NATIONAL OPEN UNIVERSITY OF NIGERIA,
PLOT 91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI – ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
2023_1 POP EXAMINATION₂₃₁

COURSE CODE: CIT301
COURSE CREDIT: 2
COURSE TITLE: STRUCTURED PROGRAMMING
 TIME ALLOWED: 2 HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER TWO (2) QUESTIONS
                QUESTIONS

QUESTION 1

1a. Name and expound on the four (4) files used in a C Program (12 marks)
1b. State any three (3) reasons for the popularity of the C programming language (3 marks)
1c. Elucidate on the five (5) phases of program development in the **order of precedence**. **(15 marks)**

                                                    [Total = 30 marks]

Question 2

2a.   As an intern in a software development firm, you are required to make a recommendation on the most effective programming approach that will provide recursive functions. Write your recommendation. **(9 marks)**
2b. State any six benefits of programming approach recommended in 2a   **(6 marks)**
2c. Write down the syntax for a Function with no arguments and return values. **(5 marks)**

                                                    [Total = 20 marks]
                                                    [Total = 20 marks]

QUESTION 3

3a. Expound on the five characteristics of a good program.   **(10 marks)**
3b. Write down and describe the content of program documentation **(5 marks)**
3c. Outline the role of a Function Prototype.   **(3 marks)**
3d. State the Syntax for a Function Protype.   **(2 marks)**

                                                    [Total = 20 marks]

Question 4

4a. Elucidate on the notion of Data Abstraction within the context of structured programming. **(3 marks)**

4b Write a simple function to select the largest of 3 numbers **(10 marks)**

4c. Give a concise description of a compound statement within the context of structured programming

(2 marks)

4d. State any 2 differences between formal and local arguments. **(5 marks)**

[Total = 20 marks]

Question 5

5a. Name and explain any four common types of programming paradigm (12 marks)

5b. Expound on the notion of a programming model (3 marks)

5c. Write down a Function that reads data and prints result in same block. **(5 marks)**

[Total = 20 marks]