

Teaching Plan

Name of the Faculty : Ravi Kumar Yadav

Name of the Course : B. Tech. Computer Science

Semester : VI Sec (if any) : A

Title of the Paper : Paper 14 CS-601 Microprocessors

Month	Topics Covered (Tentative)	References
January	Microprocessor Architecture: Internal architecture, Programming model Article 2.1 Page 51 to 58	[1]
	Memory Addressing: Real mode and protected mode operation, Program invisible register Article 2.2-2.3 Page 58 to 68	[1]
February	Addressing Modes: Data addressing modes, Program memory addressing modes and Stack memory addressing modes Article 3.1-3.3 Page 78 to 105	[1]
	Microprocessors Programming: Machine language, Instruction formats, String data transfer instructions, Program control instructions, Assembly language programming Article 4.1-4.5, 6.1-6.3 Page 112 to 142, 192 to 212	[1]
March	8088/8086 Hardware Specification: Pin-outs and pin functions, Clock generator, Bus buffering and latching, bus timing Article 9.1-9.5 Page 302 to 322	[1]
	Memory Interfacing : Memory address decoding, 8-bit and 16-bit memory interfacing. Article 10.2-10.4 Page 340 to 363	[1]
April	I/O Interfacing: Introduction to I/O interface, address decoding, Programmable Peripheral Interface, Timer Article 11.1 (Up to page 380), 11.2, 11.3, 11.4 Page 377 to 379, 387-398, 414- 420, 423-428	[1]
	Interrupts & DMA: Interrupt controller, DMA controller [1]Article 12.1- 12.2, 13.1-13.2 (Up to page 516) Page 451 to 465, 490 to 506	[1]

Note : The tentative date of Presentation/test may also be provided. (March/April)

Teaching Plan

Name of the Faculty : Dr. Sumit Kumr Agarwal

Name of the Course : B.Tech (Computer Science)

Semester : VI Sec (if any): A & B Session: 2015-16

Title of the Paper : Network Programming and Administration

Month	Topics Covered	References
Jan 2016	Chapter 1. Introduction Chapter 2. Transport Layer: TCP, UDP & SCTP Chapter 4. Elementary TCP Sockets Practical- Q1, Q2 and Q3 from the practical list.	[1] R. Stevens, UNIX Network Programming, 3 rd Ed., PHI 2008
Feb 2016	Chapter 3. Sockets Introduction Chapter 5. TCP Client-Server Example Chapter 6. I/O Multiplexing the Select and Poll Functions Practical- Q4, Q5 and Q6 from the practical list. ** Test -1 (Last week of Feb/2016) Assignment- 1 will be assigned in 2nd week of this month.	[1] R. Stevens, UNIX Network Programming, 3 rd Ed., PHI 2008
March 2016	Chapter 7. Socket Options Chapter 8. Elementary UDP Sockets Chapter 11. Elementary Name & Address Conversions Practical- Q7 and Q8 from the practical list. ** Test -2 (Last week of March/2016) Assignment- 2 will be assigned in 2nd week of this month.	[1] R. Stevens, UNIX Network Programming, 3 rd Ed., PHI 2008
April 2016	Chapter 12. IPv4 & IPv6 Interoperability (Topics 12.1 to 12.3) Chapter 20. Networking Management & Debugging Practical- Q9 and Q10 from the practical list. ** Presentations will be in this month. ** Revision	[1] R. Stevens, UNIX Network Programming, 3 rd Ed., PHI 2008 [2] Nemeth Synder & Hein, Linux Administration Handbook – Pearson Edition.

Teaching Plan

Name of the Faculty : Sudhir Kumar Gupta

Name of the Course : B Tech (Computer Science)

Semester : VI Sec (if any): B

Title of the Paper : Microprocessor

Month	Topics Covered	References
Jan 2016	Microprocessor architecture Memory Addressing Addressing modes Practical – Assembly program basics using Debug program	[1]
Feb 2016	Microprocessor programming 8088/8086 Hardware Specifications Practical – Program 1 and 2 given in guideline Assignment based on previous completed chapters Test 1	[1]
March 2016	Memory Interfacing I/O interfacing Practical – Program 3 and 4 given in guideline Presentations Test 2	[1]
April 2016	Interrupts & Direct Memory Access Practical – Program 5 and 6 given in guideline Presentations Test 3	[1]

Note: The tentative date of Assignment/test/Project may also be provided.

The schedule of Practical's may also be provided

Teaching Plan

Name of the Faculty : Dr. Namita Aggarwal
 Name of the Course : Btech Computer Science
 Semester : VI Sec (if any): A
 Title of the Paper : Systems Programming and Compiler Design

Month	Topics Covered	References
Jan	Introduction: Overview of compilation, Phases of a compiler. 1.1-1.2 [p1-12] Lexical Analysis: Role of a Lexical analyzer, Specification and recognition of tokens, Symbol table, lex. 3.1, 3.3-3.5 [p109-p114, p116-144] Parsing: Simple LR. 4.5, 4.6 [p233-258]	Alfred V. Aho, Monica S. Lam, Ravi Sethi, Jeffrey D. Ullman, Compilers: Principles, Techniques, and Tools, 2nd edition, Prentice Hall, 2006.
	TEST-1 (Last week) Practical: First 5 lex programs (1-5) Presentation of around 10 students	
Feb	Parsing continued: Canonical LR, LALR, Yacc (Parser generator). 4.7 (upto 4.7.4), 4.8-4.9 [p259-270, 278-297]	Aho et al., Compilers: Principles, Techniques, and Tools, 2nd ed, Prentice Hall, 2006.
	Assemblers & Loaders, Linkers: One pass and two pass assembler, design of an assembler, Absolute loader, relocation and linking concepts, relocating loader and Dynamic Linking.: Chap. 3 [p36-62] Chap. 4 [p63-83].	Shantanu Chattopadhyaya, Systems Software, PHI, 2011.
	TEST-2 (Third week) Practical: 3 lex programs and 3 yacc programs (6-11) Presentation of around 15 students	
March	Intermediate representations: Three address	Aho et al., Compilers:

	<p>code generation, syntax directed translation, translation of types, control statements</p> <p>[5.1-5.2.4, p303-314] [6.2 (upto 6.2.3) p363-369, 6.3-6.5.2 (p370-390), 6.6 (upto 6.6.4) (p399-405), 6.6.6, 6.9 p422-424]</p>	<p>Principles, Techniques, and Tools, 2nd ed, Prentice Hall, 2006.</p>
	<p>TEST-3 (Third week)</p> <p>Practical: 1 yacc program (12) and assembler implementation</p> <p>Presentation of around 15 students</p>	
April	<p>Storage organization: Activation records, stack allocation [7.1-7.2, p427-441]</p> <p>Code Generation: Object code generation [p505-522]</p>	<p>Aho et al., Compilers: Principles, Techniques, and Tools, 2nd ed, Prentice Hall, 2006.</p>
	<p>Practical: Assembler implementation</p> <p>Presentation of around 10 students</p>	