



# **TECHNICAL UNIVERSITY OF MOMBASA**

***Faculty of ENGINEERING & TECHNOLOGY***

DEPARTMENT OF MEDICAL SCIENCES

FACULTY OF APPLIED AND HEALTH SCIENCES

CMLS 13 M MID ENTRY

## **AML 1106: MEDICAL PARASITOLOGY I**

END OF SEMESTER EXAMINATIONS

**SERIES:** DECEMBER 2013

**TIME:** 2 HOURS

### **INSTRUCTIONS:**

1. This paper consists of Two sections, Answer all questions in A and B.
2. This paper consists of Eight printed pages

## SECTION A

1. *Giarcha lamblia* trophozoities has
  - A. Aggeda
  - B. flagecla
  - C. flagella
  - D. Flagella
2. Identification of a hiophozoite with food vaconle and containing red blood cells in the cytoplasm is a diaquostic feature of:
  - A. Gutamoeba coli
  - B. Entamoeba hystolylica
  - C. Balantidium coli
  - D. Trichomonas vaginalis
3. *Leishmania spelies* in Kenya is transmitted by
  - A. Simulium flies
  - B. Chrysopes flies
  - C. Phelobotomine flies
  - D. Culi coides
4. Pathrogenic ciliate is diagmised in the laboratory by examining stool looking for the presence of
  - A. An Iodine cyst
  - B. Flagula
  - C. A large cycst
  - D. Non nucleate cyst
5. *Toxoplasma* are classified in the following class:
  - A. coclidia
  - B. sporozoa
  - C. gimeria
  - D. ciliata
6. Pathology associated with Giardiasis includes
  - A. Halmolytic anaemia
  - B. Leakamia
  - C. Megaloblastic anaemia
  - D. Normolytic anaemia

7. Which one of the following is not a flagellate

- A. *Trichomonas vaginalis*
- B. *Chilomastic mensineli*
- C. *Trichomonas homims*
- D. *Entamoeba histolylea*

8. Which one of the following can be a mostly likely a vector of balantidiasis

- A. Mosquitoes
- B. Ticks
- C. Louse
- D. Cockraches

Apicomplex organisms includes:

- A. Serous
- B. Connective
- C. Muscular
- D. Epithelium
- E. Nervous.

9. Ball and socket joints have rounded head or ball which articulates in a socket. Which one of these is not?

- A. Trematodes
- B. Pseudopodes
- C. Ciliates
- D. Plasmodium

10. Kala-azar is a form of leishmaniasis also referred to as:

- A. Visceral leishmaniasis
- B. Espundia
- C. Mucocutaneous leishmaniasis
- D. Oriental sore

11. Mature cyst of *Entamoeba coli* contains

- A. Live nuclei
- B. Eight nuclei
- C. Four nuclei
- D. One nucleus

12. Which of the following is a type of lifecycle of an organism where it is completed within a single host.

- A. Monoxenous
- B. Monogean
- C. Monozoic

- D. monoecious
13. Most pathogenic species of plasmodium is
- A. P. falciparum
  - B. P. malarial
  - C. P. orale
  - D. P. vivax
14. Sexual stage of cryptosporidium species is referred to as
- A. merozoite
  - B. meront
  - C. macrogamete
  - D. Immature oocyte
15. Transmission of naegleria fowleri to human host occurs via?
- A. Housefly containing food and water for drinking
  - B. Mosquito vector
  - C. Through the skin penetrating on bare foot
  - D. Through the nostril when in contact with freshly contaminated water.
16. The African Trypanosomiasis is transmitted by:
- A. glossina
  - B. triatoma
  - C. cimex
  - D. Blastella
17. Which one of the following is not an intestinal coccidian
- A. Isospora belli
  - B. Sarcocystis hominis
  - C. cryptosporidium
  - D. Toxoplasma gondii
  - E. None of the above
18. Protozoa which infects red blood cells includes
- A. Toxoplasma
  - B. Isospora
  - C. Plasmodium
  - D. Cestodes
19. Which of the following solutions can not be used for direct microscopy in parasitological laboratory..
- A. Eosin
  - B. Iodine
  - C. Physiological saline
  - D. 10% formalin
20. Intermediate host of trypanosoma brucei rhodesiense includes

- A. Tsetsefly
  - B. Triatomine bug
  - C. Horsefly
  - D. Sandfly
21. The following are preventive measures of entamoeba histolytica except
- A. Hand washing after defecation and before eating
  - B. Covering of foods
  - C. Avoid eating green salads
  - D. Avoid unprotected sexual intercourse
22. Amoeba meningoenkephalitis can be diagnosed from
- A. Stool/facial sample
  - B. Liver abscess aspirate
  - C. Urine
  - D. Cerebral spinal fluid.
23. Which one of the following is not a clinical feature of malarial infection
- A. Relapsing stage
  - B. Fever stage
  - C. Cold stage
  - D. Sweating stage
24. Complications of plasmodium infection includes the following except.
- A. Anaemia
  - B. Hypoglycaemia
  - C. Black water fever
  - D. Hypertension
25. Malaria infection can be transmitted through the following except
- A. Skin contact
  - B. Mosquito bite
  - C. Blood transfusion
  - D. Infections from needles and syringes contaminated with blood.
26. Staining techniques used for cytosporidia examination includes
- A. Gram stain
  - B. Giemsa stain
  - C. Kinyoun acid fast stain
  - D. Ziehl Nielsen stain

27. The colour of gametocytes cytoplasm of a female *P. falciparum* is
- A. pink
  - B. Red
  - C. White
  - D. Blue
28. Malarial stage transmitted by the vector is
- A. Zygote
  - B. Oocyst
  - C. Ookinete
  - D. Sporozoite
29. The aim of anthropophilic vector is
- A. For food purposes
  - B. For film
  - C. For Nisance
  - D. For eggs maturation
30. The diagnostic feature of intestinal amoebiasis is
- A. Looking for mucoid stool specimen
  - B. Looking for trophozoite with bacteria
  - C. Looking for clumped Red blood cells in the trophozoite
  - D. Looking for Red blood cells in the stool specimen
31. The feature that differentiates between *P. falciparum* and *P. malarial* trophozoites is
- A. Double chromalin
  - B. Size of the host cell
  - C. Acolle form
  - D. Shape and size of the host cell
32. Comet shape is a characteristic appearance of
- A. *P. Ovale*
  - B. *P. vivax*
  - C. *P. malarial*
  - D. *P. falciparum*
33. Which one of the following has a direct life cycle
- A. *Trypanosoma cruzi*
  - B. *Trypanosoma gambiense*
  - C. *Trypanosoma b. Rhodisiense*
  - D. *Entamoeba histolytica*

34. The following are diagnostic methods of toxoplasmosis in the laboratory except
- A. Seriological test
  - B. Gremsa or field staining techniques
  - C. Animal inoculation
  - D. Direct stool microscopy.
35. The following are concentration methods used in parasitological laboratory except
- A. Formal ether method
  - B. Overnight sedimentation
  - C. Zinc floatation technique
  - D. Enter test
36. The use of chin of the malaria slides is
- A. Parasite concentration
  - B. Increasing sensitivity
  - C. Species identification
  - D. To examine small volume of blood
  - E. Myometrium
37. The best specimen used for the diagnosis of malaria is
- A. Venous blood
  - B. Arterial blood
  - C. Overnight blood
  - D. Fresh blood
38. Control of protozoan parasites involves
- A. Abandon some cultural behaviors
  - B. Hard working
  - C. Physical exercise
  - D. Personal hygiene
39. Identification of the free living amoeba (*Naegleria* species) is by:
- A. Utilisation of *Escherichia coli* bacteria
  - B. Increase in the C.S.F glucose and reduction in C.S.F proteins
  - C. Presence of poly morphonuclear of bacteria in C.S.F.
  - D. Trophicophilia
40. Diagnosis of malaria relies on the demonstration of ring forms in
- A. White blood cells
  - B. Plasma
  - C. Salivary glands of tsetse fly
  - D. Red blood cell

**SECTION B ANSWERS ALL QUESTIONS.**

- 1.a) State and explain (10marks)
- i) Parasitic factors
  - ii) Host factors
- b) Draw a well labeled diagram of *Giardia cambilia* trophozoite and give its lifecycle. (10marks)
- 2a) Describe the lifecycle of *Plasmodium falciparum*.
- b) Discuss the entero-test used to diagnose intestinal flagellates (20marks)
- 3) Discuss the preventive and control of intestinal protozoans (20marks)