

Medical Parasitology Exam 3

SECTION A (40 mks)

1. The relationship between two organisms in which one is benefited by the relationship and the other is neither benefited nor harmed is
 - a. Mutualism
 - b. Phoresis
 - c. Commensalism
 - d. Parasitism

2. Permanent parasites _____
 - a. Parasites that live inside the host
 - b. Parasites that live their entire life in the host
 - c. Parasites that completely dependent on the host during part or whole of its life cycle
 - d. Parasites that live on the host

3. A reservoir host is a host _____ -
 - a. The level of pathogen can be high enough that a vector such as a mosquito that feeds on it will probably become infectious.
 - b. Which the parasite reaches sexual maturity
 - c. That can harbor a pathogen indefinitely without getting ill but it may pass the infection to other hosts
 - d. That does not allow transmission to the definitive host and thereby prevents the parasite from it's life cycle

4. Ascaris lambricoides is transmitted through
 - a. Blood transfusion
 - b. Skin penetration
 - c. Inhalation
 - d. Ingestion of contaminated food and water

5. Which one of the following statements is FALSE about protozoans
 - a. Protozoan range from 10 – 50 micrometers but can grow up to 1 mm and are easily seen under a microscope.
 - b. They move around with whip-like tails called flagella, hair-like structures called cilia, or foot-like structures called pseudopods, others do not move at all.
 - c. As predators they prey upon unicellular or filamentous algae, bacteria and micro fungi. All protozoa digest their food in stomach-like compartments called vacuoles.
 - d. Protozoan life stages alternate between proliferative stages trophozoites and dormant cysts.

6. Protozoans belonging to the class Sarcodina _____
 - a. have one or more flagella
 - b. Move by means of cilia
 - c. form spores at one stage in their life cycle
 - d. Move by pseudopodia

7. The infective stage of malaria parasites is _____
 - a. Merozoites
 - b. Sporozoites
 - c. Trophozoites
 - d. Gametocytes

8. The gold standard method for detecting *Toxoplasma gondii* is
 - a. Microscopy
 - b. Sabin-Feldman Dye Test
 - c. Culture
 - d. Polymerase chain reaction

9. _____ invades the central nervous system through the olfactory mucosa.
 - a. *Naegleria fowleri*
 - b. *Entamoeba histolytica*
 - c. *Anopheles gambiae*
 - d. *Schistosoma mansoni*

10. Which one of the following is not an intestinal flagellate?
 - a. *Retormonas intestinalis*
 - b. *Enteromonas hominis*
 - c. *Chilomastix mesnili*
 - d. *Entamoeba histolytica*

11. The metacyclic trypanosomes _____ occupy a posterior position in the gut of the insect vector and are passed out in the faeces.
 - a. *Trypanosoma gambiense*
 - b. *Trypanosoma cruzi*
 - c. *Trichomonas hominis*
 - d. *Leishmania donovani*

12. Buffy coat examination is used for identification of
 - a. *Plasmodium falciparum*
 - b. *Trypanosoma rhodesiense*
 - c. *Leishmania aethiopica*
 - d. *Babesia bovis*

13. Which one of the following is the drug is NOT used for treatment of trypanosomiasis?
 - a. Pentamidine
 - b. Suramin
 - c. Eflornithine
 - d. Albendazole

14. The life cycle stages of *Leishmania* species are?
 - a. Amastigotes and promastigotes
 - b. Amastigotes and epimastigotes
 - c. Trypomastigotes and metacyclic promastigotes
 - d. Trypomastigotes and epimastigotes

15. *Balantidium coli* inhabits _____
 - a. Large intestine, caecum and terminal ileum
 - b. Liver, small intestines and throat
 - c. Central nervous system and lungs
 - d. Eyes, nose and ears

16. The infective stage of *Isospora belli* is?
 - a. Oocyst
 - b. Tachyzoites
 - c. Cysts
 - d. Sporozoites

17. *Hymenolepis nana* lodges in _____
 - a. Intestinal tract
 - b. Lungs
 - c. Subcutaneous tissues
 - d. Spleen and liver

18. In the life cycle of *Echinococcus granulosus* the eggs hatch in the?
 - a. Large intestines of the definitive host
 - b. Small intestines of the intermediate host
 - c. Lungs of the definitive host
 - d. Intestinal lining of the definitive host

19. Which one of the following is not a developmental stage schistosoma species?
 - a. Metacercaria
 - b. Cercaria
 - c. Schistosomula
 - d. Miracidium

20. *Loa loa* is transmitted by
 - a. Tabanid flies
 - b. Tse tse flies
 - c. Sand flies
 - d. Deer fly

SECTION B (40mks)

1. Outline the effect of parasitism on the host (5mks)
2. Describe the clinical presentation of *Toxoplasma gondii* (5mks)
3. Describe the pathology of complicated malaria (5mks)
4. Describe the clinical presentation of hookworm infection
5. Describe the life cycle of *Clonorchis sinensis*
6. Describe the clinical presentation of Leishmaniasis (5mks)
7. Outline the preventive measures of fascioliasis (5mks)
8. Describe the epidemiology of *Ascaris lumbricoides* (5mks)

SECTION C (40mks)

1. A patient comes to the hospital presenting with symptoms of severe cholera like diarrhea,

examination of the stool reveals sporulated cysts. Describe this parasitic infection in terms of

- a. Etiological agent and transmission (4mks)
 - b. Life cycle (8mks)
 - c. Pathogenesis (4mks)
 - d. Treatment and prevention (4mks)
2. Describe the host immune response to parasitic infections (10mks)
 3. Describe the evasion mechanisms parasites from the host defense mechanisms (10mks).