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 discus 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)