"Investing in Africa's Future"

COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES

DEPARTMENT OF BIOMEDICAL AND LABORATORY SCIENCES

BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS

NSLS 207: PARASITOLOGY, MYCOLOGY & VIROLOGY PRACTICAL EXAMINATION

END OF SECOND SEMESTER FINAL EXAMINATION

April 2022

LECTURER: Dr S Mutambu

DURATION: 3 HOURS

INSTRUCTIONS

1. Answer **all** questions on separate answer sheets provided.
2. Mark allocation for each question is indicated at the end of the question.
3. Credit will be given for logical, systematic and neat presentations.

Answer ALL questions

Question 1 (40 marks)

You have been provided with blood **s**lides **A** and **B** taken from a 25-year old man presenting with chills, high fever, profuse sweating, headache, nausea, vomiting and muscle pains. Perform **Procedure C** which is in the handout placed on your work station.

a) Examine slides **A** as well as **B** and give a detailed account of your findings. **(20 marks)**
b) What type of information about the parasite can you get from blood slide **B**. **(5 marks)**
c) Outline the principle of the stain that you have used in **Procedure B**. **(15 Marks)**

Question 2 (20 marks)

Teachers have noticed that some of the children attending an **Early Childhood Development School X** have developed small blisters on their mouth. The organism that is suspected to cause the blisters is a virus.

a) Discuss how you can isolate the virus from the affected children. **(10 marks**)
b) Giving examples, briefly describe any two techniques that you would use to cultivate the virus. **(10) marks**

Question 3 (40 marks)

On the work benches, you are provided with slides, pictures and petri dishes with different types of parasites.

a) Identify parasite and as well as draw the stage of its life cycle on slides **D, E, F, G and H** under the microscope. **(15 marks)**
b) What disease does each parasite on slides **D, E, F, G and H** cause? **(5 marks)**
c) How is each parasite that you have identified on **slides D, E, F, G and H** transmitted? **(5 marks).**
d) Briefly describe how each parasite on slides **D, E, F, G, and H** is diagnosed in the laboratory**. (15 marks)**

END