



COLLEGE OF HEALTH, AGRICULTURE AND NATURAL SCIENCES

DEPARTMENT OF BIOMEDICAL AND MEDICAL LABORATORY SCIENCES

BACHELOR OF MEDICAL LABORATORY SCIENCES HONOURS DEGREE

NSLS200: TRANSFUSION SCIENCE AND IMMUNOLOGY 1

END OF FIRST SEMESTER FINAL EXAMINATIONS

25 NOVEMBER 2020

LECTURER: MR M. MUTENHERWA

DURATION: 24 HOURS

INSTRUCTIONS

1. Write your candidate number on your answer sheets.
 2. Answer any **one** question of your choice from the given three questions.
 3. Each full question carries 100 marks.
 4. Submit your answer scripts as word documents.
 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.
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Answer any ONE question

Question 1

Understanding of “vein to vein” is critical in Transfusion Science and Immunology. Mrs Babesia has voluntarily donated blood fifty times to date. Her last blood donation was a whole blood unit which she successfully and safely donated on 30 October 2020. Describe the journey that the whole blood unit donated by Mrs Babesia takes from her vein to the beneficiary / recipient`s vein and even beyond. The beneficiary is anaemic and admitted at the Avenues Clinic. **[100 marks]**

Question 2

Discuss how to perform a cross-match of packed red blood cells in a hospital blood bank and issue the cross-matched unit(s) to an anaemic patient in theatre undergoing total hip replacement **[100 marks]**

Question 3

- a) Explain the causes of haemolytic disease of the new born (HDN) **[30 marks]**.
- b) You are working at Sally Mugabe National Public Health Laboratory. The nurse in charge in a post-natal ward has called and informed you that the patient he was transfusing with blood cross-matched by your laboratory is showing signs and symptoms of haemolytic transfusion reaction. Give a detailed description of how you would investigate this reported case of suspected Haemolytic transfusion reaction. **[70 marks]**

End of Paper