



NATIONAL OPEN UNIVERSITY OF NIGERIA

PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI, ABUJA

FACULTY OF SCIENCES

2021_1 EXAMINATION

COURSE CODE: CIT467

TITLE: VISUAL PROGRAMMING & APPLICATIONS

CREDIT: 3 CREDIT UNITS

TIME ALLOWED: 2HOURS 30MINUTES

Question 1 (22 marks)

- A. Why are Visual basic, visual C++ and the entire Microsoft Visual family not considered as Visual Programming Languages despite their names? (4 marks)
- B. List the two categories of Object icons and describe their roles. (4 marks)
- C. What does URL stand for? Briefly discuss the vital role they played (3 marks)
- D. Briefly explain what led to the “browser wars”. (2 marks)
- E. List and briefly describe two types of hypertext. (4 marks)
- F. Outline the concept of data abstraction with respect to Visual Programming (3 marks)
- G. Why are break statements necessary in switch statement? (2 marks)

Question 2 (12 marks)

- A. Sketchpad is considered as the first computer graphics application based on Visual Programming, briefly discuss Sketchpads creation. (4 marks)
- B. List and briefly highlight how construction rules are used to arrange icons in Visual Programming Languages. (3 marks)
- C. State and describe the two notions of flow of control in Visual Languages (5 marks)

Question 3 (12 marks)

- A. Cube is known as the first three-dimensional 3D Visual Programming Language; Describe the benefits offered by working in a 3D environment compared to 2D VPLs (4 marks)
- B. With the aid of an example, list and describe the first 4 major parts of a URL (6 marks)
- C. Briefly describe the fifth part that URL sometimes contain (2 marks)

Question 4 (12 marks)

- A. HTML is a product of SGML (Standard Generalized Markup Language), briefly explain why HTML was created as an improvement to SGML. (3 marks)
- B. Briefly discuss with examples the main effects of “browser wars” (5 marks)
- C. Briefly describe how to insert a heading into a HTML document (4 marks)

Question 5 (12 marks)

- A. Briefly describe two basic types of java application (6 marks)
- B. Java programs are faster than programs or scripts written in purely interpreted languages, how is that achieved by Java? (3 marks)
- C. Briefly enumerate what factors to consider in deciding whether to use if-then-else statements or a switch statement (3 marks)

Question 6(12 marks)

- A. What's the difference in prefix and postfix increment operators? (4 marks)
- B. Describe an Array and briefly explain how each element is accessed (6 marks)
- C. Differentiate between the do-while and while conditional Statements? (2 marks)