SEMESTER : II M.Tech **NAME OF THE FACULTY : Dr. Krishnan R**

BRANCH : CSE **DATE OF COMMENCEMENT : 01/02/2016**

SUBJECT : Artificial Intelligence and Agent Technology

SUBJECT CODE : 14SCS24 **CLASS STRENGTH : 18**

NO OF HRS/WK : 5 **TOTAL HRS : 60**

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**	3/02/2016	**Module I**: What is Artificial Intelligence:	Board and Chalk, Projector		
2	**2/1**	4/02/2016	The AI Problems, The Underlying assumption, What is an AI Technique?,	”		
3	**3/1**	4/02/2016	The Level of the model, Criteria for success, some general references, One final word and beyond.	”		
4	**4/1**	05/02/2016	Problems, problem spaces, and search: Defining, the problem as a state space search,	”		
5	**5/1**	05/02/2016	Production systems,	”		
6	**6/1**	11/02/2016	Problem characteristics			
7	**7/1**	12/02/2016	Production system characteristics,			
8	**8/1**	12/02/2016	Issues in the design of search programs, Additional Problems.			

9	**9/1**	13/02/2016	Intelligent Agents: Agents and Environments,The nature of environments,			
10	**10/1**	13/02/2016	The structure of agents.			
11	**1/2**	18/02/2016	**MODULE II** Heuristic search techniques: Generate-and-test, Hill climbing,	”		
12	**2/2**	22/02/2016	Best-first search,	”		
13	**3/2**	22/02/2016	Problem Reduction	”		
14	**4/2**	23/02/2016	Constraint satisfaction	”	**Assignment-I**	
15	**5/2**	23/02/2016	Knowledge representation issues: Representations and mappings, Approaches to knowledge representation,	”		
16	**6/2**	29/02/2016	Issues in knowledge representation, The frame problem.	”		
17	**7/2**	1/03/2016	Representing simple facts in logic, representing instance and ISA relationships, Computable functions and predicates	”		
18	**8/2**	1/03/2016	Resolution, Natural Deduction	”		
19	**9/2**	2/03/2016	Logical Agents: Knowledge – based agents, the Wumpus world, Logic-Propositional logic, Propositional theorem proving,	”		
20	**10/2**	2/03/2016	Effective propositional model checking, Agents based on propositional logic.	”		

21	**11/2**	8/03/2016	Student Presentation on mini project topic	”		
22	**12/2**	9/03/2016	Student Presentation on mini project topic	”	**Assignment 2**	
23	**1/3**	9/03/2016	**MODULE III** Symbolic Reasoning Under Uncertainty: Introduction to nonmonotonic reasoning,	”		
24	**2/3**	10/03/2016	Logic for nonmonotonic reasoning, Implementation Issues,	”		
25	**3/3**	10/03/2016	Augmenting a problem-solver, Implementation: Depth-first search,	”		
26	**4/3**	19/03/2016	Implementation: Breadth-first search.	”		
27	**5/3**	21/03/2016	Statistical Reasoning: Probability and bayes Theorem,	”		
28	**6/3**	21/03/2016	Certainty factors and rule-based systems,	”		
29	**7/3**	22/03/2016	Bayesian Networks, Dempster-Shafer Theory, Fuzzy logic.	”		
30	**8/3**	22/03/2016	Quantifying Uncertainty: Acting under uncertainty, Basic probability notation,	”		
31	**9/3**	29/03/2016	Inference using full joint distributions, Independence,	”		
32	**10/3**	30/03/2016	Inference using full joint distributions, Independence (contd)	”		
33	**11/3**	30/03/2016	Bayes’ rule and its use	”		

34	**12/3**	31/03/2016	The Wumpus world revisited.	”	**Assignment 3**	
35	**1/4**	31/03/2016	**MODULE IV** Weak Slot-and-filter structures: Semantic Nets,	”		
36	**2/4**	05/04/2016	Frames.	”		
37	**3/4**	06/04/2016	Strong slot-and –filler structures: Conceptual dependency,	”		
38	**4/4**	06/04/2016	scripts, CYC	”		
39	**5/4**	07/04/2016	Adversarial Search: Games, Optimal Decision in Games,	”		
40	**6/4**	07/04/2016	Alpha-Beta Pruning,	”		
41	**7/4**	15/04/2016	Imperfect Real-Time Decisions,	”		
42	**8/4**	16/04/2016	Stochastic Games,	”		
43	**9/4**	16/04/2016	Partially Observable Games	”		
44	**10/4**	18/04/2016	State-Of-The-Art Game Programs, Alternative Approaches, Summary	”	**Assignment 4**	
45	**11/4**	18/04/2016	**MODULE V** **Learning From examples: Forms of learning, Supervised learning,**	”		
46	**12/4**	23/04/2016	Learning decision trees, Evaluating and choosing the best hypothesis,	”		
47	**1/5**	28/04/2016	Learning decision trees, Evaluating and choosing the best hypothesis (contd)	”		
48	**2/5**	28/04/2016	The theory of learning ,PAC, Regression and Classification with linear models,	”		

49	**3/5**	29/04/2016	Nonparametric models, Support vector machines,	”		
50	**4/5**	29/04/2016	Ensemble learning.	”		
51	**5/5**	04/05/2016	Learning Probabilistic Models: Statistical learning,	”		
52	**6/5**	05/05/2016	learning with complete data,	”		
53	**7/5**	05/05/2016	learning with hidden variables:	”		
54	**8/5**	06/05/2016	**Mini Project Presentation**	”		
55	**9/5**	06/05/2016	**Mini Project Presentation**	”		
56		12/5/2016	Revision	”		
57		12/5/2016	Revision	”		
58		13/5/2016	Revision	”		
59		13/5/2016	Revision	”		
60		14/5/2016	Revision	”		

Syllabus for Internal Assessment Tests (IAT)*

IAT #	Syllabus
IAT-1	Class # 01 – 22
IAT-2	Class # 23 – 46

Text Book Details

Book Type	Code	Author & Title	Publication information	
			Edition // Publisher	ISBN
Text Book	TB1	Elaine Rich,Kevin Knight, Shivashanka B Nair:Artificial Intelligence	Tata CGraw Hill 3rd edition. 2013	
Reference	TB2	Stuart Russel, Peter Norvig: Artificial Intelligence A Modern Approach.	Pearson 3rd edition 2013.	
Reference	RB1	Nils J. Nilsson: "Principles of Artificial Intelligence".	Elsevier,	ISBN-13: 9780934613101

SEMESTER : II **NAME OF THE FACULTY : Mrs. Sherly noel**

BRANCH : CSE **DATE OF COMMENCEMENT : 01-2-2016**

SUBJECT : Advanced Algorithms **DATE OF CLOSING : 21-05-2016**

SUBJECT CODE : 14SCS23 **CLASS STRENGTH : 19**

NO OF HRS/WK : 5 **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**	03-02-16	Pre-requisites	C & B		
2	**2/1**	08-02-16	Pre-requisites	,,		
3	**3/1**	08-02-16	**MODULE I Review of Analysis Techniques**	,,		
4	**4/1**	10-2-16	Growth of Functions	,,		

5	**5/1**	10-2-16	Asymptotic notations	,,		
6	**6/1**	11-02-16	Standard notations and common functions	,,		
7	**7/1**	15-2-16	Recurrences and Solution of Recurrence equations	,,		
8	**8/1**	15-2-16	The substitution method	,,		
9	**9/1**	17-2-16	The recurrence – tree method	,,		
10	**10/1**	17-2-16	The master method	,,	Assign-1	
11	**11/1**	18-2-16	Amortized Analysis: Aggregate, Accounting	,,		
12	**12/1**	24-2-16	Potential Method	,,		
13	**13/1**	24-2-16	Revision on unit - I			
14	**1/2**	26-2-16	**MODULE II Graph Algorithms - Introduction**	,,		
15	**2/2**	26-2-16	Bellman - Ford Algorithm; Single source shortest paths in a DAG	,,		
16	**3/2**	29-2-16	Johnson's Algorithm for sparse graphs	,,		
17	**4/2**	03-3-16	Flow networks	,,		
18	**5/2**	03-3-16	Ford-Fulkerson method;	,,		
19	**6/2**	05-3-16	Maximum bipartite matching.	,,		
20	**7/2**	05-3-16	**Polynomials and the FFT:Introduction**	,,		
21	**8/2**	08-3-16	Representation of polynomials;	,,		
22	**9/2**	11-3-16	The DFT	,,	Assign-2	
23	**10/2**	11-3-16	FFT	,,		
24	**11/2**	18-3-16	Efficient implementation of FFT.	,,		
25	**12/1**	18-3-16	Revision on unit - II			
26	**1/3**	19-3-16	**MODULE III Number -Theoretic Algorithms-Introduction**	,,		

27	**2/3**	23-3-16	Elementary notions	,,		
28	**3/3**	23-3-16	GCD	,,		
29	**4/3**	28-3-16	Modular Arithmetic	,,		
30	**5/3**	28-3-16	Solving modular linear equations	,,		
31	**6/3**	29-3-16	The Chinese remainder theorem	,,		
32	**7/3**	01-4-16	Powers of an element	,,		
33	**8/3**	01-4-16	RSA cryptosystem	,,	Assign-3	
34	**9/3**	04-4-16	Primality testing	,,		
35	**10/3**	04-4-16	Integer factorization	,,		
36	**11/3**	05-4-16	Revision on unit - III			
37	**1/4**	11-4-16	**MODULE IV String-Matching Algorithms -Introduction**	,,		
38	**2/4**	11-4-16	Naïve string Matching	,,		
39	**3/4**	13-4-16	Examples of Naïve string Matching	,,		
40	**4/4**	13-4-16	Rabin - Karp algorithm	,,		
41	**5/4**	15-4-16	Examples of Rabin - Karp algorithm	,,		
42	**6/4**	20-4-16	String matching with finite automata	,,		
43	**7/4**	20-4-16	Examples of String matching with finite automata	,,		
44	**8/4**	22-4-16	Knuth-Morris-Pratt algorithm;	,,		
45	**9/4**	22-4-16	Examples of Knuth-Morris-Pratt algorithm	,,		
46	**10/4**	23-4-16	Boyer – Moore algorithms	,,		
47	**11/4**	30-4-16	Examples of Boyer – Moore algorithms	,,	Assign-4	
48	**12/4**	30-4-16	Revision on unit - IV			
49	**1/5**	03-5-16	**MODULE V Probabilistic and Randomized Algorithms-**	,,		

			Introduction			
50	**2/5**	03-5-16	Probabilistic algorithms;	,,		
51	**3/5**	04-5-16	Examples of Probabilistic algorithms	,,		
52	**4/5**	07-5-16	Randomizing deterministic algorithms	,,		
53	**5/5**	07-5-16	Examples of Randomizing deterministic algorithms	,,		
54	**6/5**	11-5-16	Examples of Monte Carlo	,,		
55	**7/5**	12-5-16	Las Vegas algorithms	,,	Assign-5	
56	**8/5**	13-5-16	Examples of Las Vegas algorithms	,,		
57	**9/5**	14-5-16	Probabilistic numeric algorithms	,,		
58	**10/5**	16-5-16	Examples of Probabilistic numeric algorithms	,,		
59	**11/5**		Revision on Unit – V			
60			Revision			
61			Revision			
62			Revision			

Syllabus for Internal Assessment Tests (IAT)*

Sessional #	Syllabus
T1	Class # 01 - 18
T2	Class # 19 – 44
T3	Class # 45 – 54

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

Literature:

Book Type	Code	Author & Title	Publication info

			Edition & Publisher	ISBN #
Text Book	TB1	Leland.L.Beck: System Software,	3rd Edition, Pearson Education, 1997.	978-81-317-6460-2
Text Book	TB2	John.R.Levine, Tony Mason and Doug Brown: Lex and Yacc,	O'Reilly, SPD, 1998.	1565920007, 9781565920002
References	RB1	D.M.Dhamdhere: System Programming and Operating Systems	2ndEdition, Tata McGraw - Hill, 1999.	1449335942

SEMESTER : II
DEPT : CSE
SUBJECT : **Advances in Computer Networks**
SUBJECT CODE : **14SCS22**
NO OF HRS/WK: 5

NAME OF THE FACULTY :**Dr.B.Loganayagi**
DATE OF COMMENCEMENT:03/02/16
DATE OF CLOSING : 21/05/16
CLASS STRENGTH : 19
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**	03/02/16	**MODULE I : Foundation** Building a Network, Requirements, Perspectives,	PPT, Board, chalk, duster		
2	**2/1**	04/02/16	Scalable Connectivity	,,		
3	**3/1**	05/02/16	Cost-Effective Resource sharing,	,,		
4	**4/1**	08/02/16	Support for Common Services,	,,		
5	**5/1**	10/02/16	Manageability, Protocol layering	,,	Assignment- I	
6	**6/1**	11/02/16	Performance, Bandwidthand Latency	,,		
7	**7/1**	12/02/16	Delay X Bandwidth Product	,,		
8	**8/1**	13/02/16	Perspectives on Connecting, Classes of Links	PPT, Board, chalk,		

				duster		
9	**9/1**	15/02/16	Reliable Transmission, Stop-and-Wait	,,		

10	**10/1**	17/02/16	Sliding Window	,,		
11	**11/1**	18/02/16	Concurrent Logical Channels	,,		
12	**12/1**	22/02/16	Concurrent Logical Channels contd..	,,		
13	**1/2**	23/02/16	**MODULE II** **Internetworking- I:** Switching and Bridging	PPT, Board, chalk, duster		
14	**2/2**	24/02/16	Datagram's, Virtual Circuit Switching	,,		
15	**3/2**	26/02/16	Source Routing,	,,		
16	**4/2**	29/02/16	Bridges and LAN Switches	,,		
17	**5/2**	01/03/16	Basic Internetworking (IP), What is an Internetwork ?, Service Model,	,,		
18	**6/2**	02/03/16	Global Addresses	,,		
19	**7/2**	03/03/16	Datagram Forwarding in IP	,,		
20	**8/2**	05/03/16	Sub netting and Classless Addressing,	,,		
21	**9/2**	08/03/16	Address Translation(ARP)	,,		
22	**10/2**	09/03/16	Host Configuration(DHCP)	,,		
23	**11/2**	10/03/16	Error Reporting(ICMP)	,,	Assignment- II	
24	**12/2**	11/03/16	Virtual Networks and Tunnels	,,		
25	**1/3**	18/03/16	**MODULE III** **Internetworking- II** Network as a Graph,	PPT, Board, chalk, duster		
26	**2/3**	19/03/16	Distance Vector(RIP),	,,		
27	**3/3**	21/03/16	Link State(OSPF),	,,		
28	**4/3**	22/03/16	Metrics,	,,		
29	**5/3**	23/03/16	The Global Internet,	,,		

30	**6/3**	28/03/16	Routing Areas	,,		
31	**7/3**	29/03/16	Routing among Autonomous systems(BGP),	,,		

32	**8/3**	30/03/16	IP Version 6(IPv6),	,,		
33	**9/3**	31/03/16	Mobility	,,		
34	**10/3**	01/04/16	Mobile IP	,,		
35	**1/4**	04/04/16	**MODULE IV** **End-to-End Protocols** Simple Demultiplexer (UDP),	PPT, Board, chalk, duster		
36	**2/4**	05/04/16	Reliable Byte Stream(TCP), End-to-End Issues,	,,		
37	**3/4**	06/04/16	Segment Format,	,,		
38	**4/4**	07/04/16	Connecting Establishment and Termination,	,,		
39	**5/4**	11/04/16	Sliding Window Revisited,	,,	Assignment -III	
40	**6/4**	13/04/16	Triggering Transmission,	,,		
41	**7/4**	15/04/16	Adaptive Retransmission,	,,		
42	**8/4**	16/04/16	Record Boundaries, TCP Extensions,	,,		
43	**9/4**	18/04/16	Queuing Disciplines, FIFO	,,		
44	**10/4**	20/04/16	Fair Queuing	,,		
45	**11/4**	22/04/16	TCP Congestion Control: Additive Increase/ Multiplicative Decrease	,,		
46	**12/4**	23/04/16	TCP Congestion Control : Slow Start	,,		
47	**13/4**	28/04/16	TCP Congestion Control: Fast Retransmit and Fast Recovery.	PPT, Board, chalk, duster		
48	**1/5**	29/04/16	**MODULE V** **Congestion Control and Resource Allocation** Congestion-Avoidance Mechanisms	,,		
49	**2/5**	30/04/16	DEC bit	,,		

50	**3/5**	03/05/16	Random Early Detection (RED),	,,		

51	4/5	04/05/16	Source-Based Congestion Avoidance.	,,	Assignment -IV	
52	5/5	05/05/16	The Domain Name System(DNS),	,,		
53	6/5	06/05/16	Electronic Mail (SMTP &POP)			
54	7/5	07/05/16	Electronic Mail (IMAP, MIME)	,,		
55	8/5	11/05/16	World Wide Web(HTTP) & Network Management(SNMP)	,,		
56		12/05/16	Network lab Programs			
57		13/05/16	Network lab Programs			
58		16/05/16	Network lab Programs			
59		17/05/16	Network lab Programs			
60		18/05/16	Simulation of Network Programs			
61		19/05/16	Simulation of Network Programs			
62		20/05/16	Simulation of Network Programs			

Syllabus for Internal Assessment Test

Internal Assessment Test	Syllabus
T1	Class # 01 – 24
T2	Class # 25- 46

Literature

Book Type	Code	Author & Title	Publication Info	
			Edition & Publisher	ISBN #
Text Book	**TB1**	Larry L Peterson and Bruce S Davie: Computer Networks – A Systems Approach.	4th Edition, Elsevier, 2007.	**978-93-80501-93-2**
Text Book	**TB2**	**Douglas E Comer,**	6th Edition, PHI -	**81-203-1053-5**

		Internetworking with TCP/IP, Principles, Protocols and Architecture	2014	
Reference	**RB1**	**Uyless Black** , Computer Networks, Protocols , Standards and Interfaces	2nd Edition - PHI	
Reference	**RB2**	**Behrouz A Forouzan,** TCP/IP Protocol Suite	4th Edition – Tata McGraw-Hill	

SEMESTER : IV
BRANCH : CSE
SUBJECT : Web Servives
SUBJECT CODE : 14SCS251
NO OF HRS/WK : 5

NAME OF THE FACULTY : Mrs. V. Sahana
DATE OF COMMENCEMENT : 03.02.16
DATE OF CLOSING : 21.05.16
CLASS STRENGTH : 18
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.	2/6	4/2	**MODULE I** **Introduction** **Middleware:** Understanding the middle ware	Board, chalk, duster		
2.	2/6	4/2	RPC and Related Middle ware	,,		
3.	2/6	5/2	TP Monitors	,,		
4.	2/6	8/2	Object Brokers	,,		
5.	2/6	8/2	Object Brokers	ppt		
6.	2/6	12/2	Message-Oriented Middleware	Board, chalk, duster		
7.	5/8	12/2	**MODULE II** **Web Services:** Introduction	Hand on session	Assignment- I	
8.	5/8	13/2	Web Services Approach	,,		
9.	5/8	15/2	Web Services Approach	,,		

10.	5/8	15/2	Web Services Technologies	,,		

11.	5/8	22/2	Web Services Technologies	,,		
12.	5/8	22/2	Web Services Architecture.			
13.	5/8	23/2	Web Services Architecture.	,,		
14.	5/8	24/2	Web Services Architecture.			
15.	6/14	24/2	**MODULE III** **Basic Web Services Technology:** Introduction	,,		
16.	6/14	1/3	SOAP	Board, chalk, duster	Assignment -II	
17.	6/14	1/3	Protocols	,,		
18.	6/14	2/3	Simple Implementation	,,		
19.	6/14	3/3	WSDL Web Services Description Language			
20.	6/14	3/3	WSDL Web Services Description Language			
21.	6/14	9/3	UDDI Universal Description Discovery and Integration			
22.	6/14	9/3	UDDI Universal Description Discovery and Integration	,,		
23.	6/14	10/3	Web Services at work interactions between the Specifications			
24.	6/14	11/3	Web Services at work interactions between the Specifications	,,		
25.	6/14	11/3	Web Services at work interactions between the Specifications	Hand on session	Assignment – III	
26.	6/14	21/3	Related Standards.			
27.	6/14	21/3	Related Standards.	,,		

28.	7/13	22/3	**Service Coordination Protocols:** Introduction			
29.	7/13	23/3	Introduction to protocol	,,		
30.	7/13	23/3	Infrastructure for Coordination Protocols			
31.	7/13	30/3	Infrastructure for Coordination Protocols	,,		
32.	7/13	30/3	WS- Coordination	,,		
33.	7/13	31/3	WS- Coordination	,,		
34.	7/13	1/4	WS-Transaction	,,		
35.	7/13	1/4	WS-Transaction	,,		
36.	7/13	6/4	Rosetta Net	,,	Assignment – IV	
37.	7/13	6/4	Rosetta Net	Board, chalk, duster		
38.	7/13	7/4	Other Standards Related to Coordination Protocols.	Hand on session		
39.	7/13	11/4	Other Standards Related to Coordination Protocols.	,,		
40.	8/15	11/4	**MODULE V** **Service Composition:** Introduction	,,		
41.	8/15	16/4	Basic of Service Composition	,,		
42.	8/15	16/4	Basic of Service Composition	,,	Assignment -V	
43.	8/15	18/4	Composition vs Coordination Middleware	Board, chalk, duster		
44.	8/15	20/4	A New Chance of Success for Composition	,,		

45.	8/15	20/4	A New Chance of Success for Composition	,,		
46.	8/15	28/4	Services Composition Models	Hand on session/ppt		
47.	8/15	28/4	Services Composition Models	Hand on session/ppt		
48.	8/15	29/4	Dependencies between Coordination and Composition	,,		
49.	8/15	30/4	Dependencies between Coordination and Composition	,,		
50.	8/15	30/4	Dependencies between Coordination and Composition	,,	Assignment - VI	
51.	8/15	5/5	BPEL: Business Process Execution Language for Web Services	,,		
52.	8/15	5/5	BPEL: Business Process Execution Language for Web Services	,,		
53.	8/15	6/5	Example on BPEL: Business Process Execution Language for Web Services	,,		
54.	9/10	7/5	Outlook: Art of Web services	,,		
55.	9/10	7/5	Art of Web services	,,		
56.	9/10	13/5	Applicability of the Web Services	Hand on session/ppt		
57.	9/10	13/5	Applicability of the Web Services: Example	"		
58.	9/10	14/5	Web services as a Problem and a Solution : AN Example.	,,	Assignment - VII	
59.	9/10	16/5	Web services as a Problem and a Solution : AN Example.	,,		
60.	9/10	16/5	Web services as a Problem and a Solution : AN Example.	,,		
61.	9/10	20/5	Sample Implementation using WSDL	,,		

62.	9/10	20/5	Sample Implementation using WSDL	,,		
63.	9/10	21/5	Sample Implementation using WSDL	,,		

Syllabus for Internal Assessment Tests (IAT)*

IAT #	Syllabus
IAT-1	1-23
IAT-2	24-46
IAT-3	38-62

Book Type	Code	Author & Title	Publication info	
			Edition & Publisher	ISBN #
Text Book	TB	Gustavo Alonso, Fabio Casati, Harumi Kuno, Vijay Machiraju: Web Services(Concepts ,Architectures and Applications)	Springer International Edition 2009.	3-540-44008-9