National University of Lesotho Department of Soil Science and Resource Conservation SSR 4504 – Scientific and Technical Writing

Final Examination

January 2023 100 marks Time: 3 hours

Instructions:

Answer Any Five (5) Questions

Question 1

Please explain to your colleague in the Technical and Scientific Writing Course the nature and purpose of a research design consideration in preparation for writing a technical paper. Out line clearly what a typical research design should seek to achieve (20 marks)

Question 2

There are 4 types of abstracts in technical and scientific writing. First state all four types clearly and briefly describe them (20 marks)

Question 3

Assume that you have been appointed as a teaching assistant to Prof Marake. He assigns you to explain to second year students in soil science how to write an abstract for a laboratory report. Briefly explain how you would guide them on the writing style of an abstract most appropriate to their field of study. Give them clear tips on the dos and don'ts of writing an abstract (20 marks)

Question 4

You have been assigned a research problem for your BSc. Project. In the process of writing the proposal or final report, you are expected to write an introduction. Prof Marake has assigned you to give a brief seminar to your colleagues about writing an introduction to a technical /scientific paper by addressing the following aspects:

- a) Establishing the context and significance of the research being conducted (5 marks)
- b) Explain to them the key questions that an introduction must answer for the reader (5 marks)
- c) Talk to them about the general phases associated with writing an introduction (10 marks)

Question 5

- a) Please discuss the notion of the "Delimitation of a study" (10 marks)
- b) Please discuss the issues to keep in mind that will help the narrative flow in the development and writing of an introduction (10 marks)

Question 6

- a) Brief discuss the purpose of a literature review (5 marks)
- b) Briefly explain the three layers in the conceptualization of a literature review (5 marks)
- c) Briefly discuss the 4 stages in the development of a literature review (10 marks)

Question 7

Make a comprehensive discussion of the methodology in your research problem for your Bsc Thesis. In writing this short essay, pay attention to all the factors that must be considered in the writing of the methodology outlined in your readings (20 marks)Give a detailed discussion on the delineation of a watershed (20 Marks)