



**NATIONAL OPEN UNIVERSITY OF NIGERIA,  
University Village, 91 Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi, Abuja  
FACULTY OF SCIENCE  
DEPARTMENT OF COMPUTER SCIENCE  
SEPTEMBER, 2020\_1 EXAMINATIONS**

**COURSE CODE: CIT 832**

**COURSE TITLE: OPERATING SYSTEM CONCEPTS AND NETWORKING  
MANAGEMENT**

**COURSE UNIT: 2 UNITS**

**TIME ALLOWED: 2 HRS**

**INSTRUCTION: ANSWER QUESTION 1 AND ANY OTHER 3 (3) QUESTIONS**

**QUESTION ONE**

- 1ai) Categorize the features of Graphical User Interface? **(3 marks)**
- 1aii) Appraise the evolution of Human and Machine Interaction **(3 marks)**
- 1aiii) What are GUIs? Analyse the Common Graphical User Interfaces **(4 marks)**
- 1b). Extensively discuss the following operating systems Architecture:
  - i. Network Operating System **(3 marks)**
  - ii. Distributed Operating System **(3 marks)**
  - iii. Multiprocessor Operating Systems **(3 marks)**
- 1c). In a tabular form distinguish four configuration procedure by method and operating system (protocols). **(6 marks)**

**QUESTION TWO**

- 2a). Briefly analyse the following Network security issues:
  - i. Integrity **(3 marks)**
  - ii. Confidentiality **(3 marks)**
  - iii. Availability **(3 marks)**
- 2bi). Justify why we study OS **(3 marks)**
- 2bii). Appraise the functions of Operating system **(3 marks)**

**QUESTION THREE**

- 3a) Differentiate Router from Hub **(6 marks)**
- 3b) Compare the features of repeater and bridge **(6 marks)**
- 3c). With the aid of diagram, illustrate the positioning of an operating system in the overall computer system. **(3 marks)**

**QUESTION FOUR**

- 4a) Discuss in detail the advantages that network offer to individuals and organization. **(3 marks)**
- 4b) Explicate the features of each of the following:
  - i. Local Area Network (LAN) **(4 marks)**
  - ii. Metropolitan Networks (MANs) **(4 marks)**
  - iii. Wide Area Network **(4 marks)**

**QUESTION FIVE**

- 5a) Examine the five (5) components of data communication model (**7 ½ marks**)
- 5b) Differentiate between the following: (i) Guided transmission media and (ii) Unguided transmission media (**6 marks**)
- 5c) Clarify the use of Multiprogramming Approach? (**1½ marks**)