



ZIMBABWE

**MINISTRY OF HIGHER AND TERTIARY EDUCATION,
SCIENCE AND TECHNOLOGY DEVELOPMENT**

**HIGHER EDUCATION EXAMINATIONS COUNCIL
(HEXCO)**

NATIONAL DIPLOMA

IN

INFORMATION TECHNOLOGY

SUBJECT: Programming in Visual Basic

PAPER NO: 553/S04

DURATION: 3 Hours

OCTOBER/NOVEMBER 2014 EXAMINATION

REQUIREMENTS

INSTRUCTIONS TO CANDIDATE

1. Answer ALL questions.
2. Print code and interfaces for all answers.

This paper consists of 5 printed pages.

QUESTION 1

Design the simple calculator to perform the following:
Addition, subtraction, multiplication and Division. Add functionality on button Execute so that one is able to do the calculations based upon the user's choice from the combo box. In addition the following: txtnumber1, txtnumber2 must be validated to accept numbers only. Items on the combo box must be added on form _load event. Below is an interface you are required to design and add functionality. (25 marks)

Calculator Programming	
Enter First Number	
Enter Second Number	
Choose option	
Result	
Calculate	Exit

QUESTION 2

Using the design below develop a visual basic application that accept coursework marks and examination mark and then calculate the overall mark. In addition the program should also determine and display the overall grade when the user clicks the display button. Use the grades specifications below.

Assignments contribute, 40% to final mark.

Examination mark contributes 60% to final mark.

If average coursework is less than 49.5 the decision is referred.

If examination mark is less than 49.5 the Decision is referred exam.
(25 marks)

Examination Mark	Grade /Decision
50 -59	Pass
60 – 74	Credit
75 – 100	Distinction

Final Exam Mark Calculator		
Enter Theory Assignment 1		
Enter Theory Assignment 2		
Enter Practical Assignment 1		
Enter Practical Assignment 2		
Exam mark		
Overall mark		
Display		
Grade		Exit

QUESTION 3

Using Visual Basic menu Editor Design an interface below with the following specifications:

- (a) On clicking text “Exit” the form should verify if the user want to exit and respond appropriately.
- (b) on clicking text “show” the current time and date should be displayed in two separate labels.
- (c) On clicking text “font size” the text in all the labels should assume the selected font size.
- (d) When text “font colour” is clicked text in all the labels should assume the selected font colour.

(25 marks)

FILE	SHOW	FONT SIZE	FONT COLOUR
Exit	Time	12	Red
	Date	18	Yellow
		26	Green
			White

TIME: 9:00

DATE: 24/11/13

VISUAL BASIC PROGRAMMING

QUESTION 4

- (a) Using any Database Package Create the Database named studies and add a table with the following details in the database.

Subject	Course code	Duration of course	Course tutor
System Analysis and Design	SSD200	200 HRS	DR Muti
Software Design	SD100	150 hrs	Prof . Huni
Visual Basic	VB400	300 hrs	Dr Thompson
Data Communication	SE500	250hrs	Mr Munoda

Print table

(5 marks)

- (b) Design the following interface in Visual basic and link it to Studies Database.

Computer Science Lecturers 2014			
Subject		Code	
Duration		Tutor	
Add	Delete	Search	

Code the command button labelled:

- Add (for adding a new record)
- Delete (for deleting an unwanted record)
- Search (look for a particular record)
- Create a report for the studies

(20 marks)

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