National Open University of Nigeria
Plot 91, Cadastral Zone, Nnamdi Asikiwe Expressway, Jabi – Abuja
Faculty of Sciences
Department of Computer Science ₁₂₃₄
2020_2 Examination

COURSE CODE: CIT411
COURSE TITLE: Microcomputers and Microprocessors
CREDIT: 2 Units
TIME ALLOWED: 2 Hours
INSTRUCTION: Answer Question ONE (1) and Any other Three (3)

Q1a. What is Microprocessor?	(2 Marks)
b. Explain any three (3) technological innovations of microprocessor	(6 Marks)
c. Explain any three (3) benefits of Assembly Language	(6 Marks)
d. Explain the concept of Direct addressing	(2 Marks)
e. What is Interrupt?	(2 Marks)
f. Mention any two (2) interrupts related problems	(2 Marks)
g. Describe the use of external memory	(2 Marks)
h. Mention three (3) components of microcomputer?	(3 Marks)

Q2a. Describes the 8255 Peripheral Interface Controller technique	(5 Marks)
b. Explain the use of logical operators in assembly language?	(4 Marks)
c. Demonstrate the use of computers in society	(6 Marks)

Q3a. Explain the concept of coprocessor trap	(4 Marks)
b. Differentiate between MOV and MOVX assembler directives	(6 Marks)
c. Write notes on any two (2) types of computer networking	(5 Marks)

Q4a. Briefly discuss the history of microprocessor	(5 Marks)
b. Differentiate between addition and subtraction arithmetic operations	(4 Marks)
c. Describe the three (3) subcategories of computer architecture	(6 Marks)

Q5a. Explain the term DMA	(4 Marks)
b. With example, prepare a table of one-byte instructions format	(5 Marks)
c. Differentiate between Intel microprocessors and Motorola microprocessors	(6 Marks)