



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences

DIPLOMA IN ENVIRONMENTAL HEALTH
FINAL EXAMINATION PAPER 2010

TITLE OF PAPER : MEAT PARASITOLOGY

COURSE CODE : EHS 208

DURATION : 2HOURS

MARKS : 100

INSTRUCTIONS : ANSWER ONLY FOUR QUESTIONS
: QUESTION ONE IS COMPULSORY
: EACH QUESTION CARRIES 25 MARKS.
: WRITE NEATLY
: BEGIN EACH QUESTION ON A
SEPARATE SHEET OF PAPER

**DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS
GRANTED BY THE INVIGILATOR**

7. Human fascioliasis is due to;
- A. Eating a liver infested with liver flukes
 - B. Eating uncooked green leafy salads or grass infested with liver flukes.
 - C. Eating uncooked green leafy salads infested with liver fluke cercaria or larvae.
 - D. Eating uncooked green leafy salads infested with liver fluke eggs
 - E. Eating a liver infested with cercaria or larvae.
8. Which of these tapeworms may infest rabbits or hares;
- A. *Hypoderma diana*
 - B. *Taenia hydatigena*
 - C. *Taenia multiceps*
 - D. *Taenia serialis*
 - E. *Taenia hydatigena*
9. Which larval stage in *Diphylobothrium latum* is infective in human;
- A. Coracidium larvae
 - B. Cysticercus larvae
 - C. Copepods larvae
 - D. Procercoid larvae
 - E. Plerocercoid larvae
10. Coccidiosis in poultry is caused by which parasite;
- A. *Coccidia avium*
 - B. *Eimeria scabra*
 - C. *Eimeria tenella*
 - D. *Eimeria stiedae*
 - E. *Eimeria zurnii*
11. Toxoplasmosis in human is caused by;
- A. *Toxoplasma gondii*
 - B. *Eimeria scabra*
 - C. *Eimeria perforans*
 - D. *Eimeria stiedae*
 - E. *Eimeria zurnii*
12. Which one of these diseases result in haemoglobinuria in cattle;
- A. Coccidiosis
 - B. Heart water
 - C. Babesiosis
 - D. Anaplasmosis
 - E. Toxoplasmosis

19. Which one of these statements is **not correct** about Anaplasmosis in cattle?
- A. It is mainly a disease of cattle but may also attack sheep and goats.
 - B. The main lesion is the distension of the gall bladder
 - C. The vector of importance is *Boophilus* species
 - D. It is sometimes known as the Black lung disease
 - E. The protozoa will parasitize red blood cells but does not destroy, so there is no haemoglobinuria
20. Which one of these statements is **not correct** about Warble flies?
- A. Large, two winged insects with hairy body
 - B. The larvae feed by penetrating the skin of animals and suck blood.
 - C. The larvae may be found on the wall of the oesophagus and subcutaneous tissue of the back
 - D. The larvae penetrate the mouth down the pharynx and then pass to the stomach
 - E. During feeding, the larvae enlarge the wound and also develop a foul-smelling necrotic area.
21. Myiasis is a condition that is caused by:
- A. When warbles flies bore through the hide in cattle
 - B. When larvae cause a lot of damage in their movement on the flesh
 - C. When larvae is deposited on a wound by blowflies
 - D. When hatched larvae penetrate the skin and wonder in the body
 - E. All of the statements are correct
22. Toxoplasmosis in human is transmitted by;
- A. food contaminated by pigs excrement
 - B. food contaminated by domestic cats excrement
 - C. eating pork or mutton with tissue cysts of the protozoa
 - D. blood sucking ticks
 - E. B and C
23. Which statement is **not true** in relation to Toxoplasmosis?
- A. Transplacental infection is common
 - B. Children are particularly at risk of infection
 - C. Milk of infected animals may contain the protozoa
 - D. Lesions are seen on the liver surface as irregular shaped whitish spots
 - E. In sheep, there is metritis, placentitis, and necrotic lesions in many organs of the fetus
24. Which statement is **not true** in relation to Trichinellosis?
- A. Trichinellosis is transmitted to human by eating raw or undercooked beef infected with the larvae of *Trichinella spiralis*
 - B. The worms after mating in the small intestines, the female deposits eggs in the lymph space.

- d) Using appropriate examples, explain the effects caused by parasites on food animals. (5)

[25 Marks]

Question 4

- a. During your ante-mortem inspection, what symptoms or signs may lead you to suspect a case of Heart water disease? (6)
- b. Since both parasites causing red water fever and gall-sickness attack the red blood cells, how can you differentiate each disease? (10)
- c. How do human acquire Toxoplasmosis diseases? (4)
- d. Which organs of pig's carcass are likely to harbour cysticercus cellulosae cysts? (5)

[25 Marks]

Question 5

- a) Explain the life cycle of 'beef tapeworm' (10)
- b) How would you control the human infestation by 'beef tapeworm'? (5)
- c) How would you control the transmission of hydatid cysts in humans? (5)
- d) Discuss the methods that can be adopted for the control of Trichinellosis disease. (5)

[25 Marks]