

**National Open University of Nigeria**

**Plot 91, Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi - Abuja**

**Faculty of Science**

**NOVEMBER, 2018 EXAMINATIONS**

**COURSE CODE:** CIT 381

**COURSE TITLE:** FILE PROCESSING AND MANAGEMENT

**CREDIT: 2 Units**

**TIME ALLOWED: 2 Hours**

**INSTRUCTION:** **Answer Question ONE (1) and any other Three (3)**

1 (.a). What do you understand by the word “file extension”. (2 marks)

(b). Give 5 examples of file extensions and it possible content as well as any associated application.

(5 marks)

(c). Define a file and List four (4) common file organization methods (5 marks)

(d). what is internal fragmentation. (2 marks)

(e). Using diagram only describe Record Blocking Methods. (4 marks)

(f). List four (4) different sorting techniques (2 marks)

(g). Write a program in C that open a file named sample.txt, write string of characters “CIT381” to the file and close it (5 marks)

(25 marks)

2 (a.) List the operations that can be performed on Files and Directories (3 marks)

(b.) i. Explain in details what you understand by intrusion detection (3 marks)

ii. Explain Basic I/O Supervisor (3 marks)

(c.) List and explain any 5 operations supported by a file management system (3 marks)

(12 marks)

3 (a.) With the aid of a diagram, describe file system software architecture (4 marks)

(b.) i. What do you understand by pre-allocation policy? (3 marks)

ii. list 10 common causes of data loss that you know (5 marks)

(12 marks)

4 (a.) Differentiate between uninformed search algorithm and informed search algorithm

(5 marks)

(b.) i. State FORTRAN input/output statements and their corresponding function.

(3 marks)

ii. Write a line to open a file for both input and output in FORTRAN language.

(4 marks)

(12 marks)

5 (a.) i. List any 3 File Allocation Methods (3 marks)

ii. State Methods of Improving Performance for disk access (3 marks)

(b.) i. what is Data Validation (3 marks)

ii. Explain Device Drivers (3 marks)

(12 marks)