NATIONAL OPEN UNIVERSITY OF NIGERIA
14-16 AHMADU BELLO WAY, VICTORIA ISLAND LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
MARCH/APRIL 2015 EXAMINATION

SCHOOL OF SCIENCE AND TECHNOLOGY

COURSE CODE: **CIT 411**

COURSE TITLE **MICROCOMPUTER AND MICROPROCESSOR**

TIME ALLOWED: **2 HOURS**

INSTRUCTION: *Answer any four questions out of six.*

1. (a) Briefly explain the Von Neumann computer architecture.
   (b) Outline and discuss the four addressing modes available to an 8085 microprocessor.

2. (a) Explain the term BUS in relation to microcontroller.
   (b) Outline and discuss the various subcategories of a computer architecture.

3. (a) What are Condition Flags.
   (b) Enumerate and explain at least five components of the 8085 microprocessor.

4. (a) (i) Define the following terms: Opcode and Operand.
   (ii) Clearly stating the difference between them.
   (b) Write out clearly the following logical operation.
   i. SET B 2FH
   ii. CLR C
   iii. CPL 20H
   iv. MOV C, 87h
   v. ANL C, 90h
   vi. ORL C, 91h

5. (a) Briefly explain the term Die.
   (b) Outline and explain at least four technological innovations of microprocessors.

6. (a) Explain the term Interrupt, listing at least four types of interrupt.
   (b) Outline at least five actions taken by the microcontroller when an interrupt is triggerred, enumerating at least five registers that the operation is protecting.