

PAN AFRICA CHRISTIAN UNIVERSITY

DIPLOMA IN INFORMATION AND COMMUNICATION TECHNOLOGY

END OF SEMESTER EXAMINATION

DEPARTMENT: COMPUTING AND INFORMATION TECHNOLOGY

COURSE CODE: DICT0131

COURSE TITLE: EVENT DRIVEN PROGRAMMING

CAMPUS: ROYSAMBU

EXAM DATE: WEDNESDAY, XXXX APRIL, 2025

TIME: 11:00AM-2:00PM

INSTRUCTIONS

- This exam script has **TWO (2)** sections.
- Read all questions carefully before attempting.
- Answer All questions in Section **A** and any other Three questions in Section **B**.
- Write only your **student number** on the answer booklet provided.

SECTION A

(Answer ALL questions in this section)

Question 1:

a) Outline a circumstance under which each of the following controls may be used in a Visual Basic program. **[3**

Marks]

- i. Timer
- ii. Checkbox
- iii. Listbox

b) The textbox is used frequently in most of the application. The textbox has property window, with no caption. Explain why this is so.

[2 Marks]

c) Write a Visual Basic program that allows a user to enter length and width of a rectangle through the use of a textboxes("txtlength" and "txtwidth" respectively). The program should use a function to find the area of the rectangle and displayed in the "txtarea". Attach the code to a command button. **[3**

Marks]

d) Visual basic application may operate in two modes. Explain these modes.

[2

Marks]

SECTION B

(Answer any THREE (3) questions in this section)

Question 2:

Write code to do each of the following:

- i. To generate the Diploma in IT Stage V units displayed in IstStageV. Also ensure that the entry "Advanced Event Driven Programming" is highlighted when the form loads.

[2 Marks]

- ii. Append code to control captioned Add such that when the user clicks an item inside the listbox, it displays in txtTransfer. **[2**

Marks]

- iii. Write code such that when a user clicks the control captioned delete, the text displayed in txtTransfer is erased and moved to txtedit, leaving txtTransfer blank. **[2**

Marks]

- iv. Write code to ensure that the control captioned B, U and I are able to format the text in txtedit to Bold, Underlined and Italics respectively. **[2**

Marks]

- v. Append code to control captioned close. **[2**

Marks]

Question 3:

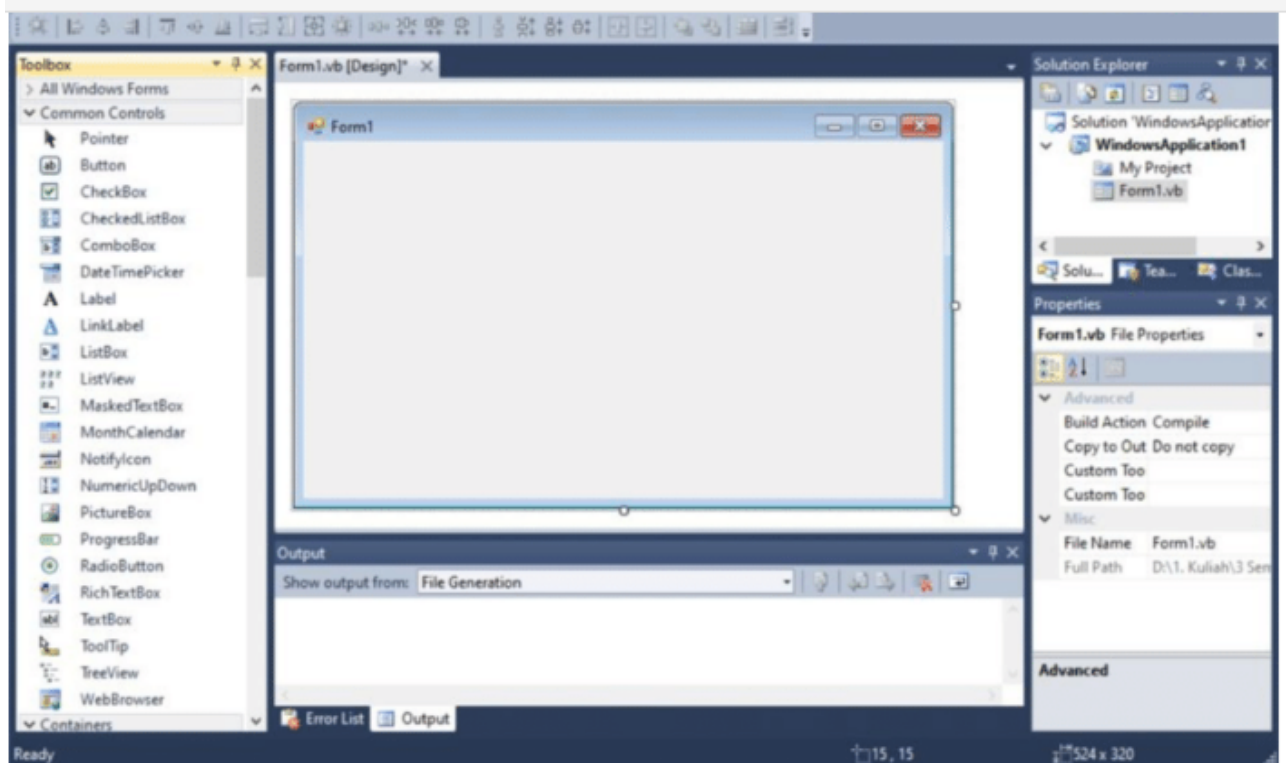
- a) A variable declared explicitly in visual basic must be of a certain data type. Outline two data types in visual basic. **[2**

Marks]

- b) Write a Visual Basic code to add the following courses; BBIT, BSIT, DICT, and CICT in a combo box. **[2**

Marks]

- c) The Screen interface below shows the features of the Visual Basic IDE. Use it to answer the questions that follow.



ii. Explain any three features displayed in the above Visual Basic screen. **[6**

Marks]

Question 4:

a) Explain two challenges that companies with applications built using Visual Basic 6.0 compiler may have with the changing software technology. **[4**

Marks]

b) A sales company contracts salesmen to distribute its three items around Nairobi. The salesmen are paid a commission of 5% for sales of up to Ksh.10, 000 or 7% if the sale is above Kshs.10, 000 and 10% if the sale is above 50,000. Write a visual basic application that calculates the total sales of the three items and computes the commission for each salesman.

[6 Marks]

Question 5:

a) State a reason why each of the following visual conditions is wrong. **[3**

Marks]

- i. Temperature >45 and <65
- ii. Value 1 and value 2=5
- iii. Case is 60 to 69

b) Write a VB program that allows a user to enter the strings 'Alex' and 1234 into respective textboxes in a login screen. If the two are valid, a form named frmmain is opened, otherwise a message 'invalid name or password' is displayed on a message box. Attach the code to a command button. **[7**

Marks]

Question 6:

a) "Visual Basic is an event-driven programming." Justify this statement. **[3**

Marks]

b) A visual basic application has the following specifications

- i. It adds the names of students to a list box control. Each student name is entered through a text box after a click of a command button
- ii. When an item in the list box control is clicked its index is displayed in a message box dialog
- iii. The application verifies that an item is selected in the list box control and then removes the item after a click of a command button

Required:

I. Sketch the GUI **[2**

Marks]

II. Write the program code **[5**

Marks]

EOF

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EXAMINATIONS PAPER**

