**CRAWFORD UNIVERSITY**
**FAITH CITY, IGBESA, OGUN STATE**
**2022/2023 HARMATTAN SEMESTER EXAMINATIONS**
**COLLEGE: NATURAL AND APPLIED SCIENCES**
**DEPARTMENT: BIOLOGICAL SCIENCES PROGRAMME: MICROBIOLOGY**
**COURSE CODE: MCB 203 COURSE UNIT: 3**
**COURSE TITLE: BASIC TECHNIQUES IN MICROBIOLOGY**
**INSTRUCTION: ANSWER ALL QUESTIONS**
**TIME ALLOWED: 3 HOURS**

You have been provided with labelled stained slides.

1. Identify the organism. **1mrk**
b. Classify the organism based on its cell wall component **2 mks**
C. Under what objective lens did you view the organism & why? **2 mks**
D. Discuss the principle of Gram staining and highlight the procedure. **5mks**

2. List step by step the method you will use to carry out Antibiotic Susceptibility Testing **5mks**
b. You have been asked to collect soil sample, as a Microbiologist:
i how would you collect the sample **2.5mks**
ii How would you reduce the microbial growth **2.5mks**

3. You are provided with plate A, flood with iodine and observe the colour change
a. Report your observation in the format below

| Test | Observation | Inference |
|---|---|---|
| | | |

b. What does the presence of zone of hydrolysis indicate?
c. What does the absence of zone of hydrolysis indicate?
d. What is responsible for the observed colour change?

4a. Describe following five factors that could be considered before doing a parasitological diagnosis
b. Describe the type that can be considered for each parasitological diagnosis discussed above

5. Discuss step by step method that can be used to carry out a diagnosis for patient with *Ascaris lumbricoides*