UNIVERSITY EXAMINATIONS
FIRST YEAR EXAMINATION FOR THE AWARD OF DIPLOMA IN
COMPUTER SCIENCE
COSC 0242: DESKTOP APPLICATION DEVELOPMENT

STREAMS: DIP COMP SCI Y2S1   **TIME: 2 HOURS**
CAMPUSES: MAIN & EMBU CAMPUS

DAY/DATE MAR……………………

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)

a) Define the following terms as used in Desktop Application Development

    i.   Identifier   (2 Marks)

    ii.   Keyword   (2 Marks)

    iii. Source files   (2 Marks)

    iv.   .Net Framework   (2 Marks)

b) Describe how event listening works in Desktop Application Development (4 Marks)

c) List FOUR windows forms controls used in user interface designs   (4 Marks)

d) Illustrate how you would initialize a variable in Visual Basic .Net   (3 Marks)

e) Differentiate between a **Variable** and a **Constant**   (4 Marks)

f) Give FIVE advantages of Visual basic .Net   (5 Marks)

g) 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 datagrid.   (10 Marks)

Question Five (20 Marks)

a) Explain the following parts of Visual Studio Development Environment

      i.   ToolBox   (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)

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