



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
INFORMATION COMMUNICATION TECHNOLOGY
2ND YEAR 2ND SEMESTER 2024/2025 ACADEMIC YEAR
MAIN CAMPUS**

COURSE CODE: ITB 1214

COURSE TITLE: RESEARCH SKILLS AND DESIGN

EXAM VENUE: CL 1

STREAM:

DATE:17/4/2025

EXAM SESSION: 15.00-17.00

TIME: 2.00 HOURS

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 research team at **JOOUST** has observed a growing concern among lecturers and student counselors regarding students' overuse of the internet. Reports indicate that some students struggle to concentrate in class, procrastinate on assignments, and experience social isolation due to excessive time spent online, especially on social media and gaming platforms. The university administration is considering policies to promote responsible internet use but needs empirical data to understand the problem's depth and factors contributing to it.

- a) Identify a specific problem from the statement above. (3 marks)
- b) Describe your proposed solution in detail. (3 marks)
- c) State two measurable objectives of your research. (4 marks)
- d) State two research questions (4 marks)
- e) Discuss the methodology you plan to use. (4 marks)
- f) Include at least 4 Likert scale questions for your research instrument. (4 marks)
- g) Include at least four open-ended questions for your research instrument (4 marks)
- h) Write a brief statement to address informed consent from participants. (2 marks)
- i) Write a brief statement to address data privacy and confidentiality measures. (2 marks)

QUESTION 2 (20 Marks)

- a) Discuss the process of conducting research (Social Science related research) (10 marks)
- b) Discuss the differences between qualitative and quantitative research (10 marks)

QUESTION 3 (20 Marks)

- a) The following represent the three important basic questions to address when conducting a research except? Discuss (9 marks)
 - i) Why?
 - ii) So what?
 - iii) How?
- b) When writing your research proposal, you are all encouraged to format your document using the APA style format guidelines. State five things that form part of the guidelines. (5 Marks)
- c) Outline the purpose of literature review (6 marks)

QUESTION 4 (20 Marks)

Research falls under three categories: Qualitative, quantitative and mixed method research

- a) Discuss four types of qualitative research (10 marks)
- b) Discuss four types of quantitative research (10 marks)

QUESTION 5 (20 Marks)

Welta Mark Limited - Kenya is an international pharmaceutical company with global command of the market which is envisaged in their mission statement. The company led the industry with the strong foundation of innovation and business process re-engineering with advanced technology as a driver. The business has been running on the legacy software platform of CREK Software which until late 1990s could not match the current requirement. The management decided to engage a vendor, to reconfigure the system on the same platform which was successful for a while then the system started to experience inconsistency like database crashing, low system speed among others. And users were always complaining about the vendor way of engagement during this process of reconfiguration. At this point the company started experiencing dwindling performance, stiff competition from the industry players who are using highly sophisticated ERP to manage their operations.

The management indeed at this point, focused on the need for a clear roadmap for the desired level of collaboration with all the stakeholders to develop a new ERP for the enterprise, but some section of management were still sceptical about the success of this new endeavours with reference to the failure of the previous project. Work needed to be undertaken to have a common set of processes, incentive structures, and management systems that encouraged and rewarded collaboration. The leading global pharmaceutical company was to turn to IT outsourcing to lower costs, improve IT efficiencies and diversify risk within its IT operation. It was therefore decided that before any new development is undertaking, the enterprise ought to hire consultants to give direction.

Required:

- a) Identify the problem from the above statement (4 Marks)
- b) Suggest an appropriate topic for a research study that would address the above issues for the pharmaceutical industry - Welta Mark Limited in Kenya. (8 Marks)
- c) State four appropriate specific objectives for the study (4 Marks)

- d) Discuss the methodology you would use for this study. Provide a justification for your choice(4 Marks)

JOOUST OBSERVES ZERO TOLERANCE TO EXAM CHEATING