



"Investing in Africa's Future"

**COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES
DEPARTMENT OF HEALTH SCIENCES
BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS**

**SLS 205 BACTERIOLOGY PRACTICAL EXAMINATION
END OF SECOND SEMESTER EXAMINATIONS**

APRIL/MAY 2019

LECTURER: Dr E. MUGOMERI

DURATION: 3 HOURS

INSTRUCTIONS

Do not write your name on the answer sheet

Use Answer Sheets Provided

Begin your answer for Each Question on a New Page

Credit is Given for Neat Presentation

Answer all Questions

1. A 10 year old girl was brought to the health care centre complaining of severe headache, stiff neck and confusion, and the doctor suspected meningitis. The CSF sample labeled **C1** was sent to the laboratory.
 - a) Perform all the necessary microbiological diagnostic procedures for such a sample for day 1 (20).
 - b) Name 3 other possible bacterial pathogens that can cause meningitis (5).

2. A 25 year old HIV positive man who has been coughing for the last two weeks visited the health care centre. After the collection of the sputum sample, a laboratory procedure for the identification for the identification of *Mycobacterium tuberculosis* was performed. You have been provided with the prepared slide (Labelled **Slide A**) for examination.
 - a) Examine the slide and report your findings (5).
 - b) Identify the staining procedure used and explain the principle of that test (10)
 - c) Identify any other method for the diagnosis of *M. tuberculosis*? (5)

3. You have been provided with a wound swab labeled **S1**.
 - a) Prepare a gram stain and describe what you see on the slide.(5)
 - b) Identify the possible organism and outline the possible identification procedures you would have done to identify the organism. (10).
 - c) Name any 2 other organisms that can cause wound infection (2)
 - d) Describe the principle of the staining technique in (a).(8)
 - e) Name the media you would use to culture the specimen and explain the rationale behind your choice of each medium.(5)

Total 75 MARKS