

NAME:

CAT ONE.

- a) Briefly explain the following visual basic IDE components (10 marks)
- i. Tool box  
***Is the selection menu for controls that are used to customize forms.***
  - ii. Properties window  
***Displays properties for forms***
  - iii. Project explorer  
***Serves as a quick reference to various element of project.***
  - iv. Form layout  
***Shows where the project will be displayed on the monitor.***
  - v. Code window  
***Displays the VBA code for the object currently highlighted in the project explorer.***
- b) Choose the most appropriate VB data type to store the following values. Explain why your choice is the most appropriate.
- i. A student registration number  
***Integer; registration number contains integer values i.e. binary variable.***
  - ii. The amount of money paid as fees by students  
***Double; amount of money is saved as a floating-point number.***
  - iii. The number of students enrolled in a certain college.  
***Integer; contains integer values which is number of students enrolled.***
  - iv. The interest rate charged if the account goes overdrawn to an accuracy of two decimal places.  
***Double; value to be saved is in a floating-point number.***
  - v. The name of a student.  
***String; contains name of student that is a text value.***
  - vi. The number of students enrolled in all the colleges and universities in Kenya.  
***Integer; contains integer values.***
  - vii. The date a student was admitted.  
***Date; it contains date values, time, or time values.***

viii. Whether a student is a male or not. (4 marks)

***Boolean; to know if the possible value is male or not: true or false.***

- c) With the aid of diagrams describe the behavior and the difference between a Do while....LOOP and a DO....LOOP UNTIL structures.(8marks)

***i.)Do while ...LOOP; checks the condition first then executes the statement(s).***

```
while{  
statements  
}
```

***ii.)Do...LOOP UNTIL; keeps iterating while the condition is false and until the condition is true.***

```
Do{  
Statement;  
}while (condition);
```

- d) Describe a situation under which checkbox controls and radio buttons may be used in an application program. (4marks)

***-A situation you set true or false; it permits the user to make binary choices.***

- e)With aid of an example differentiate one dimensional and two dimensional arrays (4marks)

***i.)one dimensional array;***

***example:***

***Dim ageCounts(120) As Integer***

***ii.)two dimensional array;***

***example:***

***Dim officeCounts(40, 5) As Byte***