

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

CHUKA & EMBU

**FIRST YEAR EXAMINATION FOR THE AWARD OF DIPLOMA IN
COMPUTER SCIENCE**

COSC 0242: DESKTOP APPLICATION DEVELOPMENT

STREAMS: DIP COMP SCI Y2S1

TIME: 2 HOURS

DAY/DATE: THURSDAY 25/03/2021

8.30 A.M. – 10.30 A.M

INSTRUCTIONS:

- Answer question **ONE** and any other **TWO** questions in section B
- Do not write anything on the question paper
- This is a **closed book exam**, no reference materials are allowed in the examination room
- There will be **NO** use of mobile phones or any other unauthorized materials
- Write your answers legibly and use your time wisely.

SECTION A (ANSWER ALL QUESTIONS)

QUESTION ONE (30 MARKS)

- Define the following terms as used in Desktop Application Development
 - Identifier (2 Marks)
 - Keyword (2 Marks)
 - Source files (2 Marks)
 - .Net Framework (2 Marks)
- Describe how event listening works in Desktop Application Development (4 Marks)
- List FOUR windows forms controls used in user interface designs (4 Marks)
- Illustrate how you would initialize a variable in Visual Basic .Net (3 Marks)
- Differentiate between a **Variable** and a **Constant** (4 Marks)
- Give FIVE advantages of Visual basic .Net (5 Marks)
- Describe the term software prototyping (2 Marks)

SECTION B (ANSWER ANY TWO QUESTIONS)

QUESTION TWO (20 MARKS)

- a) Explain the steps involved in designing login and registrations form user interfaces in Visual Basic .Net (12 Marks)
- b) In (a) above how would you add break points? (8 Marks)

QUESTION THREE (20 MARKS)

- a) As an independent contractor you have been awarded a tender to design and develop a hotel management system. Briefly explain each stage of your management system Development Life Cycle. (12 Marks)
- b) Give detailed explanations of TWO types of errors that you are likely to encounter in an active development stage of a software. (8 Marks)

QUESTION FOUR (20 MARKS)

- a) Give a brief description of each of the following models as used in Desktop Application Development.
 - i. Waterfall Model (2 Marks)
 - ii. Iterative Model (2 Marks)
 - iii. Spiral Model (2 Marks)
 - iv. V-Model (2 Marks)
 - v. Big Bang Model (2 Marks)
- b) Explain in details how you would connect your desktop application to the database and display your data in a data grid. (10 Marks)

QUESTION FIVE (20 MARKS)

- a) Explain the following parts of Visual Studio Development Environment
 - i. Tool Box (2 Marks)
 - ii. Solution Explorer (2 Marks)
 - iii. Properties Window (2 Marks)
 - iv. Output Window (2 Marks)
- b) Describe any FOUR events associated with Textbox in Visual Basic .Net (12 Marks)

.....