



**UNIVERSITY EXAMINATIONS: 2013/2014**

**EXAMINATION FOR THE MASTERS OF SCIENCE (MSC) IN COMMERCE**

**MSF 503 RESEARCH METHODS (WEEKEND)**

**DATE: APRIL, 2014**

**TIME: 3 HOURS**

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**INSTRUCTIONS: Answer Question One and Any Other Three Questions**

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### **QUESTION ONE**

SMEs contribute positively to economic growth, employment and poverty alleviation in South Africa. However, the failure rate of SMEs is very high in South Africa. One of the factors limiting the survival and growth of SMEs in South Africa is non-availability of debt financing. The main objective of the study was to investigate empirically the impact of firm and entrepreneurial characteristics on access to finance by SMEs in South Africa. The variables of interest hypothesized to influence access to finance included age of SME, size, collateral, business information, location of business, industry sector, incorporation, managerial competence, gender of owner, and relationship with bank. Data was collected from King William's Town in the Eastern Cape Province of South Africa using a survey using self-administered questionnaire in a survey. The questionnaire comprised of both close-ended and open-ended questions. The study focused on SMEs which are registered with the Enterprise Directory and the Yellow Pages telephone directory. The population of SMEs was 173. Raosoft sample size calculator was used to calculate the sample size. Raosoft sample size calculator is statistical software that enables researchers to determine the sample size given the following variables: The margin of error, the confidence level, the population and the expected response distribution (Raosoft, 2010). Raosoft provided a minimum recommended sample size of 120. However, 150 questionnaires were distributed because of the limitations associated with self-administered data collection method

such as non-response. Data analysis was done using the Statistical Package for Social Sciences (SPSS). Pre-testing the research instrument was done through a pilot study covering 20 respondents. The process of pre-testing helped the researcher to identify areas where the questionnaire needed corrections. Statistical analysis includes descriptive statistics, Pearson correlation and logistic regression. Validity and reliability were ensured by using a statistician and a panel of experts to evaluate the research instrument for conceptual clarity, pre-testing the research instrument in a pilot study and comprehensively reviewing the literature for theoretical constructs and empirical conclusions. Case wise deletion method was used to treat missing values. The Kolmogorov-Smirnov test was used to determine the normality of the data.

**Required:**

- a) Why is it important to pre-test and pilot the research instruments? (6 Marks)
- b) This study claims “Validity and reliability were ensured by using a statistician and a panel of experts to evaluate the research instrument for conceptual clarity”. Explain why this is insufficient in validating the reliability and validity of research instruments. (6 Marks)
- c) Define three types of construct validity applied in evaluating research instruments (6 Marks)
- d) Describe how each type of construct validity mentioned in (c) above can be tested. (7 Marks)
- e) Describe three methods of testing reliability of research instruments (6 Marks)

**QUESTION TWO (23 MARKS)**

- a) In the excerpt in question (1) above, data was collected from King William’s Town in the Eastern Cape Province of South Africa. Moreover, the study sampled SMEs registered with the Enterprise Directory and the Yellow Pages telephone directory. Explain why this technique of sampling is problematic. (8 Marks)
- b) Suggest an appropriate sampling method for this study and justify your choice. (5 Marks)
- c) For the method suggested above, provide a step by step description of how you would draw the sample. (10 Marks)

**QUESTION THREE (23 MARKS)**

- a) From the study in question (1) above, we learn that the study was done using a self-administered questionnaire that comprised of both close-ended and open-ended questions. Further we are told that data was analyzed using SPSS. Again we note that statistical analysis includes descriptive statistics, Pearson correlation and logistic regression.

- (i) Discuss the risks of using survey research as implemented in this study. (4 Marks)
- (ii) Explain why the selected data analysis technique is inadequate for the study. (9 Marks)
- b) Describe four levels of data measurement encountered in quantitative studies. (8 Marks)
- c) Explain what is meant by operationalization of constructs. (2 Marks)

#### **QUESTION FOUR (23 MARKS)**

- a) Describe five ethical issues that you should be cautious about when conducting research. (20 Marks)
- b) Define plagiarism. (3 Marks)

#### **QUESTION FIVE (23 MARKS)**

- a) Outline seven properties of a good questionnaire. (7 Marks)
- b) Distinguish the following terms
  - (i) Longitudinal studies versus cross-sectional studies (4 Marks)
  - (ii) Experimental versus quasi-experimental design (4 Marks)
  - (iii) Control variables versus intervening variables (4 Marks)
  - (iv) Mediation versus moderation (4 Marks)

#### **QUESTION SIX (23 MARKS)**

- a) Discuss the importance of literature review in research. (6 Marks)
- b) Distinguish empirical literature from a theoretical literature. (5 Marks)
- c) Describe any six threats to internal validity of study results. (12 Marks)