

**ST. ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY: CHIRALA**  
**DEPARTMENT OF COMPUTERSCIENCE & ENGINEERING**

**LECTURE SCHEDULE**

**SUBJECT: Principles of Programming Languages**

**ACADEMIC YEAR: 2018-19**

**NAME: M. Lakshmi Bai**

**YEAR & SEM/SECTION: II-II 'A'**

**No. of Lectures per week : 4+1\* (Tutorial)**

S. NO	DATE	UNIT	TOPICS
1	19-Nov-18	I	Evolution of programming languages
2	20-Nov-18		describing syntax
3	22-Nov-18		Context Free Grammars
4	23-Nov-18		attribute grammars
5	24-Nov-18		describing semantics
6	26-Nov-18		describing semantics
7	27-Nov-18		Lexical analysis
8	28-Nov-18		Parsing recursive – decent
9	29-Nov-18		bottom - up parsing
10	30-Nov-18		bottom - up parsing
11	1-Dec-18		<b>Tutorial</b>
12	3-Dec-18		<b>Revision</b>
13	4-Dec-18		<b>Slip Test-1</b>
14	5-Dec-18	II	Names, variables, binding
15	6-Dec-18		type checking, scope, scope rules,
16	7-Dec-18		scope, scope rules
17	8-Dec-18		<b>Tutorial</b>
18	10-Dec-18		lifetime and garbage collection,
19	11-Dec-18		primitive data types
20	12-Dec-18		strings, array types, associative arrays
21	13-Dec-18		record types, union types
22	14-Dec-18		pointers and references, Arithmetic expressions
23	15-Dec-18		<b>Tutorial</b>
24	17-Dec-18		overloaded operators, type conversions
25	18-Dec-18		relational and boolean expressions, assignment statements
26	19-Dec-18		mixed mode assignments,
27	20-Dec-18		control structures – selection,
28	21-Dec-18		iterations, branching, guarded Statements
29	22-Dec-18		<b>Tutorial</b>
30	26-Dec-18		<b>Revision</b>
31	27-Dec-18	<b>Slip Test-II</b>	
32	28-Dec-18	III	Subprograms,
33	29-Dec-18		<b>Tutorial</b>
34	31-Dec-18		design issues, local referencing
35	2-Jan-19		parameter passing, overloaded methods
36	3-Jan-19		generic methods, design issues for functions
37	4-Jan-19		semantics of call and return
38	5-Jan-19		<b>Tutorial</b>
39	7-Jan-19		implementing simple subprograms
40	8-Jan-19		implementing simple subprograms
41	9-Jan-19		stack and dynamic local variables
42	10-Jan-19		nested subprograms, dynamic scoping
43	11-Jan-19		nested subprograms, dynamic scoping
44	17-Jan-19		<b>Revision (mid-2)</b>

45	18-Jan-19		Revision (mid-2)	
46	19-Jan-19		Revision (mid-2)	
47	21-Jan-19		Revision (mid-2)	
48	22-Jan-19		Revision (mid-2)	
49	23-Jan-19		Revision (mid-2)	
50	24-Jan-19	<b>IV</b>	<b>Object – orientation</b>	
51	25-Jan-19		Object – orientation	
52	28-Jan-19		design issues for OOP languages	
53	29-Jan-19		implementation of object oriented constructs	
54	30-Jan-19		implementation of object oriented constructs	
55	31-Jan-19		Concurrency	
56	1-Feb-19		Semaphores,Monitors	
57	2-Feb-19		<b>Tutorial</b>	
58	4-Feb-19		message passing,	
59	5-Feb-19		Threads	
60	6-Feb-19		statement level concurrency	
61	7-Feb-19		exception handling	
62	8-Feb-19		Event handling	
63	11-Feb-19		<b>Revision</b>	
64	12-Feb-19	<b>SLIP-TEST-IV</b>		
65	13-Feb-19	<b>V</b>	Introduction to lambda calculus,	
66	14-Feb-19		fundamentals of functional programming languages	
67	15-Feb-19		Introduction to lambda calculus	
68	16-Feb-19		<b>Tutorial</b>	
69	18-Feb-19		Programming with Scheme	
70	19-Feb-19		Programming with Scheme	
71	20-Feb-19		Programming with ML,	
72	21-Feb-19		Programming with ML,	
73	22-Feb-19		Programming with ML,	
74	23-Feb-19		<b>Tutorial</b>	
75	25-Feb-19		Revision	
76	26-Feb-19		<b>SLIP-TEST-V</b>	
77	27-Feb-19		<b>VI</b>	<b>Introduction to logic programming</b>
78	28-Feb-19			logic programming languages
79	1-Mar-19	Programming with Prolog,		
80	2-Mar-19	<b>Tutorial</b>		
81	5-Mar-19	Programming with Prolog,		
82	6-Mar-19	Programming with Prolog,		
83	7-Mar-19	multi - paradigm languages		
84	8-Mar-19	multi - paradigm languages		
85	11-Mar-19		Revision	
86	12-Mar-19		Revision	
87	13-Mar-19		Revision	
88	14-Mar-19		Revision	
89	15-Mar-19		Revision	
90	16-Mar-19		Revision	
91	18-Mar-19		Revision	
92	19-Mar-19		Revision	
93	20-Mar-19		Revision	
94	22-Mar-19		Revision	
95	23-Mar-19		Revision	

96	25-Mar-19		Revision (mid-2)
97	26-Mar-19		Revision (mid-2)
98	27-Mar-19		Revision (mid-2)
99	28-Mar-19		Revision (mid-2)
100	29-Mar-19		Revision (mid-2)
101	30-Mar-19		Revision (mid-2)

**TEXT BOOKS:**

1. Robert W. Sebesta, "Concepts of Programming Languages", Tenth Edition, Addison Wesley, 2012.
2. Programming Languages, Principles & Paradigms, 2ed, Allen B Tucker, Robert E Noonan, TMH

**REFERENCES:**

1. R. Kent Dybvig, "The Scheme programming language", Fourth Edition, MIT Press, 2009.
2. Jeffrey D. Ullman, "Elements of ML programming", Second Edition, Prentice Hall, 1998.
3. W. F. Clocksin and C. S. Mellish, "Programming in Prolog: Using the ISO Standard", Fifth Edition, Springer, 2003.

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