

# NATIONAL OPEN UNIVERSITY OF NIGERIA, PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESS WAY, JABI, ABUJA

**COURSE CODE: CIT381** 

**COURSE TITLE: File Processing and Management** 

EXAMINATION 2021 2<sub>45678</sub>

**CREDIT: 2 Units** 

**TIME ALLOWED: 2 Hours** 

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

# **QUESTION ONE (25 MARKS) COMPULSORY**

- 1 (a) Outline and describe three file organization methods (3 marks)
- (b) Explain the term "user authentication" and how can it be implemented? (3 marks)
- (c) Describe Access Method (2 marks)
- d. Explain the term "File Organization" and mention three (3) criteria for chosen it (5marks)
- e. Outline and discuss briefly the various access rights that can be granted to a file user. (3 marks)
- f. What is a brute –force approach? (2 marks)
- g. Outline two schemes that can be used in free space fragmentation. (2 marks)
- h. Why the need for High-level Language? Identify three (3) High level languages (5 marks)

# **QUESTION 2**

- (a) Define File Management System (3marks)
- (b) Outline and explain three (3) objectives of File Management System (6 marks)
- (c) List and explain three (3) different operations supported by a file management system. (6 marks)

#### **QUESTION 3**

- . (a) Write short notes on the following:
  - (i) Truncating a file
  - (ii) Deleting a file
  - (iii) Renaming a file (2 marks each)
- (b) Outline and explain three causes of data loss and the solution to each: (6 marks)
- (c) Outline and explain three elements of a file (3 marks)

# **QUESTION 4**

- (a) Briefly outline the different ways through which a file could be protected? (6 marks)
- (b) Describe Sorting Algorithm? (3marks) And Identify and briefly write on any three (3) types of sorting (6 marks)

# **QUESTION 5**

- (a) Explain the basic difference between informed and uninformed search algorithm. (4 marks)
- (b) Classify the following into Uninform and Informed search:
  - (i) Constraint satisfaction search
  - (ii) Tree Search
  - (iii) Graph search
  - (iv) Adversarial search
  - (v) List search

(5 marks)

- (c) Explain the following file attributes:
- (i) File name
- (ii) File Type
- (iii) Time, Date and Process Identification (2 marks each)