



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY**

SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS

DEPARTMENT OF INFORMATION SYSTEMS AND TECHNOLOGY

UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF

SCIENCE IN INFORMATION COMMUNICATION TECHNOLOGY

3RD YEAR 2ND SEMESTER 2024/2025 ACADEMIC YEAR

MAIN CAMPUS

COURSE CODE: ITB 1308

COURSE TITLE: SERVICE ORIENTED COMPUTING

EXAM VENUE: LAB 12 STREAM: ICT

DATE: 25/4/2025 EXAM SESSION: 9.00-11.00

TIME: 2HOURS

INSTRUCTIONS

- 1. Answer question one and any other two**
- 2. Phones are not allowed**
- 3. All rough work should be done in the examination booklets**
- 4. Candidates are advised not to write on the question paper**

QUESTION ONE (30 MARKS)

- a. Web Service Computing has encountered the rising security concerning that hit other dimensions of technologies. Discuss three key areas. (9 marks)
- b. While setting up a web service, the input and output ports must be clearly defined with their necessary elements. Elaborate on this. (6 marks)
- c. Highlight five key considerations you would make while configuring and deploying a web service (5 marks)
- d. Highlight any five basic and five structured activities used in long-running conversations during the service messaging process. Indicate how they are denoted using relevant illustrations (10 marks)

QUESTION TWO (20 MARKS)

The Web Service-Policy framework establishes extensions that govern the assembly and structure of policy description documents that usually have three key specifications. Discuss (20 marks)

QUESTION THREE (20 MARKS)

Web Service choreography has certain goals that define its success. Elaborate on any ten of these goals (20 marks)

QUESTION FOUR (20 MARKS)

- a. Java programming enables service oriented computing greatly. Discuss any eight reasons why it maybe preferred as compared to other programming languages (8 marks)
- b. Discuss any six goals that are used in a SOA choreographic model development activity (12 marks)

QUESTION FIVE (20 MARKS)

You have been tasked with the responsibility to analyse critical operation stages in service oriented computing. Discuss the steps you would undertake to achieve this. (20 marks)