



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI, ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
OCTOBER, 2019 EXAMINATIONS

COURSE CODE: CIT467

COURSE TITLE: VISUAL PROGRAMMING AND APPLICATIONS

COURSE CREDIT: 3 UNITS

TIME ALLOWED: 2½ HOURS

INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER FOUR (4) QUESTIONS

Question 1

- (a) Why is the entire Microsoft Visual family not considered as Visual programming language (VPL)? **(4 marks)**
- (b) What do you understand by hyperlinks? **(2 marks)**
- (c) (i) State two (2) differences between definition list and other lists? **(2 marks)**
(ii) Outline the steps to create ordered list in a webpage. **(4 marks)**
- (d) What are the rules for naming variables in Java? **(3 marks)**
- (e) List any four (4) web browsers. **(2marks)**
- (f) i. Write four (4) characteristics of good abstraction? **(2 marks)**
ii. Explain three (3) differences between abstraction and encapsulation. **(3 marks)**

22 Marks

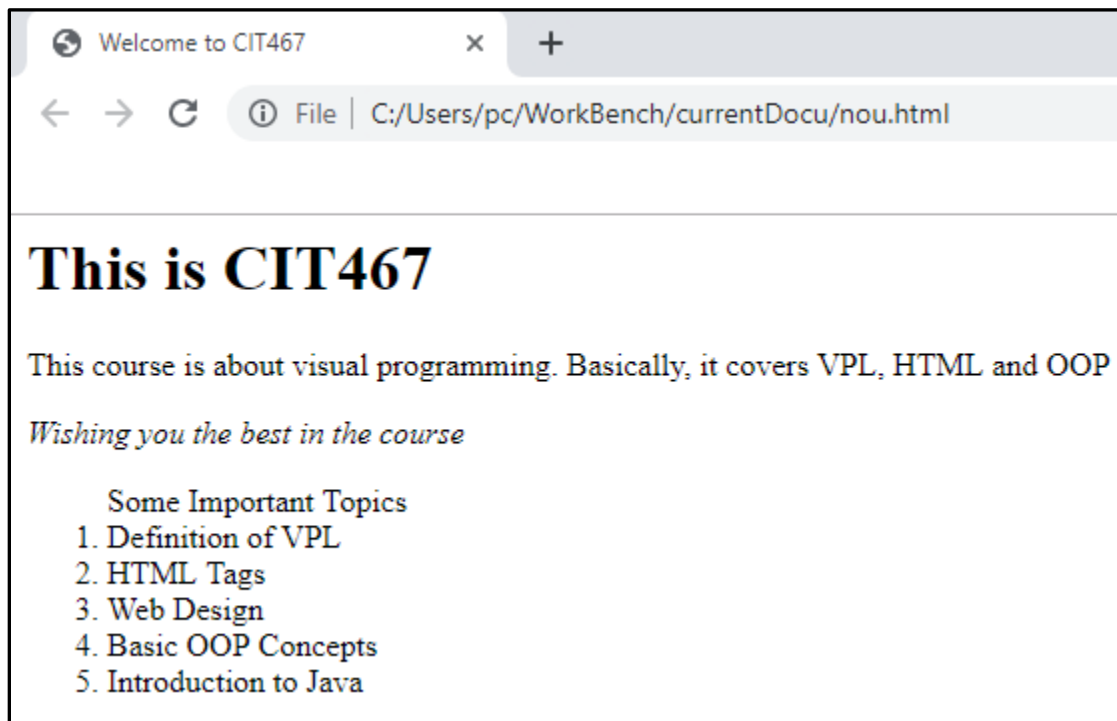
Question 2

- (a) Mention four (4) examples of Visual programming language (VPL)? **(2 marks)**
- (b) Briefly explain how HTML works in the Web? **(3 marks)**
- (c) i. Briefly describe *ordered* and *unordered* lists. **(3 marks)**
ii. Write Java program that compute the average of two numbers (12.0 and 8.0) having double data type. The program should define a class called Averager. **(4 marks)**

12 marks

Question 3

- (a) Briefly explain the following VPL classifications. (4 marks)
- (i) Hybrid text and visual systems
 - (ii) Constrain-oriented system
- (b) Describe four (4) cool things you can do with the HTML. (2 marks)
- (c) Write the appropriate HTML code that could generate the webpage below. (6 marks)



12 marks

Question 4

- (a) Define each of these concepts as they relate to visual programming. (5 marks)
- (i) Iconic system
 - (ii) Iconic sentence (visual sentence)
 - (iii) Visual language
 - (iv) Syntactic analysis (spatial parsing)
 - (v) Semantic analysis (spatial interpretation)
- (b) i. What is lateral in Java programming language? (2 marks)
- ii. List six (6) examples of the most popular programming languages that supports OOP.

(c) Explain object as a concept in OOP.

(3 marks)
(2 marks)

12 marks

Question 5

(a) State three (3) similarities and one (1) difference between VIPR and C++ (4 marks)

(b) (i) Explain logical markup tag. (2 marks)

(ii) List names and corresponding tags of six (6) physical markup tag. (6 marks)

Question 6

(a) Explain the following Internet concepts: (4 marks)

i. Uniform Resource Locator (URL).

ii. World Wide Web (WWW).

(b) Describe the underlisted attributes of <p> tag. (6 marks)

(i) align

(ii) nowrap

(iii) clear

(c) List four (4) requirements of solving complex problems using of OOP approaches. (2 marks)