

Rajarshi Shahu Mahavidyalaya (Autonomous), Latur
Department of Computer Science
Teaching Plan (Semester III, V)
(July-2021 to Dec-2021)

Name of the Teacher: **Damte shaheen A.R.**

1. Details of classes to be taught

Sr.No	Class	Subject	Course code and Title	Total Lectures
1	B.Voc(CT) SY	Computer Science	DBMS (U-DMS-433)	60
2	B.Voc(CT) TY	Computer Science	Computer Ethics (U-CET-659)	60
3	B.Sc TY	Computer Science	RDBMS (U-RDB-603)	60
4	Msc(CS) SY	Computer Science	Software Testing (P-SOT-331)	60

Course Title: Data Base Management System

Course Code:U-DMS-433

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No.of Test/Assignment topic and date
I	I : Introduction to Databases and Data Models:- What is database system? Purpose of database system, View of data, Relational databases, Database architecture, Transaction management, The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction.	Total	25	-	-
		05.07.2021 To 14.07.2021	09		
		15.07.2021 To 24.07.2021	09		
		26.07.2021 To 03.08.2021	08		
II Document1	II: Unit-II Database Design,ER-Diagram and Unified Modeling Language:- Database design and ER Model: Overview, ER-Model, Constraints, ER-Diagrams, ERD Issues, weak entity sets, Codd's rules, Relational Schemas, Introduction to UML Relational database model:Logical 15 view of data, keys, Integrity rules. Relational Database design, features of good relational database design, Atomic domain and Normalization (1NF, 2NF, 3NF, BCNF).	Total	25	Practice Test On queries	Unit Test-I
		04.08.2021 To 13.08.2021	09		
		14.08.2021 To 24.08.2021	09		
		25.08.2021 To 02.09.2021	08		

III	III: Unit- III Relational Algebra and Calculus:- Relational algebra: Introduction, Selection and projection, Set operations, Renaming, Joins, Division, Syntax, semantics, Operators, Grouping and ungrouping, Relational comparison. Calculus: Tuple relational calculus, Domain relational Calculus, Calculus vs algebra, Computational Capabilities.	Total	24	-	-
		03.09.2021 To 13.09.2021	08		
		14.09.2021 To 22.09.2021	08		
		23.09.2021 To 01.10.2021	08		
IV	IV: Constraints, Views and SQL :- What are constraints? Types of constrains, Integrity constraints, Views: Introduction to views, Data independence, security, Updates on views, Comparison between tables and views SQL, data definition, Aggregate function, Null Values, nested subqueries, Joined relations, Triggers.	Total	24	Practi ce Test On Relati onal Algeb ra	Unit Test-II
		04.10.2021 To 12.10.2021	08		
		13.10.2021 To 23.10.2021	08		
		25.04.2021 To 02.11.2021	08		

Class: B.Voc.(CT) T.Y.

Semester: V

Course Title: Computer Ethics

Course Code:U-CET-659

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No.of Test/Assignment with topic and date
I	I:The Need for Computer Ethics Training:- Definition of Ethics, The Importance of Integrity, The Difference between Morals, Ethics, and Laws, Defining the Field of Computer Ethics, Computer ethics codes	Total	20	-	-
		05.07.2021 To 14.07.2021	09		
		15.07.2021 To 24.07.2021	08		
		26.07.2021 To 28.07.2021	03		
II	II:Sample topics in Computer Ethics:- Computer crime and computer security, Software theft and intellectual property rights, Computer hacking and the creation of viruses, Computer and information system failure, Invasion of privacy. Privacy in the Workplace and on the Internet, Social implications of artificial intelligence and expert systems.	Total	25	-	Unit Test-I
		29.07.2021 To 09.09.2021	10		
		10.09.2021 To 21.09.2021	10		
		21.08.2021 To 27.08.2021	05		

III	III: Components, Binding and Directives:-	Total	25	Practice Test On Computer crime & computer security	-
	IT Professionals, Are IT Workers Professionals, Professional Relationships that Must Be	28.08.2021 To 08.09.2021	10		
	Managed, Professional Codes of Ethics, Professional Organizations, Certification	09.09.2021 To 21.09.2021	10		
	Copyright, Government Licensing, IT Professional Malpractice IT Users, Common Ethical Issues for IT Users, Supporting the Ethical Practices of IT Users, Compliance	22.09.2021 To 27.09.2021	05		
IV	IV:Social Networking:-	Total	25	-	Unit Test-II
	What Is a Social Networking Web Site? , Business Applications of Online Social	28.09.2021 To 09.10.2021	10		
	Networking, Social Network Advertising, The Use of Social Networks in the Hiring Process,	11.10.2021 To 23.10.2021	10		
	The Use of Social Media to Improve Customer Service , Social Shopping Web Sites, Social Networking Ethical Issues, Cyber bullying, Cyber stalking, Uploading of Inappropriate Material, Online Virtual Worlds, Crime in Virtual Worlds.	25.04.2021 To 29.10.2021	05		
	Revision	30.09.2021 To 02.11.2021			

Class: B.Sc T.Y.

Semester: V

Course Title: Relational Database Management System

Course Code: U-RDB-603

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No. of Test/ Assignment with topic and date
I	I: Introduction to Database and Elements of DBMS:- Definition of DBMS, File processing Vs DBMS Advantages and disadvantages of DBMS Users of DBMS, DBMS Structure ,DBMS Languages: DDL, DML, DCL Terms: Entity, Entity set, attributes, Keys: Primary, secondary, foreign, composite	Total	25	Practice Test On queries	-
		05.07.2021 To 14.07.2021	09		
		15.07.2021 To 24.07.2021	09		
		26.07.2021 To 03.08.2021	08		
II	II: Data Models and Relational Algebra and Calculus:- Introduction, Object based logical model, Record based logical model (RDB, NDB ,HDB) ,E-R model, E-R diagram, Introduction Relation, Schemes, Domain, Tuples, Cardinality degree , Algebraic operation . Fundamental operation: Select, product, union Set difference : Natural join, Cartesian product, rename Relational calculus: Tuple and domain relational calculus.	Total	25	-	Unit Test-I
		04.08.2021 To 13.08.2021	09		
		14.08.2021 To 24.08.2021	09		
		25.08.2021 To 02.09.2021	08		

III	III: Relational Database Design and SQL:- Normalization: 1NF, 2NF, 3NF, BCNF, Class diagrams and E-R tables Functional dependency, Data types, Table Creation, Modify ,Selecting, Deleting records , Simple queries , Oracle constraints	Total	24	Practice Test On Relational Algebra	-
		03.09.2021 To 13.09.2021	08		
		14.09.2021 To 22.09.2021	08		
		23.09.2021 To 01.10.2021	08		
IV	IV: Use of Operators and Advance in SQL:- Comparison operators: Between, In, Not In, Like, Null Logical operators: AND, OR, NOT SQL function, Joins Sub-queries, Views.	Total	24	-	Unit Test-I
		04.10.2021 To 12.10.2021	08		
		13.10.2021 To 23.10.2021	08		
		25.04.2021 To 02.11.2021	08		

Unit No:	Topics To be Covered	Date	No. of Lect ures	Academic Activities to be organized	No.of Test/ Assignment with topic and date
I	I:Software Testing Background and the Software Development Process:- The Psychology of Testing, Software Testing Principles., Software Testing Background: What Is a Bug?, Terms for Software Failures, Software Bug: A Formal Definition, Why Do Bugs Occur?, What Exactly Does a Software Tester Do?, What Makes a Good Software Tester?, The Software Development Process: Product Components, What Effort Goes Into a Software Product?, Product Components, What Effort Goes Into a Software Product?, What Parts Make Up a Software Product?, Software Development Lifecycle Models: Big-Bang, Code-and-Fix, Waterfall, Spiral.	Total	25	Basic Knowledge Of Software Engineerin g	—
		05.07.2021 To 14.07.2021	09		
		15.07.2021 To 24.07.2021	09		
		26.07.2021 To 03.08.2021	08		

II	II: : The Realities of Software Testing and Testing Fundamentals:-	Total	25	-	Unit Test-I
	Introduction, Testing Axioms, Software	04.08.2021 To 13.08.2021	09		
	Testing Terms and Definitions: Precision and Accuracy, Verification and Validation, Quality and Reliability, Testing and Quality Assurance (QA).	14.08.2021 To 24.08.2021	09		
	Testing the Software with Blinders On: Dynamic Black-Box Testing: Testing the Software While Blindfolded, Test-to-Pass and Test-to-Fail, Equivalence Partitioning , Data Testing, Boundary Conditions, Sub-Boundary Conditions , Default, Empty, Blank, Null, Zero, and None, Invalid, Wrong, Incorrect, and Garbage Data , State Testing ,Testing the Software's Logic Flow, Testing States to Fail.	25.08.2021 To 02.09.2021	08		
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III	III: : Applying Your Testing Skills:- An Overview of Configuration Testing, Compatibility Testing Overview, The overall course of a test: Planning, Execution, Evaluation. Testing Strategies: Explorative testing, Automated Testing, Testing by document, Smoke Test. Testing Methods: Blackbox, Whitebox, Gray Box. a) Tool support for testing: Types of test tool, Effective use of tools, Potential benefits and risks, Introducing a tool into an organization.	Total	24	Programs Test on Software Tools	-
		03.09.2021 To 13.09.2021	08		
		14.09.2021 To 22.09.2021	08		
		23.09.2021 To 01.10.2021	08		
IV	IV: Testing Web Applications:- Testing Concepts for WebApps: Dimensions of Quality, Errors within a WebApp Environment, Testing Strategy, Test Planning. The Testing Process An Overview. Content Testing: Content Testing Objectives, Database Testing. User Interface Testing: Interface Testing Strategy, Testing Interface Mechanisms, Testing Interface Semantics Usability Tests, Compatibility Tests. Component-Level Testing. Navigation Testing: Testing Navigation Syntax, Testing Navigation Semantics. Configuration Testing: Server-Side Issues,	Total	24	Show Examples of Real life Social media marketing	Unit Test-II
		04.10.2021 To 12.10.2021	08		
		13.10.2021 To 23.10.2021	08		
		25.04.2021 To 02.11.2021	08		

Name of The Teacher & Sign

Head of Department

Principal

Rajarshi Shahu Mahavidyalaya (Autonomous), Latur
Department of Computer Science
Teaching Plan (Semester IV, VI)
(Dec-2021 to April-2022)

Name of the Teacher: **Damte Shaheen A.R.**

2. Details of classes to be taught

Sr.No	Class	Subject	Course code and Title	Total Lectures
1	B.Voc(CT) SY	Computer Technology	Apptitude & Logical Reasoning (U-ALR-526)	60
2	B.Voc(CT) TY	Computer Technology	Test Engineering (U-TST-765)	60
3	B.Voc(CT) TY	Computer Technology	Digital Marketing (U-IDM-762)	60
4	B.Voc(CT) FY	Computer Technology	Analysis, Design and Testing of web Based Applications (U-ADT-316)	60

Class: B.Voc. (CT) S.Y.

Semester: IV

Course Title: Aptitude and Logical Reasoning

Course Code:U-ALR-526

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No.of Test/ Assignment topic and date
I	Unit 1: Numerical Abilities / Quantitative	Total	15	Short Tricks of multiplication By 11,5 and 2x2 ,3x3	—
	Aptitude 1:-		07		
	Number Theory, Square Roots, HCF and LCM, Data Sufficiency Test, Profit and Loss, Surds and Indices, Simplification, Percentage,	17-12-2021 To 28-12-2021			
	Approximation, Quantitative Comparison, Average Number Theory, Square Roots, HCF and LCM, Data Sufficiency Test,	31-12-2021 To 04-01-2022	04		
	Profit and Loss, Surds and Indices, Simplification, Percentage, Approximation, Quantitative Comparison, Average.	07-01-2022 To 11-01-2022	04		

II	II: Numerical Abilities / Quantitative Aptitude 2:-	Total	15	Guidance regarding placement	Unit Test-I
	Logarithms, Fraction and Decimals, Commercial Math, Ratio and Proportion,	15-01-2022 To 24-01-2022	06		
	Data Interpretation Compound and Simple Interest, Partnership,	25-01-2022 To 01-02-2022	05		
	Mensuration Area, Volume, Data Comparison, Discounts.	04-02-2022 To 08-02-2022	04		
III	III: Logical Reasoning 1:-	Total	15	Extra Problems On some Important Topic	-
	Number Test, Logical Diagram (Venn Diagram), Analogy Test, Relationship Test,	11-02-2022 To 22-02-2022	07		
	Insert Missing Sequence Test, Alpha Numeric Symbol Sequence,	25-02-2022 To 04-03-2022	04		
	Direction and Distance Test, Alphabet Test, Classification (Odd Man Out) Test.	05-03-2022 To 11-03-2022	04		
IV	IV: Logical Reasoning 2:-	Total	15	-	Unit Test-II
	Cubes and Cubical Dice Test, Logical Word Sequence Test, Time Sequence Test,	12-03-2022 To 21-03-2022	06		
	Coding & Decoding Test, Statement Arguments, Mathematical Operations, Statement Conclusion,	25-03-2022 To 01-04-2022	05		
	Series Test, Data Sufficiency Test, Data Arrangement Test, Logic Test.	04-04-2022 To 09-04-2022	04		
Revision	11-04-2022 To 16-04-2022	04			
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Class: B.Voc.(CT) T.Y.

Semester: VI

Course Title: Test Engineering

Course Code:U-TST-765

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No.of Test/Assignment with topic and date
I	I: Basics of Software Testing and Testing Methods:-	Total	15	Give Basic Knowledge Of Software Engineering	-
	Software Testing, Objectives of Testing Failure, Error, Fault, Defect, Bug Terminology Test Case, When to Start and Stop Testing of Software (Entry and Exit Criteria)	17-12-2021 To 30-12-2021	07		
	Verification and Validation (V Model). Quality Assurance Quality Control Methods of Testing: Static and dynamic Testing, The box approach White Box Testing Inspections.	31-12-2021 To 06-01-2022	04		
	Walkthroughs, Technical Reviews Functional Testing, Code Coverage Testing. Code Complexity Testing, Black Box Testing: Requirements based testing, Boundary Value Analysis, Equivalence Partitioning.	07-01-2022 To 13-01-2022	04		
II	II: Types and levels of Testing:-	Total	15	-	Unit Test-I
	Levels of testing, Unit Testing: Driver, Stub, Integration Testing: Top-Down Integration. Bottom-Up integration,	15-01-2022 To 27-01-2022	06		
	BiDirectional Integration, Testing on web Application: Performance testing [Stress testing, Security Testing, Client Sever testing]	28-01-2022 To 04-02-2022	05		
	Acceptance Testing: Alpha Testing and Beta Testing, Special Tests: Regression Testing, GUI Testing.	05-02-2022 To 11-02-2022	04		

III	III: Test Management and Defect Management:-	Total	15	Practice Test on unit 2	-
	Test Planning: Preparing a Test Plan, Deciding Test Approach, setting up Criteria for testing, Identifying Responsibilities, Staffing, Resource Requirements, Test Deliverable's, Testing tasks	12-02-2022 To 24-02-2022	07		
	Test Management: Test Infrastructure management,				
	Test People management Test Process: Baseline a Test Plan, Test Case Specification. Test Reporting: Executing Test Cases, Preparing Test Summary Report.	25-02-2022 To 03-03-2022	04		
	Defect Classification, Defect management Process. Defect Life Cycle, defect Template Estimate Expected Impact of a defect, Techniques for finding Defects, Reporting a Defect.	04-03-2022 To 10-03-2022	04		
IV	IV: Testing tools and Measurements:-	Total	15	-	Unit Test-II
	Manual Testing and Need for Automated Testing Tools Advantages and Disadvantages of Using Tools Selecting a testing Tools ,	11-03-2022 To 19-03-2022	06		
	When to Use Automated Test tools, Testing using Automated Tools. Metrics and measurement:	23-03-2022 To 30-03-2022	05		
	Types of metrics. Product metrics and process Metrics. Object oriented metrics in testing.	31-03-2022 To 07-04-2022	04		
	Revision	08-04-2022 To 16-04-2022	05		

Class: B.Voc.(CT) T.Y.

Semester: VI

Course Title:Introduction to Digital Marketing

Course Code:U-IDM-762

Unit No:	Topics To be Covered	Date	No. of Lectures	Academic Activities to be organized	No.of Test/ Assignment with topic and date
I	I: Introduction to Digital Marketing:-	Total	15	-	-
	Basic of Online Marketing, Difference of Internet Marketing vs Traditional Marketing, Search Engine Basics,	17-12-2021 To 28-12-2021	07		
	Key points of internet marketing, Basic terms used in internet marketing, Effective platforms for promotions,	31-12-2021 To 04-01-2022	04		
	why people moving in digital marketing? How much business can you grab after using internet marketing techniques? Structure of Online Marketing.	07-01-2022 To 11-01-2022	04		
II	II: Website Introduction & Creation:-	Total	15	Example of How To create Website Using Wordpress	Unit Test-I
	Understanding the web and its functioning, understanding need of website,	15-01-2022 To 24-01-2022	06		
	Choosing Great Domains, Using CMS Panel and getting the hosting for website,	25-01-2022 To 01-02-2022	05		
	Creating a professional and elegant website on WordPress.	04-02-2022 To 08-02-2022	04		
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III	III: Search Engine Optimization:- Introduction to SEO, Search Engine Working, Keyword, Research & Planning, On-Page SEO, Off-Page SEO,	Total 11-02-2022 To 22-02-2022	15 07	Creating Digital Ads/Banner	-
	Link Building, Tools for SEO, Understanding Google Algorithm SEO Site Audit, Search Engine Marketing, what is Google AdWords,	25-02-2022 To 04-03-2022	04		
	Google Ads Campaign, Search Campaign, Sale Campaign, Banner and Search Ads, Keyword Understanding, Creating successful ads.	05-03-2022 To 11-03-2022	04		
IV	IV: Social Media Marketing:- Introduction to Social Media Marketing, Facebook Marketing, Facebook Campaign Creation, Facebook for lead generation,	Total 12-03-2022 To 21-03-2022	15 06	-	Unit Test-I
	Facebook Pixel, Instagram Marketing, Instagram Promotion or ad creation, Youtube Introduction,	25-03-2022 To 01-04-2022	05		
	Understanding Youtube Algorithm, Growing Youtube Channel, LinkedIn Marketing, Twitter Marketing, Quora Marketing.	04-04-2022 To 09-04-2022	04		
	Revision	11-04-2022 To 16-04-2022	04		

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Name of The Teacher & Sign

Head of Department

Principal