

THE OPEN UNIVERSITY OF SRI LANKA POST- GRADUATE DIPLOMA IN/ MASTERS OF TECHNOLOGY FINAL EXAMINATION—2013/2014 TTY7191—RESEARCH METHODOLOGY DURATION—THREE HOURS



DATE: 31st August 2014

TIME: 0930 - 1230 HOURS

Total number of questions = 07

Number of questions to be answered = 06

Answer the <u>question one (Q1)</u>, which is compulsory and <u>five (05) more</u> questions. Question one (Q1) carries 25 marks and questions two (Q2) to seven (Q7) carry fifteen (15) marks each.

Compulsory Question

- (Q1) (a) Briefly explain the different approaches, which can be used to select a research problem. (10 marks)
 - (b) Write a comprehensive note on the major elements of a good research problem. (10 marks)
 - (c) Identify five (05) research problems presently relevant to the Sri Lankan textiles and apparel industry. (05 marks)

Answer any five (05) from the following six (06) questions

- (Q2) (a) State the major components of a good research proposal. (03 marks)
 - (b) Write a brief research proposal on a research problem you have identified in the Q1 (c). The answer should include all major components of a good research proposal. (12 marks)
 - (Q3) (a) Giving suitable examples, explain what research is and what research is not.

 (10 marks)
 - (b) Giving suitable examples, describe the benefits of carrying out research.

 (05 marks)

- (Q4) (a) Write a comparative description on qualitative and quantitative approaches of research. (08 marks)
 - (b) Explain the purposes and benefits of carrying out literature surveys/reviews in research work. (07 marks)
- (Q5) (a) Giving examples, describe the possible sources of experimental errors in research. (10 marks)
 - (b) Briefly explain the techniques, you should employ to reduce experimental errors. (05 marks)
- (Q6) (a) Write a comprehensive note on sampling techniques, which are widely used in research. (10 marks)
 - (b) Discuss the importance of the selection of the correct size of the sample in research. (05 marks)
- (Q7) Write short notes on the followings:
 - (a) Types of surveys used to collect data. (05 marks)
 - (b) Importance of practicing good research ethics. (05 marks)
 - (c) Different referencing methods used in research report writing. (05 marks)