

NATIONAL OPEN UNIVERSITY OF NIGERIA

14/16, Ahmadu Bello Way, Victoria Island

SCHOOL OF SCIENCE AND TECHNOLOGY October, 2013 Examination

COURSE CODE: CIT 309

COURSE TITLE: COMPUTER ARCHITECTURE

CREDIT UNIT: 3CREDIT UNITS

TIME: $2^{1}/_{2}$ HOURS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS IN ALL

1a. What is Processors instruction set? (5.5 marks)

- 1b. Write short note on the four register involved in the Fetch Cycles. (12 marks)
- 2a. Write a short note to differentiate between the Operation code and Next instructionreference (11 marks)
- 2b. What is Instruction address calculation (ac)? (6.5 marks)
- 3a. Write short note on Incrementer /decrementer address latch. (6.5 marks)
- 3b. Enumerate the two key characteristics of a process. (11 marks)
- 4a. Write short note on the benefit of Incrementer/decrementer address latch over the ALU. (4.5 marks)
- 4b. Define gates and list the four basic gates used in digital logic. (13 marks)
- 5a. Write down the steps to perform; ADD B, A,. (9.5mark)
- 5b. State the four Characteristics of Reduced Instruction Set Architectures. (8mark)
- 6a. What is Interrupt control? (5.5 Marks)
- 6b. State and write short note on the three micro-operations that can be performed within the time of a single time unit. (12 Marks)