



NATIONAL OPEN UNIVERSITY OF NIGERIA
PLOT 91, CADASTRAL ZONE, NNAMDI ASIKIWE EXPRESSWAY, JABI – ABUJA
FACULTY OF SCIENCES

2021 Examination

CIT 841: Advanced Information Storage and Retrieval

Credit Units: 2 Units

Time: 2 hours

INSTRUCTION: Answer Question ONE and Any Three Others

1.
 - a. What is information? Differentiate between data and information (*4 marks*)
 - b. Differentiate between objective or subjective information (*3 marks*)
 - c. Justify the assertion that information retrieval that relies on index rather than full search often result to poor retrieval? (*4 marks*)
 - d. Discuss three main factors that affect query formulation in information retrieval (*6 marks*)
 - e. Discuss the essence of interoperability in information system and state two approaches for achieving information interoperability (*4 marks*)
 - f. Describe document indexing and state its essence (*4 marks*)

2.
 - a. Explain what you understand by MARC 21 format (*4.5 marks*)
 - b. Discuss the MARC 21 formats for the following types of data:
 - i. Bibliographic (*2 marks*)
 - ii. holdings (*2 marks*)
 - iii. Community information (*2 marks*)
 - c. Explain the concept of Information Management (*4.5 marks*)

3.
 - a. State and explain the Objectives of Information Organization (*5 marks*)
 - b. Discuss why information has to be digitized (*5 marks*)
 - c. Discuss the essence of an information retrieval system (*5 marks*)

4.
 - a. Describe Pre-Publishing Structuring and explain how is it used to address the limitations of Post-publishing representation? (*5 marks*)
 - b. *Explain the concept of text operations* or transformation with respect to information retrieval and highlight how text operations can be accomplished (*6marks*)

- c. What is the advantage of having the metadata embedded in hypertext documents (*4marks*)?
- 5.
- a. Replicate the steps involved in information retrieval process? (*5 marks*)
 - b. Discuss the following models for retrieving information
 - i. Document similarity (*2.5 marks*)
 - ii. Boolean model (*2.5 marks*)
 - c. Suggest ways by which artificial intelligence can be used to enhance information retrieval. (*5 marks*)