NATIONAL OPEN UNIVERSITY OF NIGERIA,
PLOT 91, CADASTRAL ZONE, UNIVERSITY VILLAGE, JABI – ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
2022_2 EXAMINATIONS

COURSE CODE: CIT301
COURSE CREDIT: 3
COURSE TITLE: STRUCTURED PROGRAMMING
TIME ALLOWED: $2^1/_2$ HOURS
INSTRUCTION: ANSWER QUESTION ONE AND ANY OTHER THREE (3) QUESTIONS
MARKING GUIDE

QUESTION 1

1a. Name and describe the two main types of computer programming languages.

(6 marks)

1b. Elucidate on the six phases of program development in the order of precedence. **(18 marks)**

1c. Give a brief description of a computer program **(1 marks)**

[Total = 25 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)**

[Total = 15 marks]

QUESTION 3

3a. Expound on the five characteristics of a good program. **(10 marks)**

3b. Outline and describe the content of program documentation **(5 marks)**

[Total = 15 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)**

[Total = 15 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)

[Total = 15 marks]

Question 6

6a. **Name and elucidate on the 4 files used in a C Program (12 marks)**

6b. State any three (3) reasons for the popularity of the C programming language (3 marks)

[Total = 15 marks]