



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF INFORMATICS AND INNOVATIVE SYSTEMS
DEPARTMENT OF COMPUTER SCIENCE & SOFTWARE ENGINEERING
UNIVERSITY EXAMINATIONS FOR THE DEGREE
IN INFORMATON TECHNOLOGY
3RD YEAR 2ND SEMESTER
2024/2025 ACADEMIC YEAR
MAIN CAMPUS**

COURSE CODE: ITB 2302

COURSE TITLE: BUSINESS APPLICATION DESIGN

EXAM VENUE:

STREAM:

DATE: 24/4/2025

EXAM SESSION: 9.00-11.00

TIME: TWO HOURS

INSTRUCTIONS

- 1. Answer QUESTION ONE (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**
- 4. No mobile devices (e.g. laptops, phones, e.t.c.) are allowed into the Examination Room**

QUESTION ONE (30 MARKS)

- (a) Discuss FIVE software challenges. (10 Marks)
- (b) How does a Web Application Work? (6 Marks)
- (c) List contents of a good business plan whether you decide to bootstrap development or not. (5 Marks)
- (d) Give FOUR reasons why a company should decide to go for bespoke software. (4 Marks)
- (e) Explain FIVE tasks a back-end developer can do on a day-to-day basis. (5 Marks)

QUESTION TWO (20 MARKS)

- (a) Discuss how the changing user and environmental changes impact on business App development. (6 Marks)
- (b) What are SIX key design concepts used to make differences between getting a program to work, and getting it right? (6 Marks)
- (c) What are FIVE advantages of a developer using JavaScript? (5 Marks)
- (d) What THREE major design issues should a Web Developer consider when developing a front-end of a Web App? (3 Marks)

QUESTION THREE (20 MARKS)

- (a) In what FIVE ways do loyalty programs aid the Web Application Designers? (5 Marks)
- (b) What are FIVE reasons a web developer would decide to use Java Applets? (5 Marks)
- (c) Discuss FIVE architecture models used to create overall structure of software. (10 Marks)

QUESTION FOUR (20 MARKS)

- (a) Give SIX major reasons why the right app development methodology matters. (6 Marks)
- (d) Explain the Terms, Maintainability; Testability; Compatibility; and Configurability. (8 Marks)

QUESTION FIVE (20 MARKS)

- (a) Differentiate between User Interface and User Experience in Web Design. (4 Marks)
- (b) Differences between websites and web applications? (4 Marks)
- (c) What team composition in Web App development can turn your ideas into a robust, efficient product? (5 Marks)
- (d) Explain how outsourcing has impacted on Web App industry. (5 Marks)
- (e) How will a Web App Developers mitigate risks in their line of duty? (2 Marks)

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JOOUST OBSERVES ZERO TOLERANCE TO EXAM CHEATING