3470

BOARD DIPLOMA EXAMINATION, (C-09)

OCT/NOV-2012

DCME-FOURTH SEMESTER EXAMINATION

DIPLOMA MICROPROCESSORS QUESTION PAPER

Time: 3 hours] [Total Marks: 80

PART-A

Instructions: (1) Answer all questions

*Each question carries **three** marks.*

Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. Explain cache memory.
2. Describe instruction format
3. List the types of interrupts of 8086.
4. State the purpose of pointer and index registers.
5. Write any six features of Intel 8086 microprocessor.
6. List any three instructions which affect flags of 8086
7. Generate the machine code for the instruction MOV AX, [SI]. The opcode for MOV is 100010.
8. Explain RETURN instruction.
9. Write any six features of 80486
10. List any six features of 80386.

PART-B

*Instructions: (1) Answer any **five** questions.*

*(2) Each question carries **ten** marks.*

(3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. (a) explain the fixed-point and floating-point representations with examples and compare them. (b) define micro-operation and macro-operation
12. Draw the bock diagram of accumulator-based CPU and explain the function of each unit.
13. (a) write any five differences between 8-bit and 16-bit microprocessors. (b) explain the concept of parallel processing.
14. Describe block diagram and bus-cycle timing diagram of 8086 minumum mode.
15. (a) describe any five assembler directives. (b) list any two assembly language development tools and describe them.
16. Write an assembly language program to find the smallest of ‘N’ 8-bit number stored from SOURCE. Store the smallest number at RESULT.
17. Write any five differences among 80286, 80386, 80486 and Pentium.
18. Explain the architecture of 80286 with a neat diagram.

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Time: 3 hours] [Total Marks: 80

PART-A
Instructions: (1) Answer all questions
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1. Write the purpose of INTR and MN/MX pins of 8086.
2. What are the microcomputer and microprocessor?
3. State the use of assembler and debugger.
4. Explain ADD and CMP instructions.
5. What is the parameter passing in procedures?
6. What is interrupt? List the interrupts of 8086.
7. Write an assembly language program to subtract a 16-bit number num2 from another 16-bit number num1 and store at num3.
8. List any six features of keyboard/display controller.
9. What is direct memory access?
10. List any six features of 8086.

PART-B
Instructions: (1) Answer any five questions.
(2) Each question carries ten marks.
(3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. Explain any five addressing modes of 8086.
12. Briefly explain any five instructions that affect flags of 8086.
13. What us subroutines? Explain the CALL and RET instructions of 8086.
14. write an assembly language program to find large of N 8-bit numbers stored from source and store at result.
15. Explain the working of USART with diagram.
16. Draw the diagram of programmable peripheral interface of operations.
17. Draw and explain the internal block of diagram of Pentium IV processor.
18. (a) Write the function of instruction queue, sp, ip , bp of 8086.

(b) Draw the block diagram of interrupt controller.

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BOARD DIPLOMA EXAMINATION, (C-05)

OCT/NOV-2011

DCME IV SEMESTER EXAMINATION

MICROPROCESSOR

Time : 3 Hours] [Total Marks: 100

PART-A 10*4=40

Instructions: (1) Answer all questions and each question caries four marks. (2) Answers should be brief and straight to t the point and shall not exceed five simple sentences.

1. Define the concept of multiplexing in microprocessor.
2. Draw flag register of 8086
3. Draw the diagram of DRAM.
4. Define the instruction execution time.
5. List the sources of interrupt in 8086
6. Define procedure of macro's
7. Define DMA data transfer.
8. What do you mean by "parallel Data communication"?
9. Write any four features of Pentium-IV
10. Differentiate between real mode and protected virtual addressing modes

PART-B **5*12=60**

Instructions: (1) Answer any five questions and each question caries twelve marks. (2) The Answers should be comprehensive and criteria for valuation is the Content but not the length of the answer.

11. Draw and explain the functional block diagram of 8086
12. (a) explain the types of instruction formats. (b) classify the semiconductor memory
13. (a) explain any six processor/machine control instructions (b) explain the concept of interfacing SRAM and EPROM.
14. (a) explain the levels of programming. (b) explain the classification of interrupts
15. Draw and explain the interfacing of 8259A with 8086
16. Draw and explain the functional block diagram of 8251A- USART.
17. Draw and explain the architecture of 80386 Microprocessor.
18. Draw and explain the architecture of 80486 Microprocessor

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BOARD DIPLOMA EXAMINATION, (C-09)

OCT/NOV-2012

DCME-FOURTH SEMESTER EXAMINATION

DIPLOMA MICROPROCESSORS QUESTION PAPER

Time: 3 hours] [Total Marks: 80

PART-A

Instructions: (1) Answer all questions

*Each question carries **three** marks.*

Answers should be brief and straight to the point and shall not exceed five simple sentences.

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2. Describe instruction format
3. List the types of interrupts of 8086.
4. State the purpose of pointer and index registers.
5. Write any six features of Intel 8086 microprocessor.
6. List any three instructions which affect flags of 8086
7. Generate the machine code for the instruction MOV AX, [SI]. The opcode for MOV is 100010.
8. Explain RETURN instruction.
9. Write any six features of 80486
10. List any six features of 80386.

PART-B

*Instructions: (1) Answer any **five** questions.*

*(2) Each question carries **ten** marks.*

(3) Answers should be comprehensive and the criteria for valuation is the content but not the length of the answer

11. (a) explain the fixed-point and floating-point representations with examples and compare them. (b) define micro-operation and macro-operation
12. Draw the bock diagram of accumulator-based CPU and explain the function of each unit.
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16. Write an assembly language program to find the smallest of ‘N’ 8-bit number stored from SOURCE. Store the smallest number at RESULT.
17. Write any five differences among 80286, 80386, 80486 and Pentium.
18. Explain the architecture of 80286 with a neat diagram.