

#### NATIONAL OPEN UNIVERSTYOF NIGERIA,

# University Village, 91 Cadastral Zone, Nnamdi Azikiwe Expressway, Jabi, Abuja FACULTY OF SCIENCE DEPARTMENT OFCOMPUTER 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)

#### **OUESTION 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)

#### **OUESTION 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)