



KENYATTA UNIVERSITY
UNIVERSITY EXAMINATIONS 2011/2012
SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE (MEDICAL LABORATORY)

HML 211: MEDICAL PARASITOLOGY

DATE: Monday 2nd April 2012 **TIME:** 8.00a.m – 10.00a.m

INSTRUCTIONS

SECTION A: SHORT ESSAY QUESTIONS. ANSWER ALL QUESTIONS IN THIS SECTION (5 MARKS)

1. Give the infective stage for each of the following parasite
 - a) *Ascaris lumbricoides*
 - b) *Necator americanus*
 - c) *Taenia saginata*
 - d) *Schistosoma mansoni*
 - e) *Fasciola hepatica*
2. Give the genesis of diarrhoea in:
 - a) *Entamoeba histolytica* infection
 - b) *Giardia lamblia* infection
3. Which are the main soil transmitted helminthes and what is the infective stage of each?
Indicate one clinical complication associated with the infection.

SECTION B: LONG ESSAYS QUESTIONS. ANSWER ANY ONE OF THE FOLLOWING QUESTIONS WHERE NECESSARY.

1. A veteran soldier in a USA hospital died of complications due to massive *Strongyloides stercoralis* infections fifteen years after he was infected and treated for the infection during the armed forces service in Asia. There was not second exposure to the infection: Briefly describe the conditions which led to a relapse of the infection and the subsequent death. [20marks]

2. With the aid of a diagram, describe the life cycle of *Plasmodium falciparum* infection. [20marks]

SECTION C

1. Which ONE of the disease below may be considered a group infection?
 - a) Enterobiasis
 - b) Strongyloidiasis
 - c) Ascariasis
 - d) Trichuriasis
 - e)
2. Eosinophilia is:
 - a) More common in Helminth than in protozoa infections
 - b) More common in Protozoa than in helminth infections
 - c) More common in insect bites
 - d) More common in granuloma cases
3. Which ONE of the following is a tissue parasites?
 - a) *Ancylostoma duodenal*
 - b) *Wuchereria bancrofti*
 - c) *Trichuris trichiura*
 - d) *Trichinella spiralis*
4. Which parasite causes *pruritus ani*?
 - a) *Strongyloides stercoralis*
 - b) *Enterobius vermicularis*
 - c) *Ascaris lumbricoides*
 - d) *Trichuris trichiura*
5. Which infection is caused by consuming infected pork?
 - a) *Taenia saginata*
 - b) *Taenia solium*
 - c) *Diphyllobothrium latum*
 - d) *Echinococcus granulosus*
6. Fever in parasitic infections is caused by:
 - a) Stimulation of endogenous pyrogens
 - b) Splenic enlargement
 - c) Chronic effects of the infection
 - d) The pathology of the parasitic disease

7. Scotch-tape smear is the diagnostic technique mainly for:
- Strongyloides stercoralis*
 - Enterobius vermicularis*
 - Ascaris lumbricoides*
 - Trichuris trichiura*
8. Mechanical transmission of parasites may be effected by:
- Mosquitoes
 - Sandflies
 - Houseflies
 - Ticks
9. Cerebral malaria is caused by:
- Plasmodium ovale*
 - Plasmodium vivax*
 - Plasmodium malariae*
 - Plasmodium falciparum*
10. Which statement is not true of diarrhoea presented by malaria patients?
- It is caused by ulceration due to sequestration in the intestine
 - Diarrhoea is due to malaria pigment
 - Diarrhoea is due to malarial paroxysms.
 - This is bloody diarrhoea
11. Phlebotomus is the vector for:
- Leishmaniasis
 - Sleeping sickness
 - Chagas disease
 - Filariasis
12. Which of the following parasite is associated with *Tunga penetrans*?
- Typhus
 - Jiggers
 - Plaque
 - myiasis
13. Which of the following is associated with facultative parasite?
- It entirely depends on host
 - It has both free-living and parasitic life cycles
 - It is an endoparasite
 - There is a parasite-host commensalism

14. *Bulinus* species of fresh water snails is a vector for:
- a) *Schistosoma mansoni*
 - b) *Schistosoma haematobium*
 - c) *Schistosoma intercalatum*
 - d) *Schistosoma japonicum*
15. Skin snip test is applied in the diagnosis of:
- a) *Onchocerca volvulus*
 - b) *Brugia malayi*
 - c) *Loa loa*
 - d) *Wuchereria bancrofti*
16. Kala-azar is an infection caused by:
- a) *Trypanosoma rhodesiense*
 - b) *Wuchereria bancrofti*
 - c) *Fasciola hepatica*
 - a) leishmaniasis
17. Consumption of insufficiently cooked infected fish may cause:
- a) *Diphyllobotrium latum*
 - b) *Taenia saginata*
 - c) *Taenia solium*
 - d) *Hymenolepis nana*
18. Which is the mode of infection for Cysticercosis in human host?
- a) Faecal-oral contamination with the parasite egg
 - b) Transmission by cyclops
 - c) As human ingest flesh containing cysticercus
 - d) Direct skin penetration
19. Which ONE of the following is associated with rectal prolapse?
- a) *Enterobius vermicularis*
 - b) *Ascaris lumbricoides*
 - c) *Trichuris trichiura*
 - d) *Ancylostoma duodenale*
20. Which of the following arthropods transmit trypanosoma infection?
- a) Reduviid bugs
 - b) Tsetse flies
 - c) Sandflies
 - d) *Culex* female mosquitoes

21. Which parasite transmits bubonic plague?
- a) *Tunga penetrans*
 - b) *Pulex irritans*
 - c) *Xynopsylla cheopis*
 - d) *Ctenocephalides canis*
22. Which one of the following statements is associated with Taeniasis?
- a) Consumption of cysticerci
 - b) Consumption of infective eggs stage from contaminated vegetables
 - c) Development of tumors in the intestine
 - d) Consumption of contaminated milk
23. Which of the following parasites is a ciliate?
- a) *Entamoeba coli*
 - b) *Balantidium coli*
 - c) *Giardia lamblia*
 - d) *Trichomonas hominis*
24. For which of the following do humans act as the intermediate host?
- a) *Giardia lamblia*
 - b) *Ancylostoma duodenale*
 - c) *Plasmodium falciparum*
 - d) *Ascaris lumbricoides*
25. What causes *Ascaris* pneumonitis?
- a. Migrating larvae
 - b. Ectopic ascariasis
 - c. Adult worm toxins
 - d. Granuloma in the lungs
26. Myiasis may be caused by:
- a) *Phlebotomus martini*
 - b) *Musca domestica*
 - c) *Glossina palpalis*
 - d) *Fannia canicularis* Blaiter oviolaris
27. Which of the following is NOT TRUE of Ixodidae-ticks?
- a) They transmit relapsing fever
 - b) They are hard body ticks
 - c) They transmit spotted fever
 - d) They transmit Q fever

28. Which one of the following conditions is associated with *Schistosoma haematobium* infection?

- a. Loss of 0.6 – 37 mg of iron daily
- b. Necrosis of lymph nodes
- c. Vitamin B12 deficiency
- d. Hypersplenism

29. Tissue damage due to schistosoma infection is mainly caused by:

- a) Host immune response to the parasite egg
- b) Parasite eggs in the circulation
- c) Blockage of blood vessels by adult worms
- d) Allergic reaction due to worm antigens

30. Which one of the following parasite is associated with still birth?

- a) *Isospora belli*
 - b) *Sarcocystis lindermanni*
 - c) *Toxoplasma gondii*
 - d) *Balantidium coli*
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