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**University Examinations 2016/2017**

THIRD YEAR, FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN ENTOMOLOGY/PARASITOLOGY.

**SZH 3300: PARASITOLOGICAL TEHCNIQUES**

**DATE: DECEMBER, 2016 TIME: 2 HOURS**

**INSTRUCTIONS: -** *Answer question* ***one*** *and any other* ***two*** *questions*

**QUESTION ONE (30 MARKS)**

1. A stool sample is brought to the laboratory for analysis. However, the lab manager sends it back with a note indicating that the sample has been rejected. Outline some of the reasons behind the lab manager’s rejection of the sample. (4 marks)
2. Outline the factors you would consider when collecting urine for S. haematobium and T. vaginalis (4 marks)
3. Briefly describe the buffy-coat technique for detection of microfilariae (5 marks)
4. While working in a remote locality without electricity, describe how you can preserve the diagnostic value of stool samples when prolonged delays are expected before examination. (4 marks)
5. List any two parasites that can be isolated from the following specimens (6 marks)
6. Urine
7. Lymphnode aspirate
8. Sputum
9. Compare and contrast between thick and thin blood films (4 marks)
10. Name the parasites that are diagnosed using the following techniques (3 marks)
11. Modified Ziehl-Neelsen staining technique
12. Modified Kato-Katz technique
13. Strout technique

**QUESTION TWO (20 MARKS)**

Discuss parasitological examination of C.S.F. (20 marks)

**QUESTION THREE (20 MARKS)**

1. Discuss Amplified Fragment Length polymorphism (AFLP) as a diagnostic tool in parasitology. (10 marks)
2. Outline the precautionary measures to be observed in a parasitology lab to prevent the spread of infections. (10 marks)

**QUESTION FOUR (20 MARKS)**

A direct examination of formed stool from a patient with symptoms consistent with Entamoeba histolytica does not reveal any parasite. Discuss in detail how you would increase the probability of isolating the parasite. (20 marks)