



**NATIONAL OPEN UNIVERSITY OF NIGERIA**  
**PLOT 91, CADASTRAL ZONE, NNAMDI AZIKIWE EXPRESSWAY, JABI-  
ABUJA**  
**FACULTY OF SCIENCE**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**SEPTEMBER, 2020\_1 EXAMINATION**

**COURSE CODE: CIT 711**  
**COURSE TITLE: COMPUTER FUNDAMENTALS**  
**CREDIT UNIT: 3**  
**TIME ALLOWED : 2 1/2HRS**  
**INSTRUCTION: ANSWER QUESTION ONE AND ANY FOUR OTHERS**

**Questions**

1. a. Elucidate on the term computer **2.5marks**  
b. Explain Von Neumann stored program architecture and its bottleneck. **8marks**  
c. Describe key characteristics of memory system **3.5marks**  
d. Discuss the composition of a Wafer, hence what is an integrated circuit? **8marks**
- 2 a. Recognize the advantages of having densely packed Integrated Circuits? **8marks**  
b. Deliberate on the consequence of the Very Large Scale Integration (VLSI) technology. **2marks**
- c. What is Microprocessor? **2marks**
- 3 a. (i) What is Microcomputer? **2marks**  
(ii) Deduce the bit system chip **3marks**  
b. Of what advantage are higher bit computers over the smaller bit computers? **3marks**  
c. Differentiate Mainframes from Super computers **4marks**
4. a. What is Memory System? **2marks**  
b. Describe the following: (i) Internal Processor Memories, (ii) Primary Memory (iii) Secondary Memory **6marks**  
c. Write short note on ROM and PROM **4marks**
- 5 a. Describe the term Storage Capacity **2marks**  
b. Explain the following Access Modes: (i) Random, (ii) Sequential and (iii) Direct Access. **6marks**  
c. What is Access Time? **4marks**
- 6 a. What are dynamic Memories? **3 marks**  
b. Differentiate Volatile from static memories **5marks**  
c. By physical characteristics, memory devices can be categorized into four, discuss them **(4 marks)**