

LAGOS CITY POLYTECHNIC, IKEJA
SCHOOL OF ENGINEERING AND APPLIED SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
2015/2016 SEMESTER EXAMINATION

COURSE TITLE: COMPUTER ARCHITECTURE	INO	OF	QUESTION: 6
COURSE CODE: COM 314			TIME: ALLOWED:
2HRS			
FOR WHOM:	HND YR 1	CS	P/T
INSTRUCTIONS:			

Answer any

Four Questions

1. (a) Describe a microcomputer system Architecture
 (b) Mention and explain types of PC bus system
 (c) Differentiate between RAM and ROM memory devices.

2. (a) Explain the following terms:
 (i) parallel port (ii) cache memory (iii) USB port
 (iv) serial port
 (b) Mention and explain memory management methods
 (c) Explain POST and state function of BIOS

3. (a) With aid of schematic block diagram, explain basic hardware configuration of a microcomputer system
 (b) Write full meaning of the following abbreviations
 (i) BIOS (ii) RAM (iii) PCI (iv) ALU
 (v) AGP (vi) ROM (vii) RISC
 (c) Explain complex instruction set computer (CISC)

4. (a) Using a suitable schematic block diagram, explain basic bus connection between a microprocessor, input and output hardware devices and memory.
 (b) Explain instruction fetch and execute cycle
 (c) With aid of schematic block diagram, explain a basic conventional microprocessor Architecture.

5. (a) Differentiate between static RAM (SRAM) and Dynamic (DRAM) memory device.
 (b) Distinguish between complex instruction set and Reduced instruction set computer system.
 (c) Differentiate between input hardware devices and output hardware device units with examples.

6. (a) Explain computer system upgrading
 (b) Differentiate between control unit (CU) and Arithmetic and Logic unit (ALU)
 (c) Using diagram, explain operational relationship between CPU, cache memory and main memory of microcomputer system.