



AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES
DEPARTMENT OF REHABILITATION MEDICINE
BACHELOR OF SCIENCE IN PHYSIOTHERAPY

END OF TRIMESTER EXAMINATIONS JANUARY TO APRIL 2025

UNIT CODE: PHT 124

UNIT NAME: Parasitology

DATE: 15th APRIL 2025

TIME: 11.15am-1.15pm

INSTRUCTIONS

1. All students will have two (2) hours to complete the examination
2. Attempt all questions as per the instruction
3. It is the student's responsibility to report any page and number missing in this paper.
4. Check that the paper is complete
5. Total number of pages is 6 including the cover.
6. Read through the paper quickly before you start.

SECTION I: MULTIPLE CHOICE QUESTIONS

(30 MARKS)

Attempt ALL questions

1. Which of the following parasite is transmitted by dog _____
 - A. *Taenia saginata*
 - B. *Hymenolepis nana*
 - C. *Echinococcus granulosus*
 - D. *Diphyllobothrium latum*
2. Parasite which may be transmitted by sexual contact is _____
 - A. *Trypanosoma cruzi*
 - B. *Trichomonas vaginalis*
 - C. *Trypanosoma brucei*
 - D. *Ascaris lumbricoides*
3. Infective form and invasive form of *Entamoeba histolytica* are:
 - A. Trophozoite and quadrinucleated cyst
 - B. Quadrinucleated cyst and trophozoite
 - C. Both trophozoite
 - D. Both quadrinucleated cyst
4. Vector for leishmaniasis:
 - A. Sandfly
 - B. Reduviid bugs
 - C. Tsetse fly
 - D. *Anopheles* mosquito
5. Babesiosis is transmitted by bite of:
 - A. *Anopheles*
 - B. Sandfly
 - C. Mite
 - D. Tick
6. Which stage of the malaria parasite causes relapse?
 - A. Sporozoite
 - B. Trophozoite
 - C. Merozoite
 - D. Hypnozoites
7. The main reservoir of *Balantidium coli*:
 - A. Cattle
 - B. Man
 - C. Sheep
 - D. Pig

8. Most common manifestation of congenital toxoplasmosis:
- A. Lymphadenopathy
 - B. Chorioretinitis
 - C. Myocarditis
 - D. Encephalitis
9. Which statement is false about *Cryptosporidium parvum*?
- A. Developmental stages of the parasite occur inside parasitophorous vacuole
 - B. High infective dose
 - C. Large number of animal reservoir
 - D. It causes diarrhoea in AIDS patients
10. Humans acquire *cysticercus cellulosae* infection by all except:
- A. Ingestion of Contaminated vegetables
 - B. Autoinfection
 - C. Reverse peristalsis
 - D. Ingestion of contaminated pig' meat
11. Carcinoma of urinary bladder is associated with which of the following parasites?
- A. *Schistosoma japonicum*
 - B. *Schistosoma mansoni*
 - C. *Schistosoma haematobium*
 - D. *Schistosoma intercalatum*
12. Which of the following is called as lung fluke?
- A. *Clonorchis sinensis*
 - B. *Ascaris lumbricoides*
 - C. *Strongyloides stercoralis*
 - D. *Paragonimus westermani*
13. Which of the following microfilaria comes to peripheral blood in the daytime?
- A. *Wuchereria bancrofti*
 - B. *Brugia malayi*
 - C. *Loa loa*
 - D. *Brugia timori*
14. Cyclops acts as vector for transmission for all the following parasitic infections except:
- A. Diphyllbothriasis
 - B. Dracunculiasis
 - C. Gnathostomiasis
 - D. Malaria
15. In humans, malarial parasites multiply by
- A. Binary fission
 - B. Budding
 - C. Gametogony
 - D. Schizogony

16. Xenodiagnosis is useful in
- A. *Wuchereria bancrofti*
 - B. *Trypanosoma cruzi*
 - C. *Trichinella spiralis*
 - D. All of the above
17. Vaginal discharge in *Trichomonas vaginitis* is _____
- A. Colourless
 - B. Yellow
 - C. Curd- white
 - D. Blood stained
18. Winterbottom sign in sleeping sickness refers to
- A. Unilateral conjunctivitis
 - B. Posterior cervical lymphadenitis
 - C. Narcolepsy
 - D. Transient erythema
19. Malaria is not seen in patients with
- A. G6PD deficiency
 - B. Sickle cell trait
 - C. Duffy negative blood group
 - D. All of the above
20. Frenkel's skin test is positive in
- A. Spinal cord compression
 - B. Toxoplasmosis
 - C. Pemphigus
 - D. Pemphigoid
21. The infective form of *Balantidium coli* is
- A. Tachyzoites
 - B. Cyst
 - C. Sporozoite
 - D. Trophozoite
22. Which of the following statement is true in respect to trematodes
- A. Dorsoventrally flattened
 - B. Intermediate host is snail
 - C. Hermaphrodite except schistosomes
 - D. All of the above
23. The second intermediate host of *Fasciola hepatica* is
- A. Snail
 - B. Fresh water fish
 - C. Crab
 - D. Aquatic plants

24. 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
25. 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
26. Blood-sucking vector may transmit _____
- A. *Ascaris lumbricoides*
 - B. *Ancylostoma duodenale*
 - C. *Strongyloides stercoralis*
 - D. *Plasmodium spp.*
27. A 30-year-old female having habit of keeping her contact lenses in tap water. She noticed deterioration of vision and visited an ophthalmologist who diagnosed her with severe retinitis. Culture of the water as well as vitreous fluid would most likely reveal:
- A. *Naegleria fowleri*
 - B. *Entamoeba histolytica*
 - C. *Acanthamoeba*
 - D. *Entamoeba coli*
28. Diagnosis of which of the following parasite uses Entero-test?
- A. *Cyclospora* species
 - B. *Entamoeba histolytica*
 - C. *Giardia lamblia*
 - D. *Dientamoeba fragilis*
29. Oriental sore is caused by:
- A. *Leishmania mexicana* complex
 - B. *Leishmania braziliensis* complex
 - C. *Leishmania tropica*
 - D. *Leishmania chagasi*
30. Which is true about *Plasmodium falciparum*?
- A. High level of parasitemia
 - B. It invades erythrocytes of all ages
 - C. Its erythrocytic schizogony take place in the capillaries of internal organs
 - D. All of the above

SECTION II: SHORT ANSWER QUESTIONS

(20 MARKS)

Attempt ALL questions

31. [4 Marks] Differentiate between direct and indirect life cycle.
32. [4 Marks] List free living amoeba and give example of infections they cause.
33. [4 Marks] List various larval forms of helminths found in man
31. [4 Marks] Describe cercarial dermatitis (swimmer's itch)
34. [4 Marks] Differentiate between trophozoite and cyst forms of protozoa.

SECTION III: LONG ANSWER QUESTIONS

(20 MARKS)

Attempt ALL questions

32. [10 Marks] Describe the life cycle, pathogenesis and laboratory diagnosis of *Leishmania donovani*.
33. [10 Marks] With aid of a diagram describe the morphology of lumen-dwelling flagellate, *Trichomonas vaginalis*.