



**AMREF INTERNATIONAL UNIVERSITY
SCHOOL OF MEDICAL SCIENCES**

DEPARTMENT OF PHYSIOTHERAPY

BACHELOR OF SCIENCE IN PHYSIOTHERAPY

END OF JANUARY-APRIL 2023 SEMESTER EXAMINATIONS

UNIT CODE: PHT 124 UNIT NAME: MEDICAL PARASITOLOGY

DATE: Friday 14th April 2023

TIME: TWO HOURS

START: 11:15 am STOP: 1:15 pm

Instructions

- 1) This paper has three sections: Section A, Section B and Section C
- 2) Answer **ALL** questions in Section A and Section B and only one question in Section C
- 3) Use the University examination booklets provided
- 4) Re-writing the questions on your answer sheet is unnecessary
- 5) Do not write on the question paper

MULTIPLE CHOICE QUESTIONS: SECTION A (1 MARKS EACH)

1. The most common form of asexual reproduction in protozoa is called as-----
 - A. Binary fission
 - B. Multiple fission
 - C. Both
 - D. None
2. Protozoal parasites belonging to class Rhizopoda are characterized by having
 - A. Cilia
 - B. Flagella
 - C. Cyst
 - D. Rhizopoda
3. Amoebic dysentery in man and animals is caused by
 - A. *Entamoeba (E.) coli*
 - B. *E. gingivalis C*
 - C. *E. histolytica*
 - D. None
4. In human beings, *Trypanosoma brucei* caused a disease called as
 - A. African Trypanosomiasis
 - B. Sleeping sickness
 - C. Both
 - D. Nagana
5. Common name of *Glossina* species is
 - A. Tsetse fly
 - B. Horse fly
 - C. Both
 - D. None
6. Which of the following drugs is effective against *Trichomonas vaginalis*
 - A. Penicillin
 - B. Streptomycin
 - C. Metronidazole
 - D. Pentamidine
7. Which of the following classes of immunoglobulins is important in immunity to *T. vaginalis*?
 - A. IgA
 - B. IgG
 - C. IgE
 - D. IgM

8. How long after infection with *Trichomonas vaginalis* do clinical symptoms begin
- A. < 24 Hours
 - B. 1-5 Days
 - C. 5-10 Days
 - D. 1-4 Weeks
9. *Giardia lamblia* is usually transmitted
- A. by ingestion of contaminated food or water
 - B. by intermediary host
 - C. Both
 - D. None
10. Gastro-intestinal disturbances associated with giardiasis include
- A. Flatulence
 - B. Bloating
 - C. Purple burbs
 - D. All above
11. All species of *Leishmania* in human are morphologically
- A. Similar
 - B. Partially similar
 - C. Different
 - D. Partially different
12. Each of the following statements concerning *Ascaris lumbricoides* is correct except:
- A. *Ascaris lumbricoides* is one of the largest nematode
 - B. *Ascaris lumbricoides* can cause pneumonia
 - C. Both dogs and cats are intermediate host of *Ascaris lumbricoides*
 - D. *Ascaris lumbricoides* is transmitted by ingestion of eggs
13. Life cycle of a typical trematode has-----different life stages
- A. 5
 - B. 6
 - C. 7
 - D. 8
14. Nervous system of Cestodes is present in
- A. Scolex
 - B. Bothria
 - C. Bothridiate
 - D. Proboscis
15. Body of nematodes is covered with
- A. Cuticle
 - B. Dermis
 - C. Hypodermis
 - D. None of above

16. The main defense against parasitic diseases is
- A. Vaccination
 - B. Cleanliness
 - C. Deworming
 - D. Antibiotics
17. Maturation of Gastrointestinal nematodes mostly occurs in
- A. Ground/soil
 - B. Vegetation
 - C. Intermediate host
 - D. Gastrointestinal tract
18. The larval form of *Taenia solium* is called_____.
- A. Cysticercus cellulosae
 - B. Cysticercoid
 - C. Cysticercus bovis
 - D. Hydatid cyst
19. What is the intermediate host for schistosomes?
- A. Soil.
 - B Snails.
 - C Humans.
 - D. Raw sewage.
20.is where both organisms benefit from their association.
- A Parasitism.
 - B. Commensalism.
 - C. Saprophytism.
 - D Mutualism.
21. An intestinal flagellate species known as the only common pathogenic protozoan found in the duodenum and jejunum of humans is:
- A. Entamoeba histolytica.
 - B. Giardia lamblia.
 - C. Balantidium coli.
 - D Trichomonas vaginalis.
22. Malarial parasites reproduce in:
- A Lung tissue
 - B. Brain tissue
 - C. Red blood cells
 - D. Placental tissue
23. Which parasitic infection is often associated with fecally contaminated water (fecal-oral) or food?
- A. Cryptosporidium parvum.
 - B. Toxoplasma gondii.
 - C. .A and B above.
 - D. Giardia lamblia.

24. The most environmentally resistant form of many parasites is a stage of development called the:
- A. Cyst.
 - B. Spore.
 - C. Vegetarian.
 - D. Trophozoite.
25. The main host of *Toxoplasma gondii* is:
- A. Pregnant women.
 - B. Cats.
 - C. Mosquitoes.
 - D. Rats.
26. Human sleeping sickness can be caused by:
- A. *Leishmania donovani*.
 - B. *Trypanosoma cruzi*
 - C. *Leishmania tropica*.
 - D. *Trypanosoma brucei* spp.
27. Which of the following worms have eggs that hatch in 48 hours to give rhabditiform larva and molt to filariform larva after 2 days?
- A. *Enterobius vermicularis*
 - B. *Ancylostoma duodenale*
 - C. *Strongyloides stercoralis*
 - D. Both B and C are correct.
28. The infective stage of the Hookworms is:
- A. Eggs in feces.
 - B. Embryonated eggs when ingested.
 - C. Filariform larva penetrating the skin (usually the foot)
 - D. All of the above.
29. Which of the following is a whip-worm?
- A. *Trichinella spiralis*
 - B. *Trichuris trichiura*
 - C. *Necator americanus*
 - D. *Strongyloides stercoralis*
30. Which of the following are commonly known as blood flukes?
- A. *Schistosoma* species
 - B. *Hymenolopsis nana*
 - C. Nematodes
 - D. Cestodes

SECTION B: (20 MARKS)

Attempt ALL Questions

31. List the classes of the medically important protozoa. [2 Marks]
32. Outline the general characteristics of nematodes. [2½ Marks]
33. Outline three mechanisms of parasite escaping host defense [6 marks]
34. List the medically important *Schistosoma* species. [2½Marks]
35. Describe the pathogenesis of *Entamoeba histolytica*. [3 Marks]
36. State the *Leishmania* species and their clinical conditions. [4 Marks]

SECTION C: (20 MARKS)

Answer any ONE Questions

37. Discuss the following features of *Strongyloides stercoralis*:
- a) Morphology [3 Marks]
 - b) Lifecycle. [6 Marks]
 - c) Pathogenicity and clinical features. [7 Marks]
 - d) Diagnosis. [2 Marks]
 - e) Treatment. [2 Marks]
38. Describe the etiology, life cycle, pathogenesis, laboratory diagnosis and treatment of toxoplasmosis. [20 Marks]
39. a. Discuss the various reactions of a host to parasite infection. [10 Marks]
b. Describe the various effects of a parasite on its host [10 mark]