

BOWEN UNIVERSITY, IWO
(Of the Nigerian Baptist Convention)

COLLEGE OF HEALTH SCIENCES
Medical Laboratory Science Programme
2020/2021 Second Semester Examination

MLS 201; Introduction To Medical Laboratory Science; TIME: 2HRS

INSTRUCTION: ANSWER ANY FOUR (4) QUESTIONS

START EACH QUESTION ON A NEW PAGE

ALL QUESTIONS CARRY EQUAL MARKS

1. Read the following passage carefully:

The word, ‘**medical**’ (an adjective) describes ‘**medicine**’ (a noun). ‘**Medicine** is the science and practice of the diagnosis, treatment, management and prevention of disease rather than surgery.’ While **laboratory** is a facility, room or place with suitable conditions where tests, experiments, measurements or scientific research are performed. **Science** is an organized body of knowledge obtained by series of keen observations, formulation of hypotheses, experiments, theories and laws. Medical laboratory Science is rapidly and constantly evolving through scientific research and innovations; also saddled with the responsibility of bringing in science into medicine. In conclusion, therefore, Medical Laboratory Science is Laboratory Medicine.

From the passage, justify with five (5) points the cardinal role of Medical Laboratory Scientists in **healthcare** **25 marks**

2. a. State ten (10) things to do to prevent infection and accidents in the laboratory. **10 marks**

b. State five (5) conditions under which a specimen can be rejected in the laboratory reception. **5 marks**

c. List five (5) patient details that can be used for tracing a specimen in the laboratory **5 marks**

d. Name five (5) specimen types that are used for investigations in the Medical Laboratory **5 marks**

3. a. Name five (5) biohazard signs that are used on doors and containers in the laboratory **5 marks**

b. State five (5) activities that are performed in the laboratory reception **5 marks**

c. Give the headings for three (3) columns in a dispatch register **3 marks**

- d. State four (4) requirements for a specimen to be accepted in the laboratory **4 marks**
- e. List three (3) types of microscope **3 marks**
- f. State five (5) ways of caring for microscopes in the laboratory **5marks**
5. a. Define the term ‘Micrometry’ and explain the importance of Micrometry in Medical Laboratory Science. **8 marks**
- b. What are Micrometers? Name two (2) types of micrometers **7 marks**
- c. Using the x10 objective, if 7 divisions on a Stage Micrometer matches 5 divisions of the ocular Micrometer, what is the size of *Aspergillus niger* spore that measured 6 μ on the stage Micrometer (show working) . **10 marks**
6. a. Define the term ‘glassware’ and state three importance of glassware cleaning **5 marks**
- b. List five (5) methods of glassware cleaning **5 marks**
- c. Describe four (4) methods of glassware cleaning **12 marks**
- d. State three (3) precautions in cleaning of laboratory glassware. **3 marks**