



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI, ABUJA
FACULTY OF SCIENCES
DEPARTMENT OF COMPUTER SCIENCE
2020_2 EXAMINATIONS

COURSE CODE: CIT381

COURSE TITLE: File Processing and Management

CREDIT: 2 Units

TIME ALLOWED: 2 Hours

INSTRUCTION: Answer Question One (1) and any other THREE (3) Questions

QUESTION ONE (25 MARKS)

- a. Explain the term User Authentication and how it can be implemented (4 marks)
- b. What do you understand by file attributes (2 marks)
- c. Outline two (2) methods by which users can gain access to the programs of other users (2 marks)
- d. Create five (5) students records with at least four (4) necessary fields (5 marks)
- e. Classify the following file names into valid and invalid file name:

(i) Books\$ (ii) Computers* (iii) My eBook? (iv) (Wale) (v) Students@ (vi) Cash#
(vii) Ada; (viii) [Godwin] (ix) [Musa] (x) 2020_2 (5 marks)
- f. Describe the term access method (3 marks)
- g. As a computer expert, explain Data Validation (4 marks)

QUESTION 2

- (a) Explain the term “Data Corruption” and give examples (4 marks)
- (b) Outline the causes of Data Corruption (5 marks)
- (c) Outline the characteristics of naming a file and merits of naming a file (6 marks)

QUESTION 3

- a. Write down five (5) attributes a file could possess. (5 marks)
- b. What is File Management System? Identify 3 functions of File Management (5 marks)
- c. Discuss the Basic File System and Logical I/O elements of the File System Architecture (5 marks)

QUESTION 4

- a. Define Data Validation and explain three (3) methods of data validation (5 marks)

b. Outline and explain three (3) different operations supported by a File Management System.(5 marks)

c. Define a file manager and identify its six (6) common operations. (5 marks) **QUESTION 5**

a. Define Sorting algorithm (6 Marks)

b. Identify and explain any three sorting algorithms techniques (6 marks)

c. Enumerate three (3) techniques used in Space Management (3 marks)