



JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
DEPARTMENT OF INFORMATION SYSTEMS & TECHNOLOGY
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
INFORMATION AND COMMUNICATION TECHNOLOGY
4TH YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR
MAIN CAMPUS

COURSE CODE: ITB 2407

COURSE TITLE: INFORMATION SYSTEMS RESEARCH

EXAM VENUE:

STREAM: BIS

DATE:

EXAM SESSION:

TIME:

INSTRUCTIONS

- 1. Answer Question 1 (Compulsory) and ANY other TWO questions**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

Question 1 [30 marks]

- a) One of the objectives of this course is to develop a project proposal at the end of the semester. The second semester of your 4th year will require implementation of your proposed project. Discuss the key deliverables at the end of this semester for the course ITB2407-Information Systems Research. Assuming your project involves development of a web based application, explain what would be included in your project proposal. Include a discussion on the important sections of your final document. **(10 marks)**
- b) You have been asked by the principle of neighbouring high school to give a lecture to form four students on the “research process.” Briefly discuss the key points you would include in your presentation**(10 marks)**
- c) An abstract allows you to elaborate upon each major aspect of the project and helps readers decide whether they want to read the rest of the project. Therefore, enough key information must be included to make the abstract useful to someone who may want to examine your work. Briefly discuss the important things to include in an abstract? **(5 marks)**
- d) When writing your research proposal you are all encouraged to format your document using the APA style format guidelines. Briefly discuss five things that form part of the guidelines. **(5 marks)**

Question 2 [20 marks]

- a) You have been asked to carry out research on the impact/effect of taking programming class on successfully completing a Web-based project. You decide to carry out a survey among Business Information Systems students. Answer the following questions:
- i) State any two objectives for your research. **(4 marks)**
 - ii) Develop two research questions from the two objectives above **(4 marks)**
 - iii) Discuss the methodology you would use for your research **(2 marks)**
- b) You are working on your project proposal for the course ITB 2407 Capstone Research. Your project involves predicting stock markets prices. Discuss the methodology you would adopt for this type project. In your discussion include the steps you would follow.
- i) State any two objectives for your research. **(4 marks)**
 - ii) Develop two research questions from the two objectives above **(4 marks)**
 - iii) Discuss the methodology you would use for your research **(2 marks)**

Question 3 [20 marks]

There are three common approaches to conducting research: Quantitative research method, qualitative research method and mixed method research.

- i) Discuss the three research approaches **(6 marks)**
- ii) Identify any four types of quantitative research **(8 marks)**
- iii) Identify any three types of qualitative research **(6 marks)**

Question 4 [20 marks]

The goal of a research proposal is to present and justify the need to study a research problem and to present the practical ways in which the proposed study should be conducted. The design elements and procedures for conducting the research are governed by standards within the predominant discipline in which the problem resides, so guidelines for research proposals are more exacting and less formal than a general project proposal.

- a. Research proposal must address three basic questions. Discuss **(3 marks)**
- b. Identify and discuss four questions that should be addressed by the “Introduction”. **(4 marks)**
- c. A well-articulated background information is important in understanding your research proposal. Identify any five key points that must be addressed here. **(5 marks)**
- d. Briefly discuss any three mistakes you should avoid and that is likely to lead to failure to successfully complete your proposal on time. **(3 marks)**
- e. Briefly discuss any five questions to ask in order to address the potential implications of your study. **(5 marks)**

Question 5 [20 marks].

A research problem statement is a definite or clear expression about an area of concern, a condition to be improved upon, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or within existing practice that points to a need for meaningful understanding and deliberate.

- a. Briefly discuss any five things that should be included in statement of a problem. **(10 marks)**
- b. Briefly discuss any five questions that are important in determining whether a problem is researchable or not. **(10 marks)**