NATIONAL OPEN UNIVERSITY OF NIGERIA
14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS
SCHOOL OF SCIENCE AND TECHNOLOGY
MARCH/APRIL 2014 EXAMINATION

COURSE CODE: CIT 411
COURSE TITLE: MICROCOMPUTERS AND MICROPORCESSORS
TIME ALLOWED: Time: 2 HOURS
INSTRUCTION: *Answer any four questions out of six.*

1. (a) Briefly expalin the Von Neumann computer Architecture.
   (b) Outline and discuss the various subcategories of a computer architecture.

2.(a) Define the following terms: Opcode and Operand. Clearly stating the difference between them.
   (b) Briefly explain the meaning of 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

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

4. (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.

5. (a)With reference to the microcontroller, explain what you understand by the term BUS.

(b) Outline and discuss the four addressing modes available to an 8085 microprocessor.

6. (a) Give a detailed explanation about the term Die.

(b) Enumerate and explain four technological innovations of microprocessors.