

COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES DEPARTMENT OF BIOMEDICAL AND MEDICAL LABORATORY SCIENCES BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS DEGREE

NSLS405: HISTOPATHOLOGY II

END OF SECOND SEMESTER FINAL EXAMINATIONS

NOV/DEC 2020

LECTURER: DR S BOPOTO

DATE: 27 NOVEMBER 2020

TIME: 0900 HRS

DURATION: 24 HOURS

INSTRUCTIONS

- 1. Write your candidate number on your answer sheets.
- 2. Answer any **ONE** question of your choice.
- 3. Each full question carries 100 marks
- 4. Submit your answer script as a PDF document through Moodle ONLY.
- 5. Use the following specifications in your answer scripts:

Font: Times New Roman

Font size: 12 Line spacing: 2.0

6. Credit will be given for logical, systematic and neat presentations.

Answer any ONE question

Question 1

- a) A diagnostic error was made in the histology department. As a consequence, the patient got inappropriate treatment and is now considering legal action for damages. You are asked to lead an investigation into the error.
 - Discuss the steps you would take to uncover the source of the error and the corrective actions that may be necessary. [60 marks]
- **b)** A 56-year old woman presented to her General Practitioner with an 8-month history of intermenstrual bleeding. She is sent to the cytology department for further evaluation.

The patient informs you that she is in a polygamous marriage and got married at 17 years of age. She has 9 children. You make a determination that she is at high risk of developing cancer of the cervix.

- i. Discuss the risk factors associated with cancer of the cervix with reference to this patient. [20 marks]
- ii. What investigations would you do? Justify your answer. [10 marks]

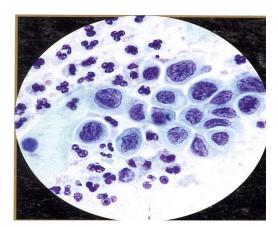


Figure 1.

- iii. The photomicrograph in **Figure 1** was obtained from one of your tests above.
 - 1. What is the likely diagnosis? Justify your answer. [4 marks]
 - 2. What recommendations would you give the patient based on your answer above? [6 marks]

Question 2

- a) A thirty-year old man is referred to you with a 14-day history of passing blood stained urine associated with fever and pain on passing urine. He was otherwise well prior to the onset of the symptoms. The referring clinician thinks that the patient has an infection.
 - i. Discuss how you would go about investigating this patient. [30 marks]
 - ii. What are the most likely causative organism(s)? Justify your answer(s).[20 marks]
- **b)** Inflammation is the response of vascularised tissue to injury.
 - i. List the cardinal signs of inflammation. [10 marks]
 - ii. Describe the vascular and cellular events in acute inflammation [25 marks]
 Discuss the complications of acute inflammation. [15 marks]

Question 3

Discuss tissue processing for histopathological examination. [100 marks]

The End