common presenting symptom of thread worm infection amongst the following is ____
A. Abdominal pain
B. Rectal prolapse
C. Urticaria
D. Vaginitis
27. Sexes are always separate in _____
A. Cestodes
B. Trematodes
C. Nematodes
D. Protozoa
28. Which of the following is not a cestode?
A. *Diphyllobothrium latum*
B. *Taenia saginata*
C. *Schistosoma mansoni*
D. *Echinococcus granulosus*
29. Larval form of *Echinococcus granulosus* is seen in _____
A. Dog
B. Man
C. Wolf
D. Fox
30. 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

SECTION II: SHORT ANSWER QUESTIONS

(20 MARKS)

Attempt ALL questions

31. [4 Marks] Explain the process of encystment and excystment in protozoa.
32. [4 Marks] Name two major groups of protozoa based on their locomotion mechanisms and provide an example of each.
33. [4 Marks] Describe the general life cycle of a helminth parasite.
34. [4 Marks] Outline the roles of intermediate hosts in the life cycle of helminth parasites.
35. [4 Marks] Describe the common routes of transmission for helminthic infections?

SECTION III: LONG ANSWER QUESTION

(20 MARKS)

Attempt ANY TWO (2) questions

36. [10 Marks] Describe the life cycle, clinical features and laboratory diagnosis of *Toxoplasma gondii*.
37. [10 Marks] Describe the challenges in controlling and preventing protozoan diseases.
38. [10 Marks] Explain the concept of "soil-transmitted helminthiasis" and its impact on public health.

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