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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

Lesson Plan

SEMESTER : V -A
BRANCH : ISE
SUBJECT : Management & Entrepreneurship for IT Industry
SUBJECT CODE : 15CS51
NO OF HRS/WK : 5

NAME OF THE FACULTY : Mr.Manoj Challa
DATE OF COMMENCEMENT : 07/08/2017
DATE OF CLOSING : 25/11/2017
CLASS STRENGTH : 59
TOTAL HRS : 55

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	**1/1**	07/08/2017	Discussed about Course outcomes & Objectives **Module1-**Introduction of Management and Entrepreneurship	Chalk & Talk		
2	**2/1**	08/08/2017	Functional areas of management	,,		
3	**3/1**	10/08/2017	Meaning, nature and characteristics of management	,,		
4	**4/1**	11/08/2017	Scope of Management	,,		
5	**5/1**	12/08/2017	levels and history of management	,,		
6	**6/1**	14/08/2017	Brief overview of evolution of management.	,,		
7	**7/1**	16/08/2017	Planning- Nature, importance	‘’		
8	**8/1**	18/08/2017	Types and steps in planning	,,		
9	**9/1**	19/08/2017	Organizing- nature and purpose	,,		
10	**10/1**	21/08/2017	Types of organization	,,		
11		22/08/2017	Revision of Module-1	,,		
12	**1/2**	23/08/2017	**Module2** - Staffing- meaning, process of recruitment and selection.	,,		
13	**2/2**	28/08/2017	Process of recruitment and selection.	,,		

14	**3/2**	29/08/2017	Directing - meaning and nature of directing	,,		
15	**4/2**	30/08/2017	Leadership styles, motivation theories	‘’		
16	**5/2**	31/08/2017	Controlling- meaning, steps in controlling,	,,	Assignment- I	
17	**6/2**	01/09/2017	Methods of establishing control	,,		
18	**7/2**	05/09/2017	Communication- Meaning and importance	,,		
19	**8/2**	06/09/2017	Coordination- meaning and importance	,,		
20		07/09/2017	Revision of Module-2	,,		
21	**1/3**	08/09/2017	**Module-3** Entrepreneur – meaning of entrepreneur	,,		
22	**2/3**	09/09/2017	Types of entrepreneurship, stages of entrepreneurial process	,,		
23	**3/3**	12/09/2017	Stages of entrepreneurial process	‘’		
24	**4/3**	13/09/2017	Role of entrepreneurs in economic development,	,,		
25	**5/3**	14/09/2017	Entrepreneurship in India,	,,		
26	**6/3**	15/09/2017	Identification of business opportunities- market feasibility study,	,,		
27	**7/3**	22/09/2017	Technical feasibility study, financial feasibility study and social feasibility study	,,		
28	**8/3**	25/09/2017	Barriers to entrepreneurship	,,		
29		26/09/2017	Revision of Module -3	,,		
30	**1/4**	27/09/2017	**Module – 4** Preparation of project and ERP - meaning of project	,,		
31	**2/4**	28/09/2017	Project identification	,,		
32	**3/4**	03/10/2017	Project selection, project report	‘’		
33	**4/4**	06/10/2017	Need and significance of report	,,		
34	**5/4**	07/10/2017	Contents and formulation, guidelines by planning commission	,,		

			for project report			
35	**6/4**	09/10/2017	Enterprise Resource Planning: Meaning and Importance- ERP	,,		
36	**7/4**	10/10/2017	Functional areas of Management – Marketing / Sales-	,,		
37	**8/4**	11/10/2017	Supply Chain Management	,,		
38	**9/4**	13/10/2017	Finance and Accounting – Human Resources	,,	Assignment- II	
39	**10/4**	14/10/2017	Types of reports and methods of report generation	‘’		
40		16/10/2017	Revision of Module-4	,,		
41	**1/5**	17/10/2017	**Module 5-** Micro and Small Enterprises: Definition of micro and small enterprises	,,		
42	**1/5**	23/10/2017	Characteristics and advantages of micro and small enterprises,	,,		
43	**2/5**	25/10/2017	Steps in establishing micro and small enterprises	,,		
44	**3/5**	26/10/2017	Government of India indusial policy 2007 on micro and small enterprises	,,		
45	**4/5**	27/10/2017	Case study (Microsoft),	,,		
46	**5/5**	28/10/2017	Case study(Captain G R Gopinath)	,,		
47	**6/5**	30/10/2017	Case study (N R Narayana Murthy & Infosys)	‘’		
48	**7/5**	02/11/2017	Institutional support: MSME-DI,	,,		
49	**8/5**	03/11/2017	NSIC, SIDBI, KIADB, KSSIDC	,,		
50	**9/5**	04/11/2017	TECSOK, KSFC, DIC	,,	Assignment- III	
51	**10/5**	09/11/2017	District level single window agency	,,		
52	**11/5**	10/11/2017	Introduction to IPR.	,,		
53	**12/5**	14/11/2017	Introduction to IPR.	,,		
54		15/11/2017	Revision of Module-5	,,		
55		16/11/2017	Discussion of Question banks	‘’		

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 - 24
T2	Class # 25 – 53
IMP	

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB1	Principles of Management -P. C. Tripathi, P. N. Reddy;	Tata McGraw Hill, 4th / 6 Edition, 2010.	9788121903240
Text Book	TB2	Dynamics of Entrepreneurial Development & Management -Vasant Desai Himalaya Publishing House. ,		13: 9789350970287.
Text Book	TB3	Entrepreneurship Development -Small Business Enterprises -Poornima M Charantimath	Pearson Education – 2006. .	0123964644 9780123964649
Text Book	TB4	Management and Enterpreneurship-Kanishka Bedi- Oxford University	Press-2017	13: 9780198061908.

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

Lesson Plan

SEMESTER : V -B
BRANCH : ISE
SUBJECT : Management & Entrepreneurship for IT Industry
SUBJECT CODE : 15CS51
NO OF HRS/WK : 5

NAME OF THE FACULTY : Mr.Manoj Challa
DATE OF COMMENCEMENT : 07/08/2017
DATE OF CLOSING : 25/11/2017
CLASS STRENGTH : 60
TOTAL HRS :

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	**1/1**	08/08/2017	Discussed about Course outcomes & Objectives **Module1-**Introduction of Management and Entrepreneurship	Chalk & Talk		
2	**2/1**	09/08/2017	Functional areas of management	,,		
3	**3/1**	10/08/2017	Meaning, nature and characteristics of management	,,		
4	**4/1**	10/08/2017	Scope of Management	,,		
5	**5/1**	12/08/2017	levels and history of management	,,		
6	**6/1**	16/08/2017	Brief overview of evolution of management.	,,		
7	**7/1**	17/08/2017	Planning- Nature, importance	‘’		
8	**8/1**	18/08/2017	Types and steps in planning	,,		
9	**9/1**	18/08/2017	Organizing- nature and purpose	,,		
10	**10/1**	21/08/2017	Types of organization	,,		
11		23/08/2017	Revision of Module-1	,,		
12	**1/2**	24/08/2017	**Module2** - Staffing- meaning, process of recruitment and selection.	,,		
13	**2/2**	28/08/2017	Process of recruitment and selection.	,,		

14	**3/2**	28/08/2017	Directing - meaning and nature of directing	,,		
15	**4/2**	30/08/2017	Leadership styles, motivation theories	‘’		
16	**5/2**	01/09/2017	Controlling- meaning, steps in controlling,	,,	Assignment- I	
17	**6/2**	04/09/2017	Methods of establishing control	,,		
18	**7/2**	05/09/2017	Communication- Meaning and importance	,,		
19	**8/2**	05/09/2017	Coordination- meaning and importance	,,		
20		07/09/2017	Revision of Module-2	,,		
21	**1/3**	09/09/2017	**Module-3** Entrepreneur – meaning of entrepreneur	,,		
22	**2/3**	11/09/2017	Types of entrepreneurship, stages of entrepreneurial process	,,		
23	**3/3**	12/09/2017	Stages of entrepreneurial process	‘’		
24	**4/3**	12/09/2017	Role of entrepreneurs in economic development,	,,		
25	**5/3**	14/09/2017	Entrepreneurship in India,	,,		
26	**6/3**	22/09/2017	Identification of business opportunities- market feasibility study,	,,		
27	**7/3**	23/09/2017	Technical feasibility study, financial feasibility study and social feasibility study	,,		
28	**8/3**	25/09/2017	Barriers to entrepreneurship	,,		
29		25/09/2017	Revision of Module -3	,,		
30	**1/4**	27/09/2017	**Module – 4** Preparation of project and ERP - meaning of project	,,		
31	**2/4**	03/10/2017	Project identification	,,		
32	**3/4**	04/10/2017	Project selection, project report	‘’		
33	**4/4**	06/10/2017	Need and significance of report	,,		
34	**5/4**	06/10/2017	Contents and formulation, guidelines by planning commission	,,		

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35	**6/4**	09/10/2017	Enterprise Resource Planning: Meaning and Importance- ERP	,,		
36	**7/4**	11/10/2017	Functional areas of Management – Marketing / Sales-	,,		
37	**8/4**	12/10/2017	Supply Chain Management	,,		
38	**9/4**	13/10/2017	Finance and Accounting – Human Resources	,,	Assignment- II	
39	**10/4**	13/10/2017	Types of reports and methods of report generation	‘’		
40		16/10/2017	Revision of Module-4	,,		
41	**1/5**	23/10/2017	**Module 5-** Micro and Small Enterprises: Definition of micro and small enterprises	,,		
42	**1/5**	24/10/2017	Characteristics and advantages of micro and small enterprises,	,,		
43	**2/5**	25/10/2017	Steps in establishing micro and small enterprises	,,		
44	**3/5**	25/10/2017	Government of India indusial policy 2007 on micro and small enterprises	,,		
45	**4/5**	27/10/2017	Case study (Microsoft),	,,		
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50	**9/5**	04/11/2017	TECSOK, KSFC, DIC	,,	Assignment- III	
51	**10/5**	10/11/2017	District level single window agency	,,		
52	**11/5**	13/11/2017	Introduction to IPR.	,,		
53	**12/5**	14/11/2017	Introduction to IPR.	,,		
54		14/11/2017	Revision of Module-5	,,		
55		16/11/2017	Discussion of Question banks	‘’		

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 - 24
T2	Class # 25 – 53
IMP	

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB1	Principles of Management -P. C. Tripathi, P. N. Reddy;	Tata McGraw Hill, 4th / 6 Edition, 2010.	9788121903240
Text Book	TB2	Dynamics of Entrepreneurial Development & Management -Vasant Desai Himalaya Publishing House. ,		13: 9789350970287.
Text Book	TB3	Entrepreneurship Development -Small Business Enterprises -Poornima M Charantimath	Pearson Education – 2006. .	0123964644 9780123964649
Text Book	TB4	Management and Enterpreneurship-Kanishka Bedi- Oxford University	Press-2017	13: 9780198061908.

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Session wise – Course Plan

Department of Information Science and Engineering

SEMESTER : V -A
BRANCH : ISE
SUBJECT : Automata Theory and Computability
SUBJECT CODE : 15CS54
NO OF HRS/WK : 6

NAME OF THE FACULTY : PV Reddy
DATE OF COMMENCEMENT : 07-08-2017
DATE OF CLOSING : 16-11-2017
CLASS STRENGTH : 59
TOTAL HRS : 62

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	7/8/17	**MODULE-1:** Why study the theory of Computation, Languages and Strings? Strings	Chalk & Talk		
2	2/1	08/08/17	Strings, Languages	”		
3	3/1	09/08/17	Languages	”		
4	4/1	11/08/17	Language Hierarchy Computation	”		
5	5/1	11/08/17	Finite State machines: Deterministic FSM	”		
6	6/1	12/08/17	Regular Languages Designing DFSM	”		
7	7/1	14/8/17	Designing FSM	‘’		
8	8/1	16/8/17	Non-deterministic FSMs	”		
9	9/1	17/8/17	Equivalence of DFSM &NFSM	”	Assignment- I	
10	10/1	18/8/17	Bidirectional transducers	”		
11	11/1	19/8/17	From FSMs to operational systems Simulators for FSMs	”		
12	12/1	21/8/17	Minimizing FSMs	”		
13	13/1	22/8/17	Canonical form of regular languages	”		

14	14/1	23/8/17	Finite transducers	,,		
15	1/2	24/8/17	**Module-2:** Regular expressions (RE): What is RE?	,,		
16	2/2	29/8/17	RE to FSM	,,		
17	3/2	29/8/17	FSM to RE; Kleene's theorem	,,		
18	4/2	30/8/17	Applications of Res	,,		
19	5/2	31/8/17	Manipulating and Simplifying Res	,,		
20	6/2	01/09/17	Regular grammars: Definition	,,		
21	7/2	04/09/17	Regular languages and Regular grammars	,,	Assignment –II	
22	8/2	06/09/17	Regular languages and nonregular languages: How many Rls	,,		
23	9/2	06/09/17	Show that language is regular	,,		
24	10/2	07/09/17	Closure properties of RLs	,,		
25	11/2	08/09/17	Closure properties of RLs	,,		
26	12/2	09/09/17	To show that some languages are not regular	,,		
27	13/2	11/09/17	To show that some languages are not regular	,,		
28	1/3	13/09/17	**Module-3:** Introduction to rewrite systems and grammars	,,		
29	2/3	13/9/17	CFGs and Languages	,,		
30	3/3	14/9/17	Designing CFGs	,,		
31	4/3	15/9/17	Simplifying CFGs	,,		
32	5/3	22/9/17	Proving that a grammar is correct	,,		
33	6/3	23/9/17	Derivation and parse trees	,,		
34	7/3	26/9/17	Ambiguity	,,		
35	8/3	26/9/17	Normal forms	,,		
36	9/3	27/9/17	Pushdown Automata: Definition	,,		

37	10/3	28/9/17	PDA examples	”	Assignment –III	
38	11/3	03/10/17	Nondeterministic PDA	”		
39	12/3	04/10/17	Equivalence of CFGs and PDAs	‘’		
40	13/3	07/10/17	Non determinism and Halting	”		
41	14/3	07/10/17	Alternative equivalent definitions of PDA, Alternatives that are not equivalent to the PDA	”		
42	1/4	09/10/17	**Module-4:** Context-free and non-context free languages: where do the context-free languages fit Showing a language is context free	”		
43	2/4	10/10/17	Pumping Lemma for CFL	”		
44	3/4	11/10/17	Pumping Lemma for CFL	”		
45	4/4	12/10/17	Closure properties of CFLs	”		
46	5/4	14/10/17	Decidable questions	”		
47	6/4	14/10/17	Undecidable questions	‘’	Assignment –IV	
48	7/4	16/10/17	TM Machine: Model, representation, Language	”		
49	8/4	17/10/17	Design of TM	”		
50	9/4	23/10/17	Techniques of TM construction	”		
51	10/4	24/10/17	Techniques of TM construction	”		
52	1/5	26/10/17	**Module 5:** Variants of Turing Machines	”		
53	2/5	26/10/17	The model of linear bounded automata	”		
54	3/5	27/10/17	Decidability: Definition of an algorithm, Decidability, Decidable languages	”		
55	4/5	28/10/17	Halting problem of TM, Post correspondence problem	‘’		
56	5//5	30/10/17	Complexity: Growth rate of functions	”	Assignment –V	
57	6/5	31/10/17	Complexity: Growth rate of functions	”		
58	7/5	03/11/17	The class of P an NP	”		
59	8/5	03/11/17	Quantum computation, Quantum computers	”		

60	9/5	04/11/17	Church- Turing thesis	”		
61	10/5	09/11/17	Solving Exam questions			
62	11/5	10/11/17	Solving Exam questions			

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 – 31
T2	Class # 31 – 51
IMP	Class # 52 - 60

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	T1	Elaine Rich, Automata, Computability, and Complexity	1st Edition, 2012/2013. Pearson.	978-81-317-8822-6
Text Book	T2	Theory of Computer Science: Automata, Languages and Computation	3rd Edition, 2011, PHI	978-81-203-2968-3
Reference Book	R1	JE Hopcroft, Rajeev Motwani, J Ullman Introduction to Automata theory, Languages, and Computation,	3rd Edition, Pearson	
Reference Book	R2	Michael Sipser: Introduction to the theory of Computation,	3rd edition, Cengage learning, 2013	

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Session wise – Course Plan

Department of Information Science and Engineering

SEMESTER : V -B
BRANCH : ISE
SUBJECT : Automata Theory and Computability
SUBJECT CODE : 15CS54
NO OF HRS/WK : 6

NAME OF THE FACULTY : PV Reddy
DATE OF COMMENCEMENT : 07-08-2017
DATE OF CLOSING : 16-11-2017
CLASS STRENGTH : 60
TOTAL HRS : 62

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	7/8/17	**MODULE-1:** Why study the theory of Computation, Languages and Strings? Strings	Chalk & Talk		
2	2/1	07/08/17	Strings, Languages	”		
3	3/1	09/08/17	Languages	”		
4	4/1	09/08/17	Language Hierarchy Computation	”		
5	5/1	10/08/17	Finite State machines: Deterministic FSM	”		
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8	8/1	14/8/17	Non-deterministic FSMs	”		
9	9/1	17/8/17	Equivalence of DFSM &NFSM	”	Assignment- I	
10	10/1	22/8/17	Bidirectional transducers	”		
11	11/1	22/8/17	From FSMs to operational systems Simulators for FSMs	”		
12	12/1	24/8/17	Minimizing FSMs	”		
13	13/1	24/8/17	Canonical form of regular languages	”		

14	14/1	28/8/17	Finite transducers	,,		
15	1/2	30/8/17	**Module-2:** Regular expressions (RE): What is RE?	,,		
16	2/2	31/8/17	RE to FSM	,,		
17	3/2	31/08/17	FSM to RE; Kleene's theorem	,,		
18	4/2	04/09/17	Applications of Res	,,		
19	5/2	04/09/17	Manipulating and Simplifying Res	,,		
20	6/2	05/09/17	Regular grammars: Definition	,,		
21	7/2	07/09/17	Regular languages and Regular grammars	,,	Assignment –II	
22	8/2	08/09/17	Regular languages and nonregular languages: How many Rls	,,		
23	9/2	08/09/17	Show that language is regular	,,		
24	10/2	11/09/17	Closure properties of RLs	,,		
25	11/2	11/09/17	Closure properties of RLs	,,		
26	12/2	12/9/17	To show that some languages are not regular	,,		
27	13/2	14/9/17	To show that some languages are not regular	,,		
28	1/3	15/9/17	**Module-3:** Introduction to rewrite systems and grammars	,,		
29	2/3	15/9/17	CFGs and Languages	,,		
30	3/3	23/9/17	Designing CFGs	,,		
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35	8/3	28/9/17	Normal forms	,,		
36	9/3	04/10/17	Pushdown Automata: Definition	,,		

37	10/3	04/10/17	PDA examples	”	Assignment –III	
38	11/3	06/10/17	Nondeterministic PDA	”		
39	12/3	09/10/17	Equivalence of CFGs and PDAs	‘’		
40	13/3	10/10/17	Non determinism and Halting	”		
41	14/3	10/10/17	Alternative equivalent definitions of PDA, Alternatives that are not equivalent to the PDA	”		
42	1/4	12/10/17	**Module-4:** Context-free and non-context free languages: where do the context-free languages fit Showing a language is context free	”		
43	2/4	12/10/17	Pumping Lemma for CFL	”		
44	3/4	13/10/17	Pumping Lemma for CFL	”		
45	4/4	16/10/17	Closure properties of CFLs	”		
46	5/4	17/10/17	Decidable questions	”		
47	6/4	17/10/17	Undecidable questions	‘’	Assignment –IV	
48	7/4	24/10/17	TM Machine: Model, representation, Language	”		
49	8/4	24/10/17	Design of TM	”		
50	9/4	25/10/17	Techniques of TM construction	”		
51	10/4	27/10/17	Techniques of TM construction	”		
52	1/5	28/10/17	**Module 5:** Variants of Turing Machines	”		
53	2/5	28/10/17	The model of linear bounded automata	”		
54	3/5	31/10/17	Decidability: Definition of an algorithm, Decidability, Decidable languages	”		
55	4/5	31/10/17	Halting problem of TM, Post correspondence problem	‘’		
56	5//5	02/11/17	Complexity: Growth rate of functions	”	Assignment –V	
57	6/5	04/11/17	Complexity: Growth rate of functions	”		
58	7/5	09/11/17	The class of P an NP	”		
59	8/5	09/11/17	Quantum computation, Quantum computers	”		

60	9/5	13/11/17	Church- Turing thesis	”		
61	10/5	13/11/17	Solving Exam questions			
62	11/5	14/11/17	Solving Exam questions			

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 – 31
T2	Class # 31 – 51
IMP	Class # 52 - 60

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Text Book	T2	Theory of Computer Science: Automata, Languages and Computation	3rd Edition, 2011, PHI	978-81-203-2968-3
Reference Book	R1	JE Hopcroft, Rajeev Motwani, J Ullman Introduction to Automata theory, Languages, and Computation,	3rd Edition, Pearson	
Reference Book	R2	Michael Sipser: Introduction to the theory of Computation,	3rd edition, Cengage learning, 2013	

Signature of faculty Signature of HOD Signature of Principal

Department of Information Science and Engineering

SEMESTER	: **V**	NAME OF THE FACULTY	: **Mrs. Anu Jose**
BRANCH	: **ISE**	DATE OF COMMENCEMENT	: **17/8/2017**
SUBJECT	: **Programming in Java**	DATE OF CLOSING	: **25/11/2017**
SUBJECT CODE	: **15CS561**	CLASS STRENGTH	: **60**
NO OF HRS/WEEK	: **4**	TOTAL HRS	: **40**

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	**1/1**	17/08/2017	**Module1** **An Overview of Java:** Object-Oriented Programming.	Chalk & Talk		
2	**2/1**	18/08/2017	A First Simple Program, Two Control Statements, Using Blocks of Code.	”		
3	**3/1**	19/08/2017	Lexical Issues, The Java Class Libraries.	,,		
4	**4/1**	22/08/2017	Data Types, Variables, and Arrays: Java Is a Strongly Typed Language.	,,		
5	**5/1**	24/08/2017	The Primitive Types, Integers, Floating-Point Types, Characters, Booleans, A Closer Look at Literals	,,		
6	**6/1**	28/08/2017	Type Conversion and Casting, Automatic Type Promotion in Expressions	,,		
7	**7/1**	29/08/2017	Arrays, A Few Words About Strings	,,	Assignment- I	
8	**8/1**	31/08/2017	**Tutorials and Discussion Question Bank Creation and Discussions**	,,		
9	**1/2**	4/09/2017	**Module2** **Operators:** Arithmetic Operators, The Bitwise Operators	,,		
10	**2/2**	5/09/2017	Relational Operators, Boolean Logical Operators	,,		
11	**3/2**	6/09/2017	The Assignment Operator, The ? Operator, Operator Precedence, Using Parentheses	‘’		

12	**4/2**	8/09/2017	**Control Statements**: Java's Selection Statements, Iteration Statements, Jump Statements.	,,	Assignment-II	
13	**5/2**	11/09/2017	**Tutorials and Discussion Question Bank Creation and Discussions**	,,		
14	**1/3**	12/09/2017	**Module3** **Introducing Classes**: Class Fundamentals, Declaring Objects, Assigning Object Reference Variables	,,		
15	**2/3**	13/09/2017	Introducing Methods, Constructors, The this Keyword	,,		
16	**3/3**	15/09/2017	Garbage Collection, The finalize( ) Method, Overloading Methods, Using Objects as Parameters	,,		
17	**4/3**	23/09/2017	A Closer Look at Argument Passing, Returning Objects , Recursion	,,		
18	**5/3**	25/09/2017	Introducing Access Control, A Stack Class, A Closer Look at Methods and Classes	,,		
19	**6/3**	26/09/2017	Understanding static, Introducing final, Arrays Revisited	,,		
20	**7/3**	28/09/2017	**Inheritance:** Inheritance, Using super, Creating a Multilevel Hierarchy, When Constructors Are Called	‘’		
21	**8/3**	4/10/2017	Method Overriding, Dynamic Method Dispatch	,,		
22	**9/3**	6/10/2017	Using Abstract Classes, Using final with Inheritance (Already discussed in lecture 19), and The Object Class.	,,	Assignment- III	
23	**10/3**	7/10/2017	**Tutorials and Discussion Question Bank Creation and Discussions**	,,		
24	**1/4**	10/10/2017	**Module 4** **Exception Handling:** Exception-Handling Fundamentals, Exception Types,	,,		
25	**2/4**	12/10/2017	Uncaught Exceptions, Using try and catch, Multiple catch Clauses,	,,		
26	**3/4**	13/10/2017	Nested try Statements, finally,	,,		
27	**4/4**	14/10/2017	throw, throws, Java's Built-in Exceptions	,,		
28	**5/4**	17/10/2017	Creating Your Own Exception Subclasses	,,		
29	**6/4**	24/10/2017	Chained Exceptions, Using Exceptions.	,,		

30	**7/4**	25/10/2017	Creating Your Own Exception	‘’		
31	**8/4**	26/10/2017	**Packages and Interfaces:** Packages, Access Protection, Importing Packages, Interfaces	,,	Assignment- IV	
32	**9/4**	28/10/2017	**Tutorials and Discussion Question Bank Creation and Discussions**	,,		
33	**1/5**	31/10/2017	**Module5** **I/O Basics:** Reading Console Input, Writing Console Output, The PrintWriter Class, Reading and Writing Files	,,		
34	**2/5**	2/11/2017	Applet Fundamentals	,,		
35	**3/5**	3/11/2017	The transient and volatile Modifiers, Using instanceof, strictfp, Native Methods,	,,		
36	**4/5**	9/11/2017	Using assert, Static Import, Enumerations, Type Wrappers, Invoking Overloaded Constructors Through this( )	,,		
37	**5/5**	13/11/2017	**String Handling :** The String Constructors, String Length, Special String Operations, Character Extraction, String Comparison, Searching Strings, Modifying a String, Data Conversion Using valueOf( ), Changing the Case of Characters Within a String,	,,	Assignment- V	
38	**6/5**	14/11/2017	Additional String Methods ,StringBuffer, StringBuilder	,,		
39	**7/5**	15/11/2017	**Tutorials and Discussion Question Bank Creation and Discussions**	‘’		
40		14/11/2017	Previous Year Question paper Discussions	,,		

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 - 16
T2	Class # 16 –35
T3	Class # 35- – 40

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB1	Herbert Schildt- Java The Complete Reference	7th Edition, Tata McGraw Hill, 2007.	
References	RB1	Mahesh Bhave and Sunil Patekar- "Programming with Java"	First Edition, Pearson Education,2008.	9788131720806
References	RB2	Rajkumar Buyya,S Thamarasi selvi, xingchen chu, Object oriented Programming with java	Tata McGraw Hill education private limited.	
References	RB3	E Balagurusamy, Programming with Java A primer	Tata McGraw Hill companies.	
References	RB4	. Anita Seth and B L Juneja, JAVA One step Ahead	Oxford University Press, 2017.	

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

SEMESTER : V A
BRANCH : ISE
SUBJECT : ADVANCED JAVA AND J2EE
SUBJECT CODE : 15CS553
NO OF HRS/WK : 5

NAME OF THE FACULTY : PRASAD M S
DATE OF COMMENCEMENT : 07/08/2017
DATE OF CLOSING : 25/11/2017
CLASS STRENGTH : 59
TOTAL HRS : 55

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	7/8/2017	Module 1 Enumerations, Autoboxing and Annotations(metadata): Enumerations, Enumeration fundamentals, the values() and valueOf() Methods	Chalk & Talk/ Hands on		
2	2/1	8/8/2017	java enumerations are class types, enumerations Inherits Enum, example	,,		
3	3/1	8/8/2017	type wrappers, Autoboxing, Autoboxing and Methods, Autoboxing/Unboxing occurs in Expressions	,,		
4	4/1	10/8/2017	Autoboxing/Unboxing Boolean and character values , A word of Warning. Autoboxing/Unboxing helps prevent errors	,,		
5	5/1	12/8/2017	Annotations, Annotation basics	,,		
6	6/1	14/8/2017	specifying retention policy	,,		
7	7/1	16/8/2017	Obtaining Annotations at run time by use of reflection	‘’		
8	8/1	16/8/2017	Annotated element Interface, Using Default values	,,		
9	9/1	18/8/2017	Marker Annotations	,,		
10	10/1	21/8/2017	Single Member annotations, Built-In annotations	,,		

11	11/1	22/8/2017	Revision	,,		
12	1/2	23/8/2017	Module 2: The collections and Framework: Collections Overview, Recent Changes to Collections	,,		
13	2/2	23/8/2017	The Collection Interfaces	,,		
14	3/2	28/8/2017	The Collection Classes	,,		
15	4/2	30/8/2017	Accessing a collection Via an Iterator	‘’		
16	5/2	31/8/2017	Storing User Defined Classes in Collections	,,		
17	6/2	1/9/2017	The Random Access Interface, Why Generic Collections?	,,	Assignment- I	
18	7/2	1/9/2017	Working With Maps	,,		
19	6/2	5/9/2017	Comparators	,,		
20	8/2	7/9/2017	The Collection Algorithms	,,		
21	9/2	8/9/2017	The legacy Classes and Interfaces	,,		
22	10/2	9/9/2017	Parting Thoughts on Collections	,,		
23	11/2	9/9/2017	Revision	‘’		
24	1/3	12/9/2017	Module 3 Introduction, Networking Basics, Protocols, Internet Address (IPv4 and IPv6), Ports	,,		
25	2/3	14/9/2017	Classes and Interfaces in java.net, class InetAddress, Constructors of class in Serverside Program InetAddress, Methods of classInet Address	,,		
26	3/3	15/9/2017	class URL, Constructors of URL class, Methods of URL class, class URL Connection	,,		
27	4/3	22/9/2017	TCP/IP Server Socket Programming, Constructors of classSocket, Methods of class Socket, Class ServerSocket	,,		
28	5/3	22/9/2017	Constructors of class ServerSocket, Methods of class ServerSocket	,,		
29	6/3	25/9/2017	Communication through Sockets, Client-side Socketp programming	,,		
30	7/3	27/9/2017	Users/UnreliableDatagramProtocol, classDatagramPacket, Constructors	,,		

31	8/3	28/9/2017	Methods of class Datagram Packets, DatagramSocket Class	,,		
32	9/3	3/10/2017	Constructors of class DatagramSocket, Methods of class DatagramSocket, Programs for Sending and Receiving Datagram	‘’		
33	10/3	3/10/2017	Creating a Datagram Packet for Sending and Receiving ,Writing Code for Receiving Datagram	,,		
34	11/3	6/10/2017	Revision	,,		
35	1/4	9/10/2017	Module 4 Java Beans Introduction to Java Beans, Attributes of Beans, Benefits of Using Beans, Properties of a Bean, Java Bean API, Interfaces	,,		
36	2/4	10/10/2017	Classes of java. Bean package(Java SE 8),class Beans, Building Java Beans with NETBEAN IDE, Source Code Generated by IDE	,,	Assignment -II	
37	3/4	11/10/2017	Changing Properties of Components, Class Methods, class Property Change Support, Building a Composite Component Bean	,,		
38	4/4	11/10/2017	JAR Files, Creating a JAR file, Viewing the contents of a JAR File	,,		
39	5/4	13/10/2017	Java Beans Project 1—Construct a Bean Containing a Label and a Scrollbar, Java Beans Project 2— Construct a Bean to Illustrate MouseEvents, Java Beans Project 3— Construct a Bean to Illustrate Working of RadioButtons	‘’		
40	6/4	16/10/2017	Java Beans Project 4—Construct a Bean Containing ComboBox, Java Beans Project 5, Application Program, Application Project 1, Application Project 2	,,		
41	7/4	17/10/2017	Java Servlets: Introduction, HTTP Basics, Life Cycle of a Servlet, Servlet Architecture, Setting up Web Server for Servlet Deployment	,,		
42	8/4	23/10/2017	Classes Defined in Javax.servlet.http Package, Interfaces Defined in javax.servlet.http Package, Handling HTTP Request and	,,		

			Response			
43	9/4	23/10/2017	Writing Servlet, Reading Servlet Parameters, Classes in javax.servlet Package	,,		
44	10/4	25/10/2017	Session Tracking and Session Management, Session Tracking Techniques	,,		
45	11/4	27/10/2017	Http Redirects in Servlets, Securing Servlets, Application Program.	,,		
46	1/5	28/10/2017	Module 5 Introduction, JDBC Architecture	,,		
47	2/5	30/10/2017	Two-tier Architecture for DataAccess, Three-tier Architecture for DataAccess	‘’		
48	3/5	30/10/2017	Installing MySQL and MySQL Connector/J,SQL Statements	,,	Assignment –III	
49	4/5	2/11/2017	JDBC Environment Setup, JDBC Connectivity Model and API	,,		
50	5/5	4/11/2017	Establishing JDBC Database Connections	,,		
51	6/5	9/11/2017	Load and Register the JDBC Driver, Defining the ConnectionURL	,,		
52	7/5	10/11/2017	ResultSet Interface, Navigating the ResultSet ,	,,		
53	8/5	10/11/2017	ResultSet MetaData interface	,,		
54	9/5	14/11/2017	Creating JDBC Application, JDBC Batch Processing	,,		
55	10/5	16/11/2017	JDBC Transaction Management, Application Programs.	,,		

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 - 23
T2	Class # 24 – 45
IMP	Class # 46 – 55

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #

Text Book	TB1	Herbert Schildt: Java The Complete Reference	7th Edition, Tata McGraw Hill, 2007	978-0-07-063677-4
Text Book	TB2	Uttam K. Roy , Advanced JAVA Programming	Oxford University Press	
References	RB1	Jim Keogh: J2EE - The Complete Reference	Tata McGraw Hill, 2007	1449335942
References	RB2	Y. Daniel Liang: Introduction to JAVA Programming	7th Edition, Pearson Education, 2007.	
References	RB3	Stephanie Bodoff et al: The J2EE Tutorial	2nd Edition, Pearson Education, 2004	

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

SEMESTER : V B
BRANCH : ISE
SUBJECT : ADVANCED JAVA AND J2EE
SUBJECT CODE : 15CS553
NO OF HRS/WK : 5

NAME OF THE FACULTY : PRASAD M S
DATE OF COMMENCEMENT : 07/08/2017
DATE OF CLOSING : 25/11/2017
CLASS STRENGTH : 60
TOTAL HRS : 56

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	1/1	7/8/2017	Module 1 Enumerations, Autoboxing and Annotations(metadata): Enumerations, Enumeration fundamentals, the values() and valueOf() Methods	Chalk & Talk/ Hands on		
2	2/1	8/8/2017	java enumerations are class types, enumerations Inherits Enum, example	,,		
3	3/1	9/8/2017	type wrappers, Autoboxing, Autoboxing and Methods, Autoboxing/Unboxing occurs in Expressions	,,		
4	4/1	10/8/2017	Autoboxing/Unboxing Boolean and character values, A word of Warning. Autoboxing/Unboxing helps prevent errors	,,		
5	5/1	11/8/2017	Annotations, Annotation basics	,,		
6	6/1	14/8/2017	specifying retention policy	,,		
7	7/1	16/8/2017	Obtaining Annotations at run time by use of reflection	‘’		
8	8/1	17/8/2017	Annotated element Interface, Using Default values	,,		
9	9/1	18/8/2017	Marker Annotations	,,		
10	10/1	19/8/2017	Single Member annotations, Built-In annotations	,,		

11	11/1	22/8/2017	Revision	,,		
12	1/2	23/8/2017	Module 2: The collections and Framework: Collections Overview, Recent Changes to Collections	,,		
13	2/2	24/8/2017	The Collection Interfaces	,,		
14	3/2	28/8/2017	The Collection Classes	,,		
15	4/2	29/8/2017	Accessing a collection Via an Iterator	‘’		
16	5/2	31/8/2017	Storing User Defined Classes in Collections	,,		
17	6/2	1/9/2017	The Random Access Interface, Why Generic Collections?	,,	Assignment- I	
18	7/2	4/9/2017	Working With Maps	,,		
19	6/2	5/9/2017	Comparators	,,		
20	8/2	6/9/2017	The Collection Algorithms	,,		
21	9/2	8/9/2017	The legacy Classes and Interfaces	,,		
22	10/2	9/9/2017	Parting Thoughts on Collections	,,		
23	11/2	11/9/2017	Revision	‘’		
24	1/3	12/9/2017	Module 3 Introduction, Networking Basics, Protocols, Internet Address (IPv4 and IPv6), Ports	,,		
25	2/3	13/9/2017	Classes and Interfaces in java.net, class InetAddress, Constructors of class in Serverside Program InetAddress, Methods of classInet Address	,,		
26	3/3	15/9/2017	class URL, Constructors of URL class, Methods of URL class, class URL Connection	,,		
27	4/3	22/9/2017	TCP/IP Server Socket Programming, Constructors of classSocket, Methods of class Socket, Class ServerSocket	,,		
28	5/3	23/9/2017	Constructors of class ServerSocket, Methods of class ServerSocket	,,		
29	6/3	25/9/2017	Communication through Sockets, Client-side Socketp programming	,,		
30	7/3	26/9/2017	Users/UnreliableDatagramProtocol, classDatagramPacket, Constructors	,,		

31	8/3	28/9/2017	Methods of class Datagram Packets, DatagramSocket Class	,,		
32	9/3	3/10/2017	Constructors of class DatagramSocket, Methods of class DatagramSocket, Programs for Sending and Receiving Datagram	‘’		
33	10/3	4/10/2017	Creating a Datagram Packet for Sending and Receiving ,Writing Code for Receiving Datagram	,,		
34	11/3	6/10/2017	Revision	,,		
35	1/4	7/10/2017	Module 4 Java Beans Introduction to Java Beans, Attributes of Beans, Benefits of Using Beans, Properties of a Bean, Java Bean API, Interfaces	,,		
36	2/4	10/10/2017	Classes of java. Bean package(Java SE 8),class Beans, Building Java Beans with NETBEAN IDE, Source Code Generated by IDE	,,	Assignment -II	
37	3/4	11/10/2017	Changing Properties of Components, Class Methods, class Property Change Support, Building a Composite Component Bean	,,		
38	4/4	12/10/2017	JAR Files, Creating a JAR file, Viewing the contents of a JAR File	,,		
39	5/4	13/10/2017	Java Beans Project 1—Construct a Bean Containing a Label and a Scrollbar, Java Beans Project 2— Construct a Bean to Illustrate MouseEvents, Java Beans Project 3— Construct a Bean to Illustrate Working of RadioButtons	‘’		
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41	7/4	17/10/2017	Java Servlets: Introduction, HTTP Basics, Life Cycle of a Servlet, Servlet Architecture, Setting up Web Server for Servlet Deployment	,,		
42	8/4	23/10/2017	Classes Defined in Javax.servlet.http Package, Interfaces Defined in javax.servlet.http Package, Handling HTTP Request and Response	,,		

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44	10/4	25/10/2017	Session Tracking and Session Management, Session Tracking Techniques	,,		
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46	1/5	28/10/2017	Module 5 Introduction, JDBC Architecture	,,		
47	2/5	30/10/2017	Two-tier Architecture for DataAccess, Three-tier Architecture for DataAccess	‘’		
48	3/5	31/10/2017	Installing MySQL and MySQL Connector/J,SQL Statements	,,	Assignment –III	
49	4/5	2/11/2017	JDBC Environment Setup, JDBC Connectivity Model and API	,,		
50	5/5	3/11/2017	Establishing JDBC Database Connections	,,		
51	6/5	4/11/2017	Load and Register the JDBC Driver, Defining the ConnectionURL	,,		
52	7/5	9/11/2017	ResultSet Interface, Navigating the ResultSet ,	,,		
53	8/5	10/11/2017	ResultSet MetaData interface	,,		
54	9/5	13/11/2017	Creating JDBC Application, JDBC Batch Processing	,,		
55	10/5	14/11/2017	JDBC Transaction Management, Application Programs.	‘’		
56	11/5	15/11/2017	Revision	,,		

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 - 23
T2	Class # 24 – 45
IMP	Class # 46 – 56

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #

Text Book	TB1	Herbert Schildt: Java The Complete Reference	7th Edition, Tata McGraw Hill, 2007	978-0-07-063677-4
Text Book	TB2	Uttam K. Roy , Advanced JAVA Programming	Oxford University Press	
References	RB1	Jim Keogh: J2EE - The Complete Reference	Tata McGraw Hill, 2007	1449335942
References	RB2	Y. Daniel Liang: Introduction to JAVA Programming	7th Edition, Pearson Education, 2007.	
References	RB3	Stephanie Bodoff et al: The J2EE Tutorial	2nd Edition, Pearson Education, 2004	

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

SEMESTER	**:V**	NAME OF THE FACULTY	**:Prasad B S**
BRANCH	**:Open Elective**	DATE OF COMMENCEMENT	**:16/08/2017**
SUBJECT	**:Artificial Intelligence**	DATE OF CLOSING	**:25/11/2017**
SUBJECT CODE	**:15CS562**	CLASS STRENGTH	**:67**
NO OF HRS/WK	**:4**	TOTAL HRS	**:40**

Session No	Chapter no (No of hrs planed for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1	**1/1**	17/08/17	**Module 1-**Introduction to AI, AI problems	Chalk & Talk		
2	**2/1**	18/08/17	AI technique, Level of Model, Criteria for success	,,		
3	**3/1**	19/08/17	State space search, production systems	,,		
4	**4/1**	22/08/17	Problem characteristics, Production system characteristics	,,		
5	**5/1**	24/08/17	Issues in the design of search programs, additional problems	,,		
6	**6/1**	29/08/17	Heuristic search techniques, Generate and test, Hill climbing	,,		
7	**7/1**	31/08/17	Best First Search, Problem reduction	‘’	Assignment- I	
8	**8/1**	04/09/17	Constraint Satisfaction, Means-ends analysis	,,		
9	**1/2**	05/09/17	**Module II-** Approaches to knowledge representation and issues	,,		
10	**2/2**	06/09/17	Using Predicate Logic, representing simple facts	,,		
11	**3/2**	08/09/17	Representing Instance and ISA reslationships	,,		
12	**4/2**	11/09/17	Computable Functions and predictions	,,		

13	**5/2**	12/09/17	Resolution	,,		
14	**6/2**	13/09/17	Natural Deduction, Representing knowledge using rules.	,,		
15	**7/2**	15/09/17	Procedural Vs Declarative knowledge, Logic programming	‘’		
16	**8/2**	13/09/17	Forward vs Backward reasoning, Matching, Control knowledge.	,,	Assignment -II	
17	**1/3**	23/09/17	**Module III-**Symbolic Reasoning under uncertainity: Nonmonotonic reasoning	,,		
18	**2/3**	25/09/17	Implementation issues	,,		
19	**3/3**	26/09/17	Augmenting a Problem solver	,,		
20	**4/3**	28/09/17	DFS-Implementation	,,		
21	**5/3**	04/10/17	BFS -Implementation	,,		
22	**6/3**	06/10/17	Probability and Bayes Theorem	,,		
23	**7/3**	07/10/17	Certainity factors and Rule based system. Bayesian Networks	‘’		
24	**8/3**	10/10/17	Dumpster shafer theory, Fuzzy logic, Semantic nets and frames.	,,	Assignment –III	
25	**1/4**	12/10/17	**Module IV**- Conceptual dependency, Scripts	,,		
26	**2/4**	13/10/17	Cyc project	,,		
27	**3/4**	14/10/17	Game playing, Overview	,,		
28	**4/4**	17/10/17	Minmax search procedure	,,		
29	**5/4**	24/10/17	Adding alpha beta cutoffs	,,		
30	**6/4**	25/10/17	Additional refinements	,,		
31	**7/4**	26/10/17	Iterative deepening	,,		
32	**8/4**	28/10/17	Refrences on Specific Games.	‘’		
33	**1/5**	31/10/17	**Module V**- Natural Language processing, Syntactic processing	,,	Assignment -IV	
34	**2/5**	02/11/17	Semantic analysis	,,		
35	**3/5**	03/11/17	Discourse and pragmatic processing	,,		
36	**4/5**	09/11/17	Statistical natural language processing	,,		

37	**5/5**	13/11/17	Learing, Rote learning, learning by advice	,,		
38	**6/5**	14/11/17	Learning in problem solving, Induction, Explanation	,,	Assignment -V	
39	**7/5**	15/11/17	Neural net learning and Genetic Learning	‘’		
40	**8/5**	15/11/17	Expert system shells	,,		

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 – 18
T2	Class # 19 – 36
IMP	

*: See calendar of events for the schedules of IATs.

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB1	E. Rich , K. Knight & S. B. Nair - Artificial Intelligence	3rd Edition, McGraw Hill, 2011.	0070087709
References	RB1	Stuart Rusell, Peter Norving- Artificial Intelligence: A Modern Approach	2nd Edition , Pearson Education	0-13-604259-7
References	RB2	Dan W. Patterson, Introduction to Artificial Intelligence and Expert Systems	Pentice Hal of India	9788120307773, 8120307771
References	RB3	G. Luger, “Artificial Intelligence: Structures and Strategies for complex problem Solving”,	4th Edition, Pearson education	0321545893
References	RB4	Artificial Intelligence and Expert Systems Development by D W Rolston	3rd Edition, McGraw Hill, 2011.	0070536147
References	RB5	N.P. Padhy “Artificial Intelligence and Intelligent Systems”	Oxford University Press-2015	0195671546

Signature of faculty Signature of HOD Signature of Principal

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DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

SEMESTER	**: V A**	NAME OF THE FACULTY	**: Poornima HN**
BRANCH	**: ISE**	DATE OF COMMENCEMENT	**: 07/08/2017**
SUBJECT	**: Database Management System**	DATE OF CLOSING	**: 25/11/2017**
SUBJECT CODE	**: 15CS53**	CLASS STRENGTH	**: 59**
NO OF HRS/WK	**: 6**	TOTAL HRS	**: 67**

LESSON PLAN

Session Plan	(No of hrs planed for the chapter /Unit No	Date	Topics Planned for the session	Teaching Aids	Assignments / Tests planned for the chapter	Topics covered As per plan
1	1/1	7-Aug-17	**Module 1** **Introduction to Databases:** Introduction	Chalk & Talk		
2	2/1	8-Aug-17	Characteristics of database approach	Chalk & Talk		
3	3/1	9-Aug-17	Activity : design a database system	Chalk & Talk		
4	4/1	9-Aug-17	Advantages of using the DBMS approach History of database applications	Chalk & Talk		
5	5/1	10-Aug-17	**Overview of Database Languages and Architectures:** Data Models Schemas Instances	Chalk & Talk		
6	6/1	11-Aug-17	Three schema architecture data independence Database languages Interfaces	Chalk & Talk		
7	7/1	14-Aug-17	**Conceptual Data Modelling using Entities and Relationships:** Entity types Entity types Entity sets Attributes Roles Structural constraints	Chalk & Talk	Assignment - 1	

			Weak entity types			
8	8/1	15-Aug-17	ER diagrams	Chalk & Talk		
9	9/1	16-Aug-17	Examples	Chalk & Talk		
10	10/1	17-Aug-17	Specialization and Generalization.	Chalk & Talk		
11	11/1	17-Aug-17	**Revision of Module 1**	Chalk & Talk		
12	1/2	18-Aug-17	**Module 2** **Relational Model**: Relational Model Concepts, Relational Model Constraints	Chalk & Talk		
13	2/2	19-Aug-17	Relational database schemas	Chalk & Talk		
14	3/2	22-Aug-17	Update Operations	Chalk & Talk		
15	4/2	23-Aug-17	Transactions, Dealing with Constraint Violations	Chalk & Talk		
16	5/2	24-Aug-17	**Relational Algebra:** Unary and Binary relational operations	Chalk & Talk		
17	6/2	24-Aug-17	Additional relational operations (aggregate, grouping, etc.) Examples of Queries in relational algebra	Chalk & Talk		
18	7/2	28-Aug-17	**Mapping Conceptual Design into a Logical Design:** Mapping Conceptual Design into a Logical Design	Chalk & Talk		
19	8/2	29-Aug-17	Relational Database Design using ER-to-Relational mapping.	Chalk & Talk	Assignment - 2	
20	9/2	31-Aug-17	SQL data definition and data types	Chalk & Talk		
21	10/2	1-Sep-17	Specifying constraints in SQL	Chalk & Talk		
22	11/2	4-Sep-17	Retrieval queries in SQL	Chalk & Talk		
23	12/2	4-Sep-17	INSERT, DELETE, UPDATE statements in SQL , Additional features of SQL	Projector		
24	13/2	5-Sep-17	**Revision of Module 2**	Chalk & Talk		
25	1/3	6-Sep-17	**Module – 3** **SQL : Advances Queries:** More complex SQL retrieval queries	Chalk & Talk		
26	2/3	8-Sep-17	More complex SQL retrieval queries (contd)	Chalk & Talk		
27	3/3	9-Sep-17	Specifying constraints as assertions and action triggers	Chalk & Talk		
28	4/3	11-Sep-17	Views in SQL Schema change statements in SQL,	Chalk & Talk	Assignment - 3	
29	5/3	11-Sep-17	**Database Application Development:** Database Application Development:	Chalk & Talk		

			Accessing databases from applications			
30	6/3	12-Sep-17	An introduction to JDBC, JDBC classes and interfaces	Chalk & Talk		
31	7/3	13-Sep-17	SQLJ	Chalk & Talk		
32	8/3	15-Sep-17	Stored Procedures	Chalk & Talk		
33	9/3	22-Sep-17	Case study: The internet Bookshop.	Chalk & Talk		
34	10/3	23-Sep-17	**Internet Applications:** The three-Tier application architecture,	Chalk & Talk		
35	11/3	23-Sep-17	The presentation layer, The Middle Tier	Projector		
36	12/3	25-Sep-17	**Revision of Module 3**	Chalk & Talk		
37	¼	26-Sep-17	**Module – 4** **Normalization: Database Design Theory** Introduction to Normalization using Functional and Multivalued Dependencies: Informal design guidelines for relation schema	Chalk & Talk		
38	2/4	28-Sep-17	Informal design guidelines for relation schema	Chalk & Talk		
39	¾	3-Oct-17	Functional Dependencies	Chalk & Talk		
40	4/4	4-Oct-17	Normal Forms based on Primary Keys	Chalk & Talk	Assignment - 4	
41	5/4	4-Oct-17	Second and Third Normal Forms	Chalk & Talk		
42	6/4	6-Oct-17	Boyce-Codd Normal Form, Multivalued Dependency and Fourth Normal Form	Chalk & Talk		
43	7/4	7-Oct-17	Join Dependencies and Fifth Normal Form	Chalk & Talk		
44	8/4	10-Oct-17	**Normalization Algorithms:** Inference Rules	Chalk & Talk		
45	9/4	11-Oct-17	Equivalence, and Minimal Cover	Chalk & Talk		
46	10/4	12-Oct-17	Properties of Relational Decompositions, Algorithms for Relational Database Schema Design	Chalk & Talk		
47	11/4	12-Oct-17	Nulls, Dangling tuples, and alternate Relational Designs	Chalk & Talk		
48	12/4	13-Oct-17	Further discussion of Multivalued dependencies and 4NF, Other dependencies and Normal Forms	Projector		
49	13/4	14-Oct-17	**Revision of Module 4**	Chalk & Talk		
50	1/5	17-Oct-17	**Module – 5** **Transaction Processing:** Introduction to Transaction Processing	Chalk & Talk		
51	2/5	23-Oct-17	Transaction and System concepts	Chalk & Talk		
52	3/5	24-Oct-17	Desirable properties of Transactions, Characterizing schedules based on recoverability	Chalk & Talk		
53	4/5	24-Oct-17	Characterizing schedules based on	Chalk & Talk	Assignment - 5	

			Serializability			
54	5/5	25-Oct-17	Transaction support in SQL	Chalk & Talk		
55	6/5	26-Oct-17	**Concurrency Control in Databases:** Two-phase locking techniques for Concurrency Control	Chalk & Talk		
56	7/5	28-Oct-17	Two-phase locking techniques for Concurrency Control (contd)	Chalk & Talk		
57	8/5	30-Oct-17	Concurrency control based on Timestamp ordering	Chalk & Talk		
58	9/5	31-Oct-17	Multiversion Concurrency control techniques	Chalk & Talk		
59	10/5	31-Oct-17	Validation Concurrency control techniques, Granularity of Data items and Multiple Granularity Locking	Chalk & Talk		
60	11/5	2-Nov-17	**Introduction to Database Recovery Protocols:** Recovery Concepts	Chalk & Talk		
61	12/5	3-Nov-17	NO-UNDO/REDO recovery based on Deferred update, Recovery techniques based on immediate update	Chalk & Talk		
62	13/5	9-Nov-17	Shadow paging, Database backup and recovery from catastrophic failures	Projector		
63	14/5	10-Nov-7	**Revision of Module 5**	Projector		
64		13-Nov-17	**REVISION**	Projector		
65		13-Nov17	**REVISION**	Projector		
66		14-Nov17	**REVISION**	Projector		
67		15-Nov17	**REVISION**	Projector		

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Syllabus for Internal Assessment Tests (IAT)

IAT #	Syllabus
IAT-1	Class # 01-34
IAT-2	Class # 25-41
IAT-3	Class # 41-61

*: See calendar of events for the schedules of IATs.

Literature:

Book TypeCode		Author & Title	Publication information	
			Edition // Publisher	ISBN #
Text Book	TB1	Database systems Models, Languages, Design and Application Programming, Ramez Elmasri and Shamkant B. Navathe,	7th Edition, Pearson Education	978-81-317-9247-6
Text Book	TB2	Database management systems, Ramakrishnan, and Gehrke,	3rd Edition, McGraw-Hill, 2014.	9780072465631
Reference	RB1	Silberschatz Korth and Sudharshan: Database System Concepts	6th Edition, Mc-Graw-Hill, 2013	9780071325226
Reference	RB1	Coronel, Morris, and Rob, Database Principles Fundamentals of Design, Implementation and Management,	Cengage Learning 2012.	9788177585568

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63	14/5	10-Nov-17	**Revision of Module 5**	Projector		
64		13-Nov-17	**REVISION**	Projector		
65		14-Nov-17	**REVISION**	Projector		
66		15-Nov-17	**REVISION**	Projector		
67		16-Nov-17	**REVISION**	Projector		

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