MICROPROCESSORS (Common to CSE & ISE)

Written by Administrator
Sunday, 08 November 2009 06:42 -

Sub Code

:

06CS45

IA Marks

:

25

Hrs / Week

:

04

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⬚

Exam Hours

:

03

Total Hrs

:

52

⬚

Exam Marks

:

100

PART – A

UNIT 1:

   1. Overview   of Microcomputer Structure and Operation, Microprocessor Evolution and Types, 8086 Internal Architecture, Introduction to Programming the 8086

6 Hours

UNIT 2:

   1. 8086   Family Assembler Language Programming – Instruction Templates, MOV Instruction Coding Format and Examples, MOV Instruction Coding Examples,   Writing Programs for use with an Assembler, Assembly Language Program   Development Tools

6 Hours

UNIT 3:

1. Implementing   Standard Program Structures In 8086 Assembly Language: Simple Sequence   Programs, Jumps, Flags, and Conditional Jumps, If-Then, If-Then-Else, and Multiple If-Then-Else Programs, While-Do Programs, Repeat-Until Programs,   Instruction Timing and Delay Loops

7 Hours

UNIT 4:

1. Strings,   Procedures, and Macros: The 8086 String Instructions, Writing and Using Procedures, Writing and Using Assembler Macros

7 Hours

PART – B

UNIT 5:

1. 8086   Instruction Description and Assembler Directives

6 Hours

UNIT 6:

   1. 8086   System Connections Timing: A Basic 8086 Microcomputer System, Addressing   Memory and Ports in Microcomputer Systems, 8086 and 8088 Addressing and   Address Decoding, How the 8088 Microprocessor Accesses Memory and Ports,   8086 Timing Parameters

7 Hours

UNIT 7:

   1. 8086   Interrupts and Interrupt Applications: 8086 Interrupts and Interrupt Responses, Hardware Interrupt Applications, 8259A Priority Interrupt   Controller, Software Interrupt Applications

7 Hours

UNIT 8:

   1. Digital   Interfacing: Programmable Parallel Ports and Handshake Input/Output, Methods of Data Transfer, Implementing Handshake Data Transfer, 8255A   Internal Block Diagram and System Connections, 8255A Operational Modes and   Initialization, Constructing and Sending 8255A Control Words

6 Hours

Text Book

1. **Microprocessors   and Interfacing**,   Douglas V. Hall, Revised 2nd Edition, TMH, 2006.

Reference Books

1. **Advanced   Microprocessors & IBM-PC assembly Language Programming,** K. Udaya Kumar   & B.S. Umashankar, TMH 2003.

1. **The Intel   Microprocessors**,   7th Edition, Barry B. Brey, Pearson/PHI 2006.

(Section 4-7, Section 8-1).

1. **The Intel   Microprocessor Family: Hardware and Software Principles and Applications**   , James L.   Antonakos, Thomson, 2007.

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