

TED (10) - 5040 (REVISION - 2010)

| Reg. 1 | No |
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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

ADVANCED MICROPROCESSORS

[Time: 3 hours

(Maximum marks: 100)

PART — A

(Maximum marks: 10)

Marks

- I Answer all questions in one or two sentences. Each question carries 2 marks.
 - 1. List the segment registers of 8086.
 - 2. Define Assembler.
 - 3. List the features of Pentium Pro.
 - 4. Define Interrupt.
 - 5. List the different operating modes of 80386 processor.

 $(5 \times 2 = 10)$

PART — B

(Maximum marks: 30)

- II Answer any five of the following questions. Each question carries 6 marks.
 - 1. Explain the flag register of 8086 with diagram.
 - 2. Write notes on hardware and software interrupts of 8086.
 - 3. Describe Interrupt vector table.
 - Explain Assembler directives.
 - 5. Compare 80286 & 80386.
 - 6. Write notes on Data & Instruction cache.
 - 7. Explain the special registers of 80386.

 $(5 \times 6 = 30)$

[400]

P.T.O.



5

10

| | | | Marks |
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| | | PART — C | |
| | | (Maximum marks: 60) | |
| | | (Answer one full question from each unit. Each full question carries 15 marks.) | |
| | | Unit — I | |
| Ш | (a) | Explain the Architecture of 8086 with a neat diagram. | 10 |
| | (b) | Explain different instruction types in 8086. | 5 |
| | | OR | |
| IV | (a) | Explain the addressing modes of 8086 with examples. | 12 |
| | (b) | Explain IN A, [DX] | 3 |
| | | Unit — II | |
| V | (a) | With a neat diagram explain interfacing of 8086 with keyboard display controller. | 8 |
| | (b) | With neat diagram explain the interfacing of 8086 with 8259A. | 7 |
| | | OR | |
| VI | (a) | Explain Basic Interrupt Processing. | 9 |
| | (b) | With neat diagram explain the interfacing of 8086 with 8237. | 6 |
| | | Unit — III | |
| VII | (a) | With a neat diagram explain the architecture of 80286. | 9 |
| | (b) | Comment on memory management in 80386. | 6 |
| | | OR | |
| III | (a) | Explain the different operating modes of 80286. | 6 |
| | (b) | With a neat diagram explain the architecture of 80386. | 9 |
| | | Unit — IV | |
| lΧ | (a) | With a neat sketch explain the architecture of Pentium Pro Processor. | 10 |
| | (b) | Write notes on Super scalar architecture. | 5 |
| | | OR | |

(ii) multicore technology

X (a) Compare Pentium Pro, PentiumI and PentiumII.

(b) Explain (i) hyper threading technology