



**SCHOOL OF COMPUTING AND ENGINEERING SCIENCES**

**BACHELOR OF SCIENCE IN INFORMATICS AND COMPUTER SCIENCE**

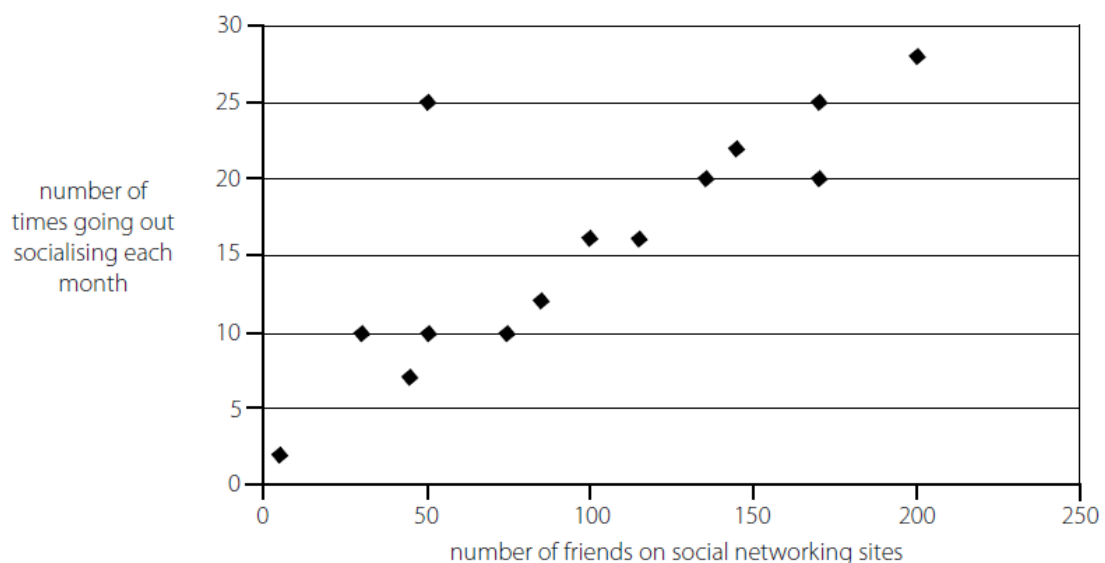
**ICS3105: RESEARCH METHODOLOGY AND TECHNICAL WRITING**

**Date: 11 November 2022**

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**Answer ALL Questions (30 Marks)**

1. A researcher conducted a correlation study to investigate the relationship between the number of friends people claim to have on internet social networking sites and number of times they go out socialising each month. The findings from the study are presented in the scatter graph below.



- From the scatter graph presented above, what is the mode for 'the number of times going out socialising each month' and how do you know this? **(1 Marks)**
- Outline two findings from the scatter graph. **(3 Marks)**
- Propose a research instrument that you will use for this study and justify why **(3 Marks)**
- Discuss the appropriate sampling technique that was used in this study **(3 Marks)**
- What is qualitative data? **(1 Marks)**

- f) Suggest two examples of qualitative data that could have been collected in this study.  
**(2 Marks)**
- g) Discuss two strengths and a weakness of collecting quantitative data in this study **(3 Marks)**
- h) Identify and discuss two ethical issues in this study. **(2 Marks)**
- i) Differentiate between descriptive statistics and inferential statistics. Describe five statistical measures often used to summarise the research data.**(7 Marks)**
- j) Describe **three** hypothesis testing techniques .For each, give an example of when it can be used.**(6 Marks)**