

CHUKA

UNIVERSITY



UNIVERSITY EXAMINATIONS

EXAMINATION FOR THE AWARD OF DEGREE OF BACHELOR OF PUBLIC HEALTH

PUHE 115: MEDICAL PARASITOLOGY

STREAMS: PUHE

TIME: 2 HOURS

DAY/DATE: MONDAY 14/04/2025

8.30 A.M. – 10.30 A.M.

**INSTRUCTIONS**

- Answer all questions in section **A and B**, and **any other two in section C**
- All answers in the booklet

**SECTION A: (TRUE OR FALSE)**

1. In symbiosis type of parasitism

- A, both organism benefits
- B, none of the organism benefits
- C, only the parasite benefit
- D, none of the above

2. The protozoa *Endolimax nana*,

- A, lives as a harmless commensal in large intestine of man
- B, lives as pathogenic protozoa in large intestines of man
- C, lives as both pathogenic and non-pathogenic parasite in large intestines of man
- D, There is no intestinal protozoa called *Endolimax nana*

3. Entamoeba histolytica,

- A, is able to show some extra intestinal existence, e.g. hepatic
- B, Trophozoites of E Entamoeba histolytica releases an enzyme called histolysin which is able to break up cells and destroy tissues (cytolytic)
- C, E.histolitica is a non-pathogenic protozoa found in large intestines of man
- D, E.histolitica signs and symptoms may include liver abscess, abdominal pains, and diarrhea with blood

4. In amoebic dysentery,

- A, Trophozoites of E.histolitica are present
- B, Charcoal lyden crystals may be present
- C, Trophozoites of E.histolitica are absent
- D, charcoal lyden crystals are not found

5. In bacillus dysentery,

- A, Trophozoites of E.histolitica are present
- B, many puss cells are present
- C, eosinophilia is present
- D, no pus cells are found
- D, there is no eosinophilia

6. About Entamoeba coli,

- A, It is a pathogenic intestinal protozoa
- B, E coli is a non-pathogenic intestinal protozoa
- C, is able to show some extra intestinal existence, e.g. hepatic
- D, Trophozoites of E coli releases an enzyme called histolysin which is able to break up cells and destroy tissues (cytolytic)

7. The following is the habitat of protozoa (sarcocystis)

- A, Trichomonas vaginalis - teeth and gum
- B, giardia lamblia - duodenum
- C, chilomestic meshnili - caecum

- D, *Trichomonas tenax* - vagina
8. Steatorrhoea (yellow and fatty stool) and malabsorption is associated with,
- A, *giardia lamblia*
  - B, *Entamoeba histolytica*
  - C, *Entamoeba coli*,
  - D, Hook worm
9. The sporogony stage of malaria parasite life cycle is also referred to as,
- A sexual phase
  - B, asexual phase
  - C, extrinsic phase
  - C, invertebrates phase
10. The schizogony stage of malaria parasite life cycle is also referred to as,
- A, asexual phase
  - B, intrinsic phase
  - C, vertebrate phase
  - D, sexual phase
11. Some malaria are known to relapse (come back)
- A. this occurs when sporozoites taken by some liver cells are imprisoned but do not die,
  - B. this is associated with *plasmodium vivax*
  - C. this is associated with *plasmodium ovale*
  - D. this is associated with *plasmodium falciparum*
12. Trypanosomiasis is associated with:
- A. *Trypanosoma chancre* (sore)
  - B. winter bottom sign
  - C. Hematuria
  - D. hematemesis

13. The mode of infection of the following nematodes is through penetration.
- A, AScaris lumbricoides
  - B, Enterobius vermicularies
  - C, Ancylostoma duodenale
  - D, Necator americanus
14. About AScaris lumbricoides;
- A, it's the largest intestinal nematode
  - B, it is also known as round worm
  - C, May cause a condition called "Loffler's syndrome"
  - D, Adult worms may cause appendicitis and intestinal obstruction
15. About Enterobius vermicularies:
- A, scotch tape technique is most reliable and specific
  - B, mode of infection may include person to person
  - C, auto infection and retro infection is common
  - D, wet preparation/direct technique is most reliable and specific
16. The following is the pathology of Trichuris trichiura,
- A, hypervolemia
  - B, Rectal prolapse in heavy infection
  - C, ascitis
  - D, Abdominal pains and mucus diarrhoea
17. As regard to hookworm;
- A, A.duodenale is more pathogenic because it's usually larger than N.americanus, its armed with teeth and its more migratory thus biting many parts
  - B, it feeds primarily on blood thus causing iron deficiency anemia
  - C, praziquantel it the drug of choice
  - D, it is associated with itching "Ground itch" at the site of penetration

18. Charcoal Leyden crystals is associated with

- A, Entamoeba histolytica
- B, Trichuris trichiura
- C, Giardia lamblia
- D, Hookworms

19. Concerning taenia

- A, T. solium is associated with pork
- B, T. saginata is associated with pork
- C. saginata is associated with beef
- D, T. solium is associated with beef

20. Echinococcus granulosus

- A, it is also called dog tape worm
- b, the disease is zoonotic
- c. it is found mostly in areas with close association between animals, dogs and human
- d.hydatid cyst can cause ascitis due to obstruction of intestines

**SECTION B (answer all the questions)**

- a. Briefly classify leishmania disease according to the organ they affect (3 marks)
- b. Name molluscs involved in transmission of: (2 marks)
  - i . Schistosoma mansoni
  - ii. Schistosoma haematobium
- c. state the common name used to identify the following parasites and diseases(5mks)
  - i. Enterobius vermicularies
  - ii. AScaris lumbricoides
  - iii. Ancylostoma duodenale/Necator americanus
  - iv. Schistosomiasis
  - v. Trypanasomiasis

**SECTION C ANSWER ONLY any 2 QUESTIONS**

1. Describe mode of transmission, life cycle, prevention and control of infections by Plasmodium falciparum. (10 marks)
2. Discuss the general pathogenicity /pathology of parasitic infection, prevention and control. (10 marks)
- 3 a. Briefly classify the parasites of medical importance (5 marks)
- b. Describe 4 modes of infection to human by helminthes citing one example (5 marks)

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