



KENYATTA UNIVERSITY

SUPPLEMENTARY/SPECIAL EXAMINATION 2023/2024

EXAMINATION FOR DIPLOMA IN INFORMATION TECHNOLOGY

SIT 024: VISUAL BASIC PROGRAMMING

APRIL/MAY 2024

TIME: 2 HRS

INSTRUCTIONS

Answer Question One and any other Two questions

Question One (Compulsory)

- a) With a sample in differentiate between value and reference types. [2 marks]
- b) Discuss the following terns as used in object-oriented programming:
 - i) Encapsulation
 - ii) Polymorphism
 - iii) Abstraction [6 marks]
- c) Briefly explain the main structure for exception handling in a visual programming language. Illustrate your answer by catching division by zero error. [4 marks]
- d) Outline any five common components of any commercial application. [5 marks]
- e) Discuss any four windows forms-based application design consideration. [8 marks]
- f) Write a program in C#.net that captures vehicle details in a Data Grid and sorts them before displaying. [5 marks]

Question Two

- a) Discuss any three circumstances under which a programmer would prefer windows form-based user interface of web based one. [6 marks]
- b) Discuss the use of any three basic IDE components. [6 marks]
- c) A database in drive D named customer details such as account NO., Full Name and Balance. Use the ADO.net component to declare, initiate and populate dataset objects. A table customer is used all the fields are selected. [8 marks]

Question Three

- a) Discuss any three advantages of command line user interface. [6 marks]
- b) Explain how data and methods access are controlled using various access modifiers. [6 marks]
- c) Write a vb.net code for retrieving all data from database tables and displaying in a datagrid. [8 marks]

Question Four

- a) Discuss any three risks of the component-based development approach. [6 marks]
- b) Discuss general structure of a message box dialogue and write a code that displays your registration no and the course you are enrolled for as its title in an authoritative way. [6 marks]
- c) Differentiate between SDI and MDI and give any two-application using such. [8 marks]

Question Five

- a) Discuss any five general user interface design considerations for non-expert users. [10 marks]
- b) Outline any five command button features that can be set at run time. Write a vb.net code that changes them. [6 marks]
- c) Write a program that captures several fruits name in a string. Use for eachloop to retrieve all. [4 marks]