

#132, AECS Layout, IT Park Road, Kundalahalli, Bangalore – 560 037
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CMR
INSTITUTE OF
TECHNOLOGY



Session wise – Course Plan

Department of CSE

SEMESTER : V
BRANCH : CSE
SUBJECT : MANAGEMENT &
ENTREPRENEURSHIP
SUBJECT CODE:15CS51
NO OF HRS/WK: 5

NAME OF THE FACULTY : Mrs. Kokila
DATE OF COMMENCEMENT : 07-08-2017
DATE OF CLOSING : 15-11-2017
CLASS STRENGTH : 73
TOTAL HRS : 50 Hours

Session No	Chapter no (No of hrs planned for the chapter)	Date	Topics planned for the session	Teaching Aids	Assignments/ Tests planned for the chapter	Topics covered As per plan
1.	1/I	7/8/17	Module 1: Management: Introduction of the subject	Chalk and Black Board		
2.	2/I	9/8/17	Meaning nature and characteristics of management	Chalk and Black Board		
3.	3/I	9/8/17	Goals of management, Levels of management	Chalk and Black Board		
4.	4/I	10/8/17	Functions of management	Chalk and Black Board		

5.	5/I	11/8/17	Management theories	Chalk and Black Board		
6.	6/I	14/8/17	Planning, nature, types of planning and significance	Chalk and Black Board		
7.	7/I	17/8/17	Steps in planning, organizing introduction	Chalk and Black Board		
8.	8/I	17/8/17	Process of recruitment and selection	Chalk and Black Board		
9.	9/I	18/8/17	Staffing and its importance	Chalk and Black Board		
10	10/I	19/8/17	Principles of organizing	Chalk and Black Board		
11	1/II	22/8/17	Module 2: Directing and Controlling: meaning and nature of directing	Chalk and Black Board	Assignment I	
12	2/II	24/8/17	Leadership, meaning and leadership styles	Chalk and Black Board		
13	3/II	28/8/17	Motivation, meaning, significance	Chalk and Black Board		
14	4/II	29/5/17	Communication, meaning and importance	Chalk and Black Board		
15	5/II	31/8/17	Controlling, meaning, significance	Chalk and Black Board		
16	6/II	4/9/17	Controlling, meaning, steps and methods of establishing control	Chalk and Black Board		
17	7/II	4/9/17	Coordination – meaning and control	Chalk and Black Board		
18	8/II	8/9/17	Controlling, meaning, steps and methods of establishing control	Chalk and Black Board		

19	9/II	11/9/17	Communication theories	Chalk and Black Board	Submission of Assignment I	
20	10/II	12/9/17	Barriers in communication	Chalk and Black Board		
21	1/III	13/9/17	Unit III- Entrepreneur meaning, characteristics and skills / qualities of Entrepreneur	Chalk and Black Board		
22	2/III	15/9/17	Types of entrepreneur, entrepreneurial process	Chalk and Black Board		
23	3/III	23/9/17	Role of entrepreneurship, and barriers	Chalk and Black Board		
24	4/III	23/9/17	Feasibility study of entrepreneurial development	Chalk and Black Board	Assignment II	
25	5/III	25/9/17	Success stories of an entrepreneur	Discussion		
26	6/III	26/9/17	Risk involved in entrepreneurship, Stages of entrepreneurial process	Chalk and Black Board		
27	7/III	28/9/17	Feasibility studies of entrepreneurship	Chalk and Black Board		
28	8/III	4/10/17	Role of entrepreneurs in economic development	Chalk and Black Board		
29	9/III	4/10/17	Entrepreneurial development	Chalk and Black Board		
30	10/III	6/10/17	Case study	Discussions		
31	1/IV	7/10/17	Unit 4: Project management meaning, types of projects, Project identification	Chalk and Black Board	Submission of Assignment II	
32	2/IV	10/10/17	Steps involved in project management	Chalk and Black Board		

33	3/IV	12/10/17	Project report, planning commission guidelines for project	Chalk and Black Board		
34	4/IV	12/10/17	ERP , meaning, importance for ERP	Chalk and Black Board		
35	5/IV	13/10/17	Application of ERP in the functional areas of management	Chalk and Black Board		
36	6/IV	14/10/17	ERP in finance, marketing, human resources	Chalk and Black Board		
37	7/IV	17/10/17	Significance of ERP in business	Chalk and Black Board		
38	8/IV	24/10/17	Types of reports, methods of report generation	Chalk and Black Board		
39	9/IV	24/10/17	Difficulties in ERP and its challenges	Chalk and Black Board		
40	10/IV	25/10/17	Case study	Discussions		
41	1/V	26/10/17	Unit 5: Micro and small enterprises Meaning of micro and small scale enterprises	Chalk and Black Board	Assignment III	
42	2/V	28/10/17	Characteristics and merits of small scale enterprises	Chalk and Black Board		
43	3/V	31/10/17	Steps in establishing small and micro firms	Chalk and Black Board		
44	4/V	31/10/17	Institutional support to small and micro firms	Chalk and Black Board		
45	5/V	2/11/17	MSME, DI, NSIC	Chalk and Black Board		
46	6/V	3/11/17	SIDBI, KIADB, KSSIDC	Chalk and Black Board		
47	7/V	9/11/17	TECSOK, KSFC, DIC	Chalk and Black Board		

48	8/V	13/11/17	District level single window agency	Chalk and Black Board		
49	9/V	13/11/17	IPR – Intellectual Property Rights meaning and its significance	Chalk and Black Board	Submission of Assignment III	
50	10/V	14/11/17	VTU Question paper - Discussion	Discussion		
51	11/V	15/11/17	VTU Question paper - Discussion	Discussion		

Syllabus for Internal Assessment Tests (IAT) *

IAT # Syllabus

IAT	Syllabus
IAT 1	Classes # 1 to 22
IAT 2	Classes # 23-35
IAT 3	Classes # 36-50

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB 1	Principles of Management – P.C Tripathi, P.N Reddy,	McGraw Hill Education, 6th Edition, 2017	ISBN-13:978-93-5260-535-4
Text Book	TB 2	Entrepreneurship Development Small Business Enterprises	Poornima M Charantimath, Pearson Education 2008	ISBN 978-81-7758-260-4
References	RB1	Dynamics of Entrepreneurial Development and Management	HPH 2007, Vasant Desai	ISBN: 978-81-8488-801-2
References	RB2	Essentials of Management: An International, Innovation and Leadership perspective	Harold Koontz, Heinz Weihrich McGraw Hill Education, 10th Edition 2016	ISBN- 978-93-392-2286-4

Session wise – Course Plan

Department of Computer Science and Engineering

SEMESTER : V A	NAME OF THE FACULTY : Sagarika Behera
BRANCH : CSE	DATE OF COMMENCEMENT : 07/08/17
SUBJECT : Automata Theory and Computability	DATE OF CLOSING : 16/11/17
SUBJECT CODE : 15CS54	CLASS STRENGTH : 74
NO OF HRS/WK : 6	TOTAL HRS : 64

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	08/08/17	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	”	Assignment- I	
4	4/1	10/08/17	Language Hierarchy Computation	”		
5	5/1	11/08/17	Finite State machines: Deterministic FSM	”		
6	6/1	12/08/17	Regular Languages Designing DFMS	”		
7	7/1	16/8/17	Designing FSM	”		
8	8/1	16/8/17	Non-deterministic FSMs	”		
9	9/1	17/8/17	Equivalence of DFMS & NFSM	”		

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	23/8/17	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	28/8/17	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	01/09/17	Manipulating and Simplifying Res	”		
20	6/2	01/09/17	Regular grammars: Definition	”		
21	7/2	04/09/17	Regular languages and Regular grammars	”	Assignm ent –II	
22	8/2	05/09/17	Regular languages and nonregular languages: How many RIs	”		
23	9/2	06/09/17	Show that language is regular	“		
24	10/2	07/09/17	Closure properties of RLs	”		
25	11/2	09/09/17	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	12/09/17	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	22/9/17	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	25/9/17	Ambiguity	”		
35	8/3	26/9/17	Normal forms	”		
36	9/3	27/9/17	Pushdown Automata: Definition	”		
37	10/3	03/10/17	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	06/10/17	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	11/10/17	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	13/10/17	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	23/10/17	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	25/10/17	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	30/10/17	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	02/11/17	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	10/11/17	Solving Exam questions	”		
62	11/5	10/11/17	Solving Exam questions	”		
63		13/11/17	Revision	”		
64		14/11/17	Revision	”		

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 – 27
T2	Class # 28 – 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	K L P Mishra, N Chandrasekaran, Theory of Computer Science	3rd Edition, 2012, TMH	978-81-203-2968-3
Reference Book	R1	JE Hopcroft, Rajeev Motwani, J Ullman Introduction to Automata theory, Languages, and Computation,	3 rd Edition, Pearson	
Reference Book	R2	Michael Sipser: Introduction to the theory of Computation,	3 rd edition, Cengage learning, 2013	

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Session wise – Course Plan

Department of Computer Science and Engineering

SEMESTER : V -C
BRANCH : CSE
SUBJECT : Computer Networks
SUBJECT CODE : 15CS52
NO OF HRS/WK : 6

NAME OF THE FACULTY : Shyamasree Ghosh
DATE OF COMMENCEMENT : 07.08.2017
DATE OF CLOSING : 25.11.2017
CLASS STRENGTH : 73
TOTAL HRS : 67

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		07/08/17	Introduction, Revision on Data Communication	Chalk & Talk		
2	1/1	08/08/17	(M-1)Application Layer :Introduction Application and Application Layer	”		

3	2/1	09/08/17	Network Application Architectures, Processes Communicating	”		
4	3/1	10/08/17	Transport Services Available to Applications, Transport Services Provided by the Internet,	”		
5	4/1	10/08/17	The Web and HTTP: Overview of HTTP, Non-persistent and Persistent Connections, HTTP Message Format	”		
6	5/1	11/08/17	The Web and HTTP: Ctnd..			
7	6/1	12/08/17	User-Server Interaction: Cookies, Web Caching, The Conditional GET	”		
8	7/1	12/08/17	File Transfer: FTP Commands & Replies	“		
9	8/1	16/08/17	Electronic Mail in the Internet: SMTP, Comparison with HTTP	”		
10	9/1	18/08/17	Mail Message Format, Mail Access Protocols	”		
11	10/1	18/08/17	DNS; The Internet's Directory Service: Services Provided by DNS, Overview of How DNS Works	”		
12	11/1	19/08/17	DNS Records	”		
13	12/1	21/08/17	Peer-to-Peer Applications: P2P File Distribution	”		
14	13/1	21/08/17	Distributed Hash Tables	”		
15	14/1	23/08/17	Socket Programming: creating Network Applications: Socket Programming with UDP	” PPT		
16	15/1	28/08/17	Socket Programming with TCP.	“		
17	1/2	28/08/17	(M-2)Transport Layer : Introduction and Transport-Layer Services: Relationship Between Transport and Network Layers	”		
18	2/2	29/08/17	Overview of the Transport Layer in the Internet, Multiplexing and Demultiplexing	”		
19	3/2	30/08/17	Connectionless Transport: UDP,UDP Segment Structure,	”		
20	4/2	30/08/17	UDPChecksum	”		

21	5/2	01/09/17	Principles of Reliable Data Transfer: Building a Reliable Data Transfer Protocol	”		
22	6/2	05/09/17	Pipelined Reliable Data Transfer Protocols, Go-Back-N	”		
23	7/2	05/09/17	Selective repeat	”		
24	8/1	06/09/17	Connection-Oriented Transport TCP: The TCP Connection, TCP Segment Structure	“		
25	9/2	07/09/17	Round-Trip Time Estimation and Timeout, Reliable Data Transfer	”	Assignment –I	
26	10/2	07/09/17	Flow Control, TCP Connection Management	”		
27	11/2	09/09/17	Principles of Congestion Control: The Causes and the Costs of Congestion, Approaches to Congestion Control	”		
28	12/2	12/09/17	Network-assisted congestion-control example	”		
29	13/2	12/09/17	ATM ABR Congestion control	”		
30	1/3	13/09/17	TCP Congestion Control: Fairness.	”		
31	2/3	14/09/17	(M-3)The Network layer: What's Inside a Router?: Input Processing, Switching, output Processing	”		
32	3/3	14/09/17	Where Does Queuing Occur? Routing control plane	”		
33	4/3	22/09/17	IPv6,A Brief foray into IP Security	“		
34	5/3	25/09/17	Routing Algorithms: The Link-State (LS) Routing Algorithm			
35	6/3	25/09/17	The Link-State (LS) Routing Algorithm Ctnnd..	”		
36	7/3	26/09/17	The Distance-Vector (DV) Routing Algorithm			
37	8/3	27/09/17	The Distance-Vector (DV) Routing Algorithm Ctnnd..	”		

38	9/3	27/09/17	Hierarchical Routing, Routing in the Internet	”		
39	10/3	03/10/17	Intra-AS Routing in the Internet: RIP	”		
40	11/4	06/10/17	Intra-AS Routing in the Internet: OSPF	”		
41	12/4	06/10/17	Inter/AS Routing: BGP	”		
42	1/4	07/10/17	Broadcast Routing Algorithms and Multicast.	“		
43	2/4	09/10/17	(M-4)Wireless and mobile networks: Cellular Internet Access: An Overview of Cellular Network Architecture	”		
44	3/4	09/10/17	3G Cellular Data Networks: Extending the Internet to Cellular subscribers	”	Assignment -II	
45	4/4	11/10/17	On to 4G:LTE	”		
46	5/4	13/10/17	Mobility management: Principles, Addressing	”		
47	6/4	13/10/17	Routing to a mobile node, Mobile IP	”		
48	7/4	14/10/17	Managing mobility in cellular Networks,	”		
49	8/4	16/10/17	Routing calls to a Mobile user	”		
50	9/4	16/10/17	Handoffs in GSM,	“		
51	1/5	23/10/17	Wireless and Mobility: Impact on Higher-layer protocols	”		
52	2/5	25/10/17	(M-5)Multimedia networking: Properties of video, properties of Audio	”		
53	3/5	25/10/17	Types of multimedia Network Applications,	”		
54	4/5	26/10/17	Streaming stored video: UDP Streaming	”		
55	5/5	27/10/17	HTTP Streaming	”		
56	6/5	27/10/17	Adaptive streaming	”		
57	7/5	30/10/17	DASH	”		
58	8/5	02/11/17	Content distribution Networks	“		

59	9/5	02/11/17	Network Support for Multimedia: Dimensioning Best-Effort Networks	„		
60	10/5	03/11/17	Providing Multiple Classes of Service	„		
61	11/5	04/11/17	Diffserv			
62	12/5	04/11/17	Per-Connection Quality-of-Service (QoS) Guarantees: Resource Reservation and Call Admission			
63		10/11/17	Revision			
64		14/11/17	Revision			
65		14/11/17	Revision			
66		15/11/17	Revision			
67		21/11/17	Revision			

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 - 29
T2	Class # 29 – 41
T3	

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

Literature:

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB1	James F Kurose and Keith W Ross, Computer Networking, A Top-Down Approach,	6th edition, Pearson,2017.	ISBN-10: 0-13-285620-4

References	RB1	Behrouz A Forouzan, Data and Communications and Networking	5th edition, McGraw Hill, Indian Edition, 2017	ISBN-13: 978-1259064753
References	RB2	Larry L Peterson and Bruce S Davie, Computer Networks	5th edition, ELSEVIER	ISBN: 9780123850591
References	RB3	Andrew S Tanenbaum, Computer Networks	5th edition, Pearson	ISBN-13: 978-0-13-212695-3
References	RB4	Mayank Dave, Computer Networks	2nd edition, Cengage Learning	ISBN 10: 8131509869

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Session wise – Course Plan

Department of Computer Science and Engineering

SEMESTER	: V C	NAME OF THE FACULTY	: Swetha KV
BRANCH	: CSE	DATE OF COMMENCEMENT	: 07/08/2017
SUBJECT	: Database Management System	DATE OF CLOSING	: 25/11/2017
SUBJECT CODE	: 15CS53	CLASS STRENGTH	: 73
NO OF HRS/WK	: 5	TOTAL HRS	: 67

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-Aug-17	Module 1: Introduction to databases	Chalk & Talk		
2	2/1	8-Aug-17	Characteristics of database approach	„		
3	3/1	10-Aug-17	Advantages of using the DBMS approach History of database applications	„		
4	4/1	12-Aug-17	Data Models, Schemas And Instances	„		

			Three schema architecture, data independence			
5	5/1	12-Aug-17	Database languages & Interfaces, Database System Environment	”		
6	6/1	14-Aug-17	Entity types Entity sets Attributes Roles Structural constraints Weak entity types	”		
7	7/1	16-Aug-17	ER diagrams	”		
8	8/1	17-Aug-17	Examples	Projector	Assignment- I	
9	9/1	21-Aug-17	Specialization and Generalization.	Chalk & Talk		
10	10/1	21-Aug-17	Revision of Module 1	”		
11	1/2	22-Aug-17	Module 2: Relational Model. Relational Model Concepts, Relational Model Constraints	”		
12	2/2	23-Aug-17	Relational database schemas	”		
13	3/2	24-Aug-17	Update Operations, Transactions,	”		
14	4/2	30-Aug-17	Dealing with Constraint Violations	”		
15	5/2	31-Aug-17	Unary and Binary relational operations	”		
16	6/2	31-Aug-17	Additional relational operations (aggregate, grouping, etc.) Examples of Queries in relational algebra	”		
17	7/2	1-Sep-17	Mapping Conceptual Design into a Logical Design	”		
18	8/2	4-Sep-17	Relational Database Design using ER-to-Relational mapping.	”		
19	9/2	7-Sep-17	SQL data definition and data types	”	Assignment -II	
20	10/2	7-Sep-17	Specifying constraints in SQL	”		
21	11/2	8-Sep-17	Retrieval queries in SQL	”		

22	12/2	9-Sep-17	INSERT, DELETE, UPDATE statements in SQL , Additional features of SQL	„		
23	13/2	11-Sep-17	Revision of Module 2	“		
24	1/3	14-Sep-17	Module 3: SQL : Advances Queries	„		
25	2/3	14-Sep-17	More complex SQL retrieval queries (contd)	„		
26	3/3	15-Sep-17	Specifying constraints as assertions and action triggers	„		
27	4/3	22-Sep-17	Views in SQL	„		
28	5/3	23-Sep-17	Schema change statements in SQL, Database Application Development: Accessing databases from applications	„		
29	6/3	27-Sep-17	An introduction to JDBC, JDBC classes and interfaces	„, and Projector		
30	7/3	27-Sep-17	SQLJ	Chalk & Talk		
31	8/3	28-Sep-17	Stored Procedures	„		
32	9/3	3-Oct-17	Case study: The internet Bookshop.	“		
33	10/3	4- Oct -17	Internet Applications: The three-Tier application architecture,	„	Assignment –III	
34	11/3	9- Oct -17	The presentation layer, The Middle Tier	„		
35	12/3	9- Oct -17	Revision of Module 3	„		
36	1/4	10- Oct -17	Module 4: Normalization: Database Design Theory. Introduction to Normalization using Functional and Multivalued Dependencies: Informal design guidelines for relation schema	„		
37	2/4	11- Oct -17	Informal design guidelines for relation schema	„		
38	3/4	12- Oct -17	Functional Dependencies	„		

39	4/4	13- Oct -17	Normal Forms based on Primary Keys	“		
40	5/4	16- Oct -17	Second and Third Normal Forms	”		
41	6/4	16- Oct -17	Boyce-Codd Normal Form, Multivalued Dependency and Fourth Normal Form	”		
42	7/4	17- Oct -17	Join Dependencies and Fifth Normal Form	”		
43	8/4	23- Oct -17	Normalization Algorithms: Inference Rules	”		
44	9/4	24- Oct -17	Equivalence, and Minimal Cover	”		
45	10/4	25- Oct -17	Properties of Relational Decompositions, Algorithms for Relational Database Schema Design	”	Assignm ent –IV	
46	11/4	26- Oct -17	Nulls, Dangling tuples, and alternate Relational Designs	”		
47	12/4	27- Oct -17	Further discussion of Multivalued dependencies and 4NF, Other dependencies and Normal Forms	“		
48	13/4	27- Oct -17	Revision of Module 4	”		
49	1/5	28- Oct -17	Module 5: Transaction Processing. Introduction to Transaction Processing	”		
50	2/5	30- Oct -17	Transaction and System concepts	”		
51	3/5	31- Oct -17	Desirable properties of Transactions, Characterizing schedules based on recoverability	”		
52	4/5	2-Nov-17	Characterizing schedules based on Serializability	”		
53	5/5	3-Nov-17	Transaction support in SQL	”		
54	6/5	4-Nov-17	Two-phase locking techniques for Concurrency Control	”		
55	7/5	4-Nov-17	Two-phase locking techniques for Concurrency Control (contd)	“		
56	8/5	9-Nov-17	Concurrency control based on Timestamp ordering	”	Assignm ent -V	

57	9/5	10-Nov-17	Multiversion Concurrency control techniques	„		
58	10/5	13-Nov-17	Validation Concurrency control techniques, Granularity of Data items and Multiple Granularity Locking	„		
59	11/5	16-Nov-17	Recovery Concepts, NO-UNDO/REDO recovery based on Deferred update, Recovery techniques based on immediate update	„		
60	12/5	16-Nov-17	Shadow paging, Database backup and recovery from catastrophic failures	„		
61	13/5		Revision of Module 5			
62			REVISION			
63			REVISION			
64			REVISION			
65			REVISION			
66			REVISION			

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Class # 01 - 30
T2	Class # 31 – 61
T3	

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

Literature:

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

Text Book	TB1	Database systems Models, Languages, Design and Application Programming, Ramez Elmasri and Shamkant B. Navathe,	7 th Edition, Pearson Education	978-81-317-9247-6
Text Book	TB2	Database management systems, Ramakrishnan, and Gehrke,	3 rd Edition, McGraw-Hill, 2014.	9780072465631
Reference	RB1	Silberschatz Korth and Sudharshan: Database System Concepts	6 th Edition, Mc-Graw-Hill, 2013	9780071325226

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CMR
INSTITUTE OF
TECHNOLOGY



Session wise – Course Plan

Department of Computer Science and Engineering

SEMESTER : V
Kulkarni
NAME OF THE FACULTY : Asst Prof. Apurva
BRANCH : CSE
SUBJECT : Programming in Java (open elective)
SUBJECT CODE : 15CS561
NO OF HRS/WK : 4
DATE OF COMMENCEMENT : 17/8/2017
DATE OF CLOSING : 25/11/2017
CLASS STRENGTH :
TOTAL HRS : 39

Session No	Chapter no (No of hrs planned for the chapter)	DATE	Topics planned for the session	Teaching Aids	Assignment s/Tests planned for the chapter	Topics covered As per plan
1	1/1	17/8/17	Induction class , Subject Overview and prerequisites	Chalk & Talk		
2	2/1	18/8/17	Module 1: An Overview of Java: Object-Oriented Programming, A First Simple Program A Second Short Program	„		

3	3/1	19/8/17	Two Control Statements ,Using Blocks of Code, Lexical Issues,The Java Class Libraries	”		
4	4/1	22/8/17	Data Types, Variables	”		
5	5/1	24/8/17	Type Casting and conversion	”		
6	6/1	28/8/17	1D & 2 D array and programs	”		
7	7/1	29/8/17	Strings : simple program	”		
8	8/1	31/8/17	Tutorial	”	Assignment - I	
9	1/2	4/9/17	Module 2: Operators Arithmetic,Bitwise,Relational,Logical operator	”		
10	2/2	5/9/17	Boolean,Assignment,Conditional, Precedence	”		
11	3/2	6/9/17	Control statements:if-else... switch	”		
12	4/2	8/9/17	For,while,do-while	”		
13	5/2	11/9/17	Nested loops,break-continue	”		
14	6/2	12/9/17	Programs	”		
15	7/2	13/9/17	Programs and Tutorial	”	Assignment - II	
16	1/3	15/9/17	Module 3: Introduction to classes,declaring object,new	”		
17	2/3	23/9/17	Introducing method,constructor	”		
18	3/3	25/9/17	Stack class	”		
19	4/3	26/9/17	Passing object,Recursion	”		
20	5/3	28/9/17	Programs on class-object concept	”		
21	6/3	4/10/17	Access control: static and final	”		
22	7/3	6/10/17	Inheritance,types	”		
23	8/3	7/10/17	Method overriding,dynamic method dispatch	”		
24	9/3	10/10/17	Program and Tutorial	”	Assignment - III	
25	1/4	12/10/17	Module 4: Package Introduction &	”		

			small program			
26	2/4	13/10/17	Access Protection,Importing package eg.	”		
27	3/4	14/10/17	Interface example	”		
28	4/4	17/10/17	Exception Handling : Introduction	”		
29	5/4	24/10/17	Types of exception handling,uncaught exception	”		
30	6/4	25/10/17	Try...catch,multiple catch...clause.	”		
31	7/4	26/10/17	<i>Throw,throws,finally</i>	”		
32	8/4	28/10/17	<i>Built in exception,writing own exception.</i>	”		
33	9/4	31/10/17	<i>Programs and tutorial</i>	”	Assignment - IV	
34	1/5	2/11/17	Module 5: Enumeration and program,Wrapper,types,programs	”		
35	2/5	3/11/17	Applets,transient and volatile modifiers,instance of,native methods	”		
36	3/5	10/11/17	IO Basics,Reading and writing files	”		
37	4/5	13/11/17	String handling methods	”		
38	5/5	14/11/17	String Buffer and string builder	”		
39	6/5	15/11/17	Tutorial	”		

Syllabus for Internal Assessment Tests (IAT) *

Sessional #	Syllabus
T1	Module1&Module2
T2	Module3&Module4
T3	Module5

*: 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	7 th Edition, Tata McGraw Hill, 2007.	
References	RB1	Mahesh Bhawe 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.	