

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)