SPECIFY TYPE OF
EXAMINATION ☐

☐
FIRST ATTEMPT ☐
FIRST RESIT ☐
SECOND RESIT
RE-TAKE

JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY

SCHOOL OF INNOVATION AND INFORMATION SYSTEMS
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
INFORMATION COMMUNICATION TECHNOLOGY
2ND YEAR 1ST SEMESTER 2022/2023 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 2202

COURSE TITLE: INFORMATIOM REQUIREMENTS DEFINITION AND MANAGEMENT

DATE: **TIME:**

TIME: 2 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) Define the term *Requirements* as used in systems development   **(2marks)**

b) State and briefly describe any three techniques that a system analyst can use during requirements gathering   **(6 marks)**

c) State and explain **three** benefits of requirements management   **(6 marks)**

d) Describe **three** types of **requirements** a system analyst may come across during system development.   **(6marks)**

e) JAD is a process designed for development of computer based systems. Describe **three** circumstances under which a system analyst may decide to use JAD during a system development process.   **(6marks)**

f) List and explain two roles of a system analyst during the process of system development **(2marks)**

g) State any two software development methodologies that a system may use during software development   **(2 marks)**

Question 2 [20 marks]

a) Provide a description of the role that the following are expected to play in a system development   project.

   i. Users.   **(2 Marks)**

   ii. Management.   (2 Marks)

   iii.   Quality   Assurance   people.
   (2marks)

b) Describe **four** phases of requirements management process   **(8 marks)**

c) State and explain **two** common problems faced by (Business or Technical) analysts during requirement elicitation process   **(4 marks)**

d) Identify **four** skills needed to successfully function as an Information system analyst **(2marks)**

Question 3 [20 marks]

a) Using prototyping during requirements determination is most useful in certain specific circumstances, describe two such scenarios   **(4 marks)**

b) Differentiate between waterfall model and Agile development methodologies in relation to requirements management? **(4 Marks)**

c) State **FIVE** important reasons for system documentation **(4 Marks)**

d) During the process of system development, system failure can be anticipated since there is no full guarantee of success for the anticipated information system. State and explain **FOUR** possible reasons why systems fail. **(4 Marks)**

e) Describe **two** Non-functional requirements of a software product **(2 marks)**

Question 4 [20 marks]

a) In a systems development life cycle, the systems analyst is interested in finding out the organization's objectives and exploring the nature and scope of the problems under study during the feasibility stage. Explain three objectives of a feasibility study **(6marks)**

b) One of the most important component of requirements management is **traceability**, state **two** reasons why tracing is important **(4 Marks)**

c) State **four** components of an information system environment **(4marks)**

d) Define **stakeholder** as used in requirements definition **(2 marks)**

e) Identify any **two** Business requirements for an organization with a goal of expanding into the global market this year **(2 marks)**

f) State any **two** possible user requirements for a web portal platform **(2 marks)**

Question 5 [20 marks]

a) What is requirements management **(2marks)**

b) Describe any **four** contents of a requirements management plan **(8marks)**

c) John, a system analyst is always concerned with effective management of requirements, state any **four** advantages of his actions. **(4 marks)**

d) Compare and contrast the following approaches of writing requirements **(6marks)**
    i) Requirements specification document
    ii) User stories