

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: 2¹/₂ 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]