

**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**14/16 AHMADU BELLO WAY, VICTORIA ISLAND, LAGOS**

**SCHOOL OF SCIENCE AND TECHNOLOGY**

**JUNE/JULY EXAMINATION**

**COURSE CODE: CIT 411**

**COURSE TITLE: MICROCOMPUTERS AND MICROPORCESSORS**

**TIME ALLOWED:2 HOURS**

**INSTRUCTION: Answer question one and any other three questions**

1. Using suitable diagram, draw the Architectural design of an 8085 Microprocessor, indicating at least

ten of its components and five of its features.

2. What is Microcomputer Networking? Outline and discuss any five of its various types.

3. Differentiate between the following microprocessor types based on hardware characteristics: RISC,

 CISC, VLWI & Superscalar, clearly indicating four of their features each.

4. (a) Define the following terms: Opcode and Operand. Clearly stating the difference between them.

 (b) Write out clearly the following logical operation.

1. SET B 2FH
2. CLR C
3. CPL 20H
4. MOV C, 87h
5. ANL C, 90h
6. ORL C, 91h

5. (a) What is an Assembly Language. Outlining four of its benefits.

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

6. Explain the term Interrupt; clearly stating the actions taken by the microcontroller when an interrupt is

 triggerred, enumerating at least five registers that the operation is protecting.