

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule: November 2023 - April 2024

Department : Computer Science
Name/s of the Faculty : J Birunda Antoinette Mary
Course Title : Formal Languages And Finite Automata
Course Code : 19CS/PC/FF44
Shift : II

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Evaluation Methodology
Nov 22 – 23, 2023 (Day Order 1 & 2) 2 hrs.	Unit1 1.1 Fundamentals and Finite Automata Strings, Alphabets, Languages, Finite State Machine, Finite Automaton model	Lecture	Martin, John C. Introduction to languages and the Theory of Computation. Hopcroft,H.E., Rajeev Motvani and Ullman J. D. Introduction to Automata Theory Languages and Computation.	Questioning
Nov 24-30, 2023 (Day Order 1 to 6) 5 hrs	Acceptance of Strings and Languages, Deterministic Finite Automaton (DFA), Non-deterministic Finite automaton (NFA) - Transition diagrams and Language recognisers, Acceptance of languages, Equivalence of NFA and DFA (Proof needed), NFA with ϵ - transitions	Lecture, Solving Problems	-do-	Problem Solving

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Evaluation Methodology
Dec 1-7, 2023 (Day Order 1 to 6) 5 hrs.	5.2 Applications Applications of Finite Automata - Text Search – Findings Strings in Text, Nondeterministic Finite Automata for Text Search, A DFA to Recognise a set of Keywords Unit2 2.1 Regular Languages The operators of Regular Expressions - Building Regular Sets Expressions,	Lecture, Solving Problems	-do-	Questioning
Dec 8-9, 2023 (Day Order 1, 3) 2 hrs.	Precedence of Regular Expression operators, Finite Automata and Regular Expressions From DFA to Regular Expressions and Conversion of a given regular expression into a Finite Automata, Conversion of DFA into a Regular Expression by eliminating states,	Lecture, Solving Problems	-do-	Problem Solving
Dec 11-15, 2023 (Day Order 2 to 6) 4 hrs.	Pumping Lemma for Regular Sets (Proof needed), Closure Properties of Regular Sets (proofs not required)	Lecture, Solving Problems	-do-	Comp1 Test - Unit 1, 2
Dec 16 – 22, 2023 (Day Order 1 to 6) 5 hrs.	Applications of Regular Expressions - Regular Expressions in UNIX, Lexical Analysis,	Lecture, Solving Problems	-do-	Group Discussion

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Evaluation Methodology
Jan 3 – 6, 2024 (Day Order 1 to 4) 3 hrs.	Finding Patterns in Text	Lecture, Solving Problems	-do-	Problem Solving
Jan 8 – 12, 2024	C.A. Test – I			
Jan 13, 2024 (Day Order 1) 1 hr.	Unit3 3.1 Grammar Formalism Definition of a Context Free Grammars,	Lecture, Solving Problems	-do-	Discussion
Jan 18 -20, 2024 (Day Order 4 to 6) 3 hrs	Derivations using a Grammar, Language of a Grammar, Leftmost and rightmost derivation of strings and sentential forms	Lecture, Solving Problems	-do-	Quiz
Jan 22-29, 2024 (Day Order 1 to 6) 5 hrs.	Parse Trees – Constructing parse trees, Yield of a parse tree, From Trees to derivations, Ambiguous Grammars	Lecture, Solving Problems	-do-	Problem Solving
Jan 30– Feb 2, 2024 (Day Order 1 to 4) 3 hrs.	Removing Ambiguity from Grammars, Leftmost Derivation, Inherent ambiguity, Normal forms for Context Free Grammars	Lecture, Solving Problems	-do-	Questioning
Feb 3, 2024 (Day Order 2) 1 hr.	Applications of Context Free Grammars – Parsers, the YACC parser	Lecture, Solving Problems	-do-	Discussion
Feb 5- 6, 2024 (Day Order 5 to 6) 2 hrs.	Generator, Markup Languages, XML and Document – Type Definitions	Lecture, Solving Problems	-do-	Discussion

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Evaluation Methodology
Feb 7 – 14, 2024 (Day Order 1 to 6) 5 hrs.	Unit4 4.1 Pushdown Automata Definition – Model Graphical notation - Instantaneous descriptions	Lecture, Solving Problems	-do-	Questioning
Feb 15 – 22, 2024 (Day Order 1 to 6) 5 hrs.	Acceptance of Context Free Languages - Acceptance by Final State and Acceptance by Empty State and its Equivalence - Equivalence of Context Free Grammars and Pushdown Automata, Inter-conversion (Proofs not required) -	Lecture, Solving Problems	-do-	Problem Solving
Feb 23 – 24, 2024 (Day Order 1 & 5) 5 hrs.	Introduction to Deterministic Pushdown Automata 4.2 Turing Machines Notation - Instantaneous descriptions Transition Diagrams – Language - Turing	Lecture, Solving Problems	-do-	Comp 2 Assignment on CFG & PDA
Feb 26–Mar 1, 2024 (Day Order 2 to 6) 4 hrs.	Machines and Halting - Storage in the State - Multiple Tracks – Subroutines – Multitape Turing Machines	Lecture, Solving Problems	-do-	Discussion
Mar 2, 2024 (Day Order 1) 1 hr.	Revision & Backlog		-do-	
Mar 4 –8, 2024	C.A. Test – II			
Mar 9 – 16, 2024 (Day 6 & Day Order 1 to 6) 6 hrs.	Unit5 5.1 Mealy and Moore Machine Finite Automata with Output – Mealy machine, Moore Machine , Properties,	Lecture, Solving Problems	-do-	Questioning

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Evaluation Methodology
Mar 18 - 19, 2024 (Day Order 2 to 3) 2 hrs.	Comparison of Mealy and Moore Machine - Conversion of Mealy to Moore and vice versa	Lecture, Solving Problems	-do-	Discussion
Mar 20-22, 2024 (Day Order 4 to 6)	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule: November 2023 - April 2024

Department : Computer Science

Name/s of the Faculty : Dr. Swetha Margaret T A

Course Title : Cloud Computing: Theory and Practice

Course Code : 19CS/PC/CT45

Shift : II

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Nov 22 – 23, 2023 (Day Order 1 & 2) & 2 hrs	Unit 1 1.1 Introduction Introduction - Limitations of the Traditional Computing Approaches - Solutions – Three Layers of Computing - Three Layers in Traditional Computing - The End of Traditional Computing – Example – Use of cloud in current scenario - Influences behind Cloud Service Adoption	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Eliciting Activity
Nov 24-30, 2023 (Day Order 1 to 6) & 6 hrs	1.2 Evolution, Benefits and Challenges The Evolution of Cloud Computing - How Philosophies Converged into Cloud Computing - Comparison between Cluster, Grid and Cloud Computing - Origin of the Term ‘Cloud Computing’ - Early Initiatives - Utility Computing - Metering and Billing in Cloud - Separation of Data Center Operation - Benefits of Cloud Computing	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Explore real time cloud environments and platforms.

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Dec 1-7, 2023 (Day Order 1 to 6) & 6 hrs	<p>Challenges of Cloud Computing - Cloud Computing and Business Challenges - Ethical Issues in Cloud Computing - Cloud Computing: Network as Computer - Role of Web Service - Role of API - Ubiquitous Cloud - Cloud Vs. Internet</p> <p>Unit 2 - 2.1 Cloud Computing Model and Services Standard Cloud Model - Cloud Deployment Models - Choosing the Appropriate Deployment Model - Service Delivery Models - Service Abstraction - The SPI Model – A Traditional System vs Cloud System Model - All applications delivered using webservices are not SaaS - SaaS and PaaS: Salesforce.com and Force.com - Other Category of Cloud Services - Open Cloud Services</p>	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Explore cloud analyst simulator
Dec 8-9, 2023 (Day Order 1, 3) & 2 hrs	<p>2.2 Security Reference Model The Security Concern in Cloud - Cloud Security Working Groups - Elements of Cloud Security Model - Cloud Security Reference Model - Examining Cloud Security against Traditional Computing - Security Policy Trusted Cloud Computing</p>	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Component I Theoretical observations on VM ware and resource pooling from cloud analyst
Dec 11-15, 2023 (Day Order 2 to 6) & 5 hrs	<p>Unit 3 3.1 Resource Virtualization What is Virtualization - Virtualizing Physical Computing Resources – Understanding Abstraction - Business Benefits of Virtualization - Machine or Server Level Virtualization - Exploring Hypervisor or Virtual Machine Monitor</p>	Lecture/ Presentation	-do-	Discussion
Dec 16 – 22, 2023 (Day Order 1 to 6) & 6 hrs	Operating System Level Virtualization: Removal of the hypervisor - Major Server Virtualization Products and Vendors	Lecture/ Presentation	-do-	Explore IBM cloud portal

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Jan 3 – 6, 2024 (Day Order 1 to 4) & 4 hrs	High-Level Language Virtual Machine - Emulation - Some Other Types of Virtualizations - Advantages of Virtualization - Downsides of Virtualization	Lecture/ Presentation	-do-	Explore IBM cloud portal
Jan 8 – 12, 2024	C.A. Test – I			
Jan 13, 2024 (Day Order 1) & 1 hr	Virtualization Security Threats - Virtualization Security Recommendations -Virtualization and Cloud Computing	Lecture/ Presentation	-do-	Discussion
Jan 18 -20, 2024 (Day Order 4 to 6) & 3 hrs	3.3 Resource Pooling, Sharing and Provisioning Resource Pooling - Commoditization of the Data Center - Standardization, Automation and Optimization - Resource Sharing - Resource Provisioning	Lecture/ Presentation	-do-	Discussion on google app engine
Jan 22-29, 2024 (Day Order 1 to 6) & 6 hrs	Unit 4 - 4.1 Scaling in the Cloud What is Scaling? - Scaling in Traditional Computing - Scaling in Cloud Computing - Foundation of Cloud Scaling - Scalable Application	Lecture/ Presentation	-do-	Discussion
Jan 30 -Feb 2, 2024 (Day Order 1 to 4) & 4 hrs	Scaling Strategies in Cloud - Auto-Scaling in Cloud - Types of Scaling - Horizontal Scaling is More Cloud-Native Approach	Lecture/ Presentation	-do-	Discussion
Feb 3, 2024 (Day Order 2) & 1 hr	4.2 Capacity Planning What is Capacity Planning - Capacity Planning in Computing - Capacity Planning in Cloud Computing	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Demo on Basic operations on docker
Feb 5- 6, 2024 (Day Order 5 to 6) & 2 hrs	Cloud Capacity: Consumers' View vs Providers' View – Capacity Planning: Then and Now - Approaches for Maintaining Sufficient Capacity - Role of Auto-Scaling in Capacity Planning -	Lecture/ Presentation	-do-	Discussion on IBM Cloud VS

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Feb 7 – 14, 2024 (Day Order 1 to 6) & 6 hrs	Capacity and Performance: Two Important System Attributes - Steps for Capacity Planning 4.3 Load Balancing Importance of Load Balancing in Cloud Computing - How Load Balancing is done in Cloud	Lecture/ Presentation	-do-	Discussion on Cloud foundry
Feb 15 – 22, 2024 (Day Order 1 to 6) & 6 hrs	Goals of Load Balancing - Categories of Load Balancing - Parameters for Consideration Load Balancing Algorithms - The Persistence Issue – Application Delivery Controller	Lecture/ Presentation	-do-	Component II Seminar
Feb 23 – 24, 2024 (Day Order 1 & 5) & 5 hrs	Case Study: Google Cloud - Case Study: Amazon Elastic Compute Cloud (EC2) Unit 5 5.1 Service Oriented Architecture The Pre-SOA Era - Role of SOA in Cloud Computing Service - Oriented Architecture	Lecture/ Presentation	-do-	Demo Creating an Instance using Amazon EC2 Compute Service
Feb 26 – Mar 1, 2024 (Day Order 2 to 6) & 5 hrs	Goal of System Designing - Service Represents Business Functionality- Open Standard Implementation - Benefits of SOA - SOA and Cloud Computing 5.2 File System and Storage Requirements of Data-Intensive Computing - Challenges before Cloud Native File System	Lecture/ Presentation	-do-	Demo Creating an Instance using Amazon EC2 Compute Service
Mar 2, 2024 (Day Order 1) & 1 hr	Model for High-Performance Processing of Large Data-sets Cloud Native File System - Storage Deployment Models - Storage Types - Popular Cloud Storages for Developers - Popular General Purpose Cloud Storages	Lecture/ Presentation	-do-	Demo Creating a Virtual Machine Instance on Microsoft Azure
Mar 4 –8, 2024	C.A. Test – II			
Mar 9 – 16, 2024 (Day 6 & Day Order 1 to 6) & 6 hrs	5.3 Security Issues Cloud Security - Threats to Cloud Security - Infrastructure Security – Information Security - Identity Management and Access Control	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Discussion

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Mar 18 - 19, 2024 (Day Order 2 to 3) & 2 hrs	Cloud Security Design Principles - Cloud Security Management Frameworks - Security-as-a-Service - Performance and Scalability - The Resource Contention Problem - Cloud Bursting: A Scenario of Flexible Scaling - Scalability is a Business Concern	Lecture/ Presentation	Bhowmik, Sandeep. Cloud Computing. Cambridge University Press, 2017	Discussion
Mar 20-22, 2024 (Day Order 4 to 6) & 3 hrs	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule: November 2023 - April 2024

Department : Computer Science
Name/s of the Faculty : Dr. Renuka Devi.D
Course Title : PROJECT
Course Code : 19CS/PC/DS48
Shift : II

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Nov 22 – 23, 2023 (Day Order 1 & 2) 2 Hrs	Requirements Gathering and Analysis / Research Problem Identification	Discussion with Project Guides	Software Engineering: A Practitioner's Approach Roger Pressman <i>Refer: Software Requirements template</i> https://researcheracademy.sevier.com/	Submission of Abstract Nov 23, 2023
Nov 24-30, 2023 (Day Order 1 to 6) 8 Hrs	System Analysis and Design [Identifying the different components required for the application, what happens within the system when user interacts with it] / Literature Study	Discussion with Project Guides	Software Engineering: A Practitioner's Approach Roger Pressman <i>Refer: Software Requirements template</i> https://researcheracademy.sevier.com/	Submission of Software requirements document Preparation of Design Document / Review Literature Nov 28, 2023
Dec 1-7, 2023 (Day Order 1 to 6) 8 Hrs	Designing /Review Methodology Design	Discussion with Project Guides	“	Preparation of Design Document / Methodology Design
Dec 8-9, 2023 (Day Order 1, 3) 4 Hrs	Designing /Review Methodology Design	Review by Project Guides	“	Preparation of Design Document / Methodology Design
Dec 11-15, 2023 (Day Order 2 to 6) 6 Hrs	Implementation and further updating of design document / Algorithm Implementation	Review by Project Guides	“	Preparation of Design Document / Methodology design

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Dec 16 – 22, 2023 (Day Order 1 to 6) 8 Hrs	Implementation and further updating of design document / Methodology design	Review by Project Guides	Reference to be made by students according to the software used for development. Refer: Test Case Templates/ <i>https://researcheracademy.elsevier.com/</i>	Component I: Submission of Updated design Document, Test Cases, Prototype / Research Model, Datasets - EDA (Dec 22, 2023)
Jan 3 – 6, 2024 (Day Order 1 to 4) 5 Hrs	Implementation [Development of a working model of one module] / Algorithm Implementation	Review by Project Guides	Reference to be made by students according to the software used for development/ <i>https://researcheracademy.elsevier.com/</i>	Review
Jan 8 – 12, 2024	C.A. Test – I			
Jan 13, 2024 (Day Order 1) 1 Hr	Implementation of Application/ Research Model	Discussion with Project Guides	Reference to be made by students according to the software used for development/ <i>https://researcheracademy.elsevier.com/</i>	Implementation of 60% of the Project (Jan 13, 2024)
Jan 18 -20, 2024 (Day Order 4 to 6) 6 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Discussion
Jan 22-29, 2024 (Day Order 1 to 6) 8 Hrs	Implementation of Application/ Research Model	Review by Project Guides	“	Review

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Jan 30 – Feb 2, 2024 (Day Order 1 to 4) 5 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Implementing suggested changes
Feb 3, 2024 (Day Order 2) 1 Hr	Implementation of Application/ Research Model	Discussion with Project Guides	“	Review
Feb 5- 6, 2024 (Day Order 5 to 6) 3 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Review
Feb 7 – 14, 2024 (Day Order 1 to 6) 8 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Review
Feb 15 – 22, 2024 (Day Order 1 to 6) 8 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Review
Feb 23 – 24, 2024 (Day Order 1 & 5) 7 Hrs	Implementation of Application/ Research Model	Discussion with Project Guides	“	Review

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Feb 26 – Mar 1, 2024 (Day Order 2 to 6) 6 Hrs	Testing and Documentation / Research Results Inferences	Review by Guides	<i>Refer: Testcase template</i> https://www.softwaretestingmaterial.com/test-case-template-with-explanation/ https://researcheracademy.sevier.com/	Component II: 80% of project completion Feb 26, 2024
Mar 2, 2024 (Day Order 1) 1 Hr	Testing and Documentation / Research Results and Documentation	Review by Guides	“	Submission of documentation
Mar 4 –8, 2024	C.A. Test – II			
Mar 9 – 16, 2024 (Day 6 & Day Order 1 to 6) 9 Hrs	Testing and Documentation / Research Results and Documentation	Review by Guides	“	Submission of Documentation (March 10, 2024)
Mar 18 - 19, 2024 (Day Order 2 to 3) 3 Hrs	Testing and Documentation / Research Results and Documentation	Review by Guides	“	Review
Mar 20-22, 2024 (Day Order 4 to 6) 5 Hrs	REVISION			

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI

Course Schedule: November 2023 - April 2024

Department : Computer Science

Name/s of the Faculty : Dr. Renuka Devi.D, Dr. Faustina Joan SP

Course Title : Advanced Technologies

Course Code : 19CS/PE/AT15

Shift : II

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Nov 22 – 23, 2023 (Day Order 1 & 2) 2 Hrs	Unit 1 1.1 Neural Networks and Deep Learning Neural Networks Unit 3 3.1 BitCoin BitCoin- History of BitCoin	Lecture and Presentation	Deep Learning: A Practitioner's Approach. Patterson, Josh, and Adam Gibson. O'Reilly Media, Inc., 2017. Mastering Bitcoin: Programming the Open Block chain. Andreas M. Antonopoulos. O'Reilly Media, Inc.,2017.	Discussion
Nov 24-30, 2023 (Day Order 1 to 6) 6 Hrs	1.1 Neural Networks and Deep Learning Training NN Unit 3 3.1 BitCoin Bitcoin Uses, Users- Transactions	Lecture/Demo	“	Brian storming

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Dec 1-7, 2023 (Day Order 1 to 6) 6 Hrs	Unit 1 Activation Functions, Loss functions Unit 3 Blocks, Mining and the Blockchain-Bitcoin Transactions-Constructing a Transaction-Bitcoin Mining-Mining transactions in blocks-Spending the transaction	Lecture and Presentation	“	Quiz
Dec 8-9, 2023 (Day Order 1, 3) 3 Hrs	Unit 1 Hyper parameters Unit 3 Keys, Addresses,	Lecture and Presentation	“	Chart Preparation on Activation Functions
Dec 11-15, 2023 (Day Order 2 to 6) 4 Hrs	Unit 1 Hyper parameters-contd.. Unit 3 Wallets-Introduction-Bitcoin Addresses-Wallets-The Bitcoin Network	Lecture and Presentation	“	Quiz
Dec 16 – 22, 2023 (Day Order 1 to 6) 6 Hrs	Unit 2 2.1 Deep Networks Defining Deep Learning Unit 3 Peer-to-Peer Network Architecture-Nodes Types and Roles-The Extended Bitcoin Network	Lecture and Presentation	“	Component I Scenario based case study presentation
Jan 3 – 6, 2024 (Day Order 1 to 4) 4 Hrs	Unit 2 2.1 Deep Networks Architectural Principles of Deep Networks Unit 3 Simplified Payment Verification (SPV) Nodes-Bloom Filters-Transaction Pools	Lecture and Presentation	“	Crossword

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Jan 8 – 12, 2024	C.A. Test – I			
Jan 13, 2024 (Day Order 1) 1 Hr	Unit 2 Building Blocks of Deep Networks	Lecture and Presentation	“	Discussion
Jan 18 -20, 2024 (Day Order 4 to 6) 3 Hrs	Unit 4 4.1 Blockchain The Blockchain- Structure of a Block-Block Header-Block Identifiers	Lecture and Presentation	“	Discussion
Jan 22-29, 2024 (Day Order 1 to 6) 6 Hrs	Unit 2 Unsupervised Pretrained Networks Unit 4 -Block Header Hash and Block Height - The Genesis Block-Linking Blocks in the Blockchain Merkle Trees	Lecture and Presentation	“	GD
Jan 30 – Feb 2, 2024 (Day Order 1 to 4) 4 Hrs	Unit 2 Convolution Neural Networks Unit 4 Merkle Trees-Merkle Trees and Simplified Payment Verification (SPV)-Mining and Consensus-De-Centralized Consensus	Lecture and Presentation	“	Discussion
Feb 3, 2024 (Day Order 2) 1 Hr	Unit 2 Recurrent NNs	Lecture and Presentation	“	Discussion

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Feb 5- 6, 2024 (Day Order 5 to 6) 2 Hrs	Unit 2 Recursive NNs Unit 4 Independent Verification of Transactions	Lecture and Presentation	“	Quiz
Feb 7 – 14, 2024 (Day Order 1 to 6) 6 Hrs	Unit 4 Mining Nodes-Aggregating Transactions into Blocks Mining the Block-Assembling and Selecting Chains of Blocks-Mining and the Hashing Race	Lecture and Presentation	“	Quiz
Feb 15 – 22, 2024 (Day Order 1 to 6) 6 Hrs	Unit 2 Applications of Deep Learning in Natural Language Processing	Lecture and Presentation	“	Explore the applications of NLP
Feb 23 – 24, 2024 (Day Order 1 & 5) 2 Hrs	Unit 4 Consensus Attacks-Bitcoin Security-Security principles-User Security Best Practices	Lecture and Presentation	“	Discussion
Feb 26 – Mar 1, 2024 (Day Order 2 to 6) 5 Hrs	Unit 5 5.1 Quantum Computing Overview-The Circuit Model of Computation-A Linear Algebra Formulation of the Circuit Model	Lecture and Presentation	An Introduction to Quantum Computing, Phillip Kaye, Raymond Laflamme and Michele Mosca. Oxford University press, 2007	Discussion
Mar 2, 2024 (Day Order 1) 1 Hr	Reversible Computation	Lecture and Presentation	“	Discussion

Week & No. of hours	Units & Topics	Teaching Methodology	Text & References	Method of Evaluation
Mar 4 –8, 2024	C.A. Test – II			
Mar 9 – 16, 2024 (Day 6 & Day Order 1 to 6) 7 Hrs	A Preview of Quantum Physics-Quantum Physics and Computation - Qubits and The Framework of Quantum Mechanics-	Lecture and Presentation	“	Component II Explore Research articles and Report submission
Mar 18 - 19, 2024 (Day Order 2 to 3) 2 Hrs	A Quantum Model of Computation–Quantum Computing Applications	Lecture and Presentation	“	Discussion
Mar 20-22, 2024 (Day Order 4 to 6) 3 Hrs	REVISION			