

Uva Wellassa University of Sri Lanka
Faculty of Science and Technology
Department of Science and Technology
300 level 2nd Semester Examination – Dec.-2017/Jan.-2018
CST 393-2 Research Methodology and Scientific Writing



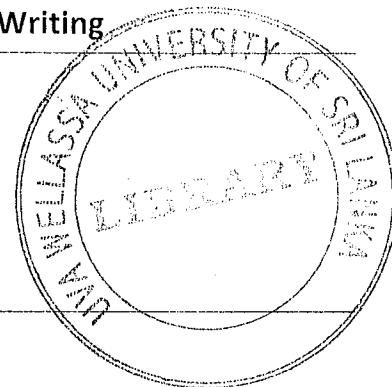
Instructions to candidates

Duration: Two (02) hours

Number of questions: Four (04) essay questions

Answer all questions

Mark allocation: 100



1. Define the following terms in the context of Research Methodology:

- a. Hypothesis
- b. Variables
- c. Rationale
- d. Ethics in research

(20 mark)

2.

- a. List components of research design.
- b. What is a reference or citation?
- c. How citation or reference is importance for a researcher?

(25 mark)

3.

Design an experiment to compare two well-known algorithms for solving a problem.

- What is/are the objective/s of proposed study? Specifically discuss how you would collect data, appropriate sampling method, and the most appropriate analysis methods for the collected data.

Note: Assume you have all necessary facilities to do the study, and as much funds as you need.

(30 mark)

4. Read the given research article and write **brief answers** to each of the following questions.

- a. What was the rationale of this article?
- b. What are the objectives of this study?
- c. Describe the key steps of the applied methodology.
- d. What were the results?
- e. What was the take home message of this paper?

(25 mark)