# BINDURA UNIVERSITY OF SCIENCE EDUCATION FACULTY OF SCIENCE AND ENGINEERING DEPARTMENT OF COMPUTER SCIENCE BSc HONS DEGREE IN SOFTWARE ENGINEERING SWE204: REQUIREMENTS ENGINEERING

# 2 HOURS 30 MINUTES

@ OC 1 2024

# **INSTRUCTIONS FOR CANDIDATES**

Answer all questions

Total marks: 100

# Question 1

- a. Explain the following terms
  - i. Natural language requirements
  - ii. Modeled requirements

[4]

b. Describe the **four** stages in the requirements engineering process cycle. **[16]** 

### Question 2

Examine any <u>five</u> problems that have led to research and discovery of various processes involved in requirements engineering.

[20]

### **Question 3**

Bindura University of Science Education held a competition last Friday in which students had a chance to share their innovations to get funding. Among the six selected finalists is a student named Kimberly who is developing a dating app for students only. As a software engineering student you have been assigned the task to apply your quality modeling techniques on the following requirements that Kimberly got from the audience.

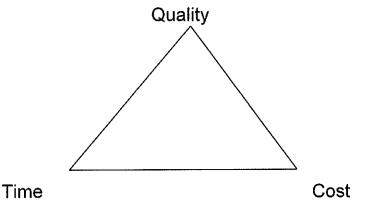
a. "The app should respond fast."

[5]

b. "The app should be easy to use."	[5]
c. "The app UI should be beautiful."	[5]
d. "The app does not consume lots of data."	[5]

# **Question 4**

a.



In requirements engineering, often software engineers are required to make decisions on what to value the most between, time, quality and cost as they move from project to project. Give a detailed description of examples of projects in which the following are important as the major priority.

- i. Quality
- ii. Time
- iii. Cost [12]
- b. Describe the following tailoring characteristics in requirements engineering
  - i. Project setting
  - ii. Team knowledge
  - iii. Type of system
  - iv. Business and legal concerns

[8]

# **Question 5**

- a. Explain the following terms
  - i. System Stakeholders
  - ii. System Vision
  - iii. System Goals
  - iv. System Quality

[8]

b. Refining requirements involves **two** steps, describe the two steps.

c. Give any <u>two</u> examples of detailed use case scenarios for Bindura University of Science Education moodle system. [8]

— End of Exam —