M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

Department: I.T.   **Class:S.Y.B.Sc.(I.T.)**   **Semester:III**

Subject: Applied Mathematics

Name of the Faculty: Amit Limbasia

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	1. Differential Equation 2. Higher Order D.E. 3. Matrices		16
July	1. Laplace transform 1 2. Laplace Transform 2 3. Triple Integration 4. Double Integration		24
August	1. Double Integration 2. Beta Gamma Function Error Function 3. Error Function 4. Complex Number 5. Application of D.E.		20
September			
October			

Sign of Faculty   **Sign of Coordinator**

M.L.Dahanukar College of Commerce

Teaching Plan: 2019-20

Department: I.T.   **Class:S.Y.B.Sc.(I.T.)**   **Semester:III**

Subject:Computer network

Name of the Faculty:amit bane

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	1.Data communications, networks, network types, Internet history,standards and administration. 2.Protocol layering, TCP/IP protocol suite, The OSI model. 3.Data and signals, periodic analog signals, digital signals, transmission impairment, data rate limits, performance. 4.Digital-to-digital conversion, analog-to-digital conversion, transmission modes, digital-to-analog conversion, analog-to-analog conversion.		15
July	1.Multiplexing, Spread Spectrum 2.Guided Media, Unguided Media 3.Introduction, circuit switched networks, packet switching, structure of a switch. 4.Link layer addressing, Data Link Layer Design Issues, Error detection and correction, block coding, cyclic codes, checksum, forward error correction, error correcting codes, error detecting codes.		15
August	1.DLC services, data link layer protocols, HDLC, Point-to-point protocol. 2.Random access, controlled access, channelization, Wired LANs – Ethernet Protocol, standard ethernet, fast ethernet, gigabit ethernet, 10 gigabit ethernet, 3.Introduction, IEEE 802.11 project, Bluetooth, WiMAX, Cellular telephony, Satellite networks.		15
	1.Network layer services, packet	Internal test (20)	15

September	switching, network layer performance, IPv4 addressing, forwarding of IP packets, Internet Protocol, ICMPv4, Mobile IP 2.Introduction, routing algorithms, unicast routing protocols. 3.IPv6 addressing, IPv6 protocol, ICMPv6 protocol, transition from IPv4 to IPv6. 4.Introduction, Transport layer protocols (Simple protocol, Stop-and-wait protocol, Go-Back-n protocol, Selective repeat protocol, Bidirectional protocols) 5. Transport layer services, User datagram protocol, Transmission control protocol. 6.World wide-web and HTTP, FTP, Electronic mail, Telnet, Secured Shell, Domain name system.		

Sign of Faculty   **Sign of Coordinator**

M.L.Dahanukar College of Commerce

Teaching Plan: 2019- 20

Department: I.T.   Class:S.Y.B.Sc.(I.T.)   Semester: III

Subject:Database Management Systems

Name of the Faculty:NavneetKaurNagpal

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	What is database system, purpose, applications, advantages, file processing system, types of database users, DBA,data abstraction, instances and schema, business rules, database architecture, data models		10
July	ER data model, constraints on relationship, types of attributes, ER diagrams, weak entity sets, strong entity sets, generalization, specialization, basic building block, codd's rules, UML, types of database keys, integrity rules, Normalization and types of normal forms, relational database, Relational algebra, operations(select, project, composition, rename, join, division, grouping, set operations), tuple calculus, domain calculus, calculus vs algebra		24
August	DDL, DML, DCL, DQL, integrity constraints, pattern matching test,views, joins, aggregate functions, null values, subqueries, nested subquery, transaction management, process of transaction, ACID properties, serial transaction, concurrent transaction, problems due to concurrent transaction, states of transaction, serializability, lock based protocol(shared mode and exclusive mode), two phase locking protocol, deadlock, timestamp, deadlock prevention, deadlock detection recovery, database recovery management		20
September	Pl/sql, variable declaration, variable scope,constants, comments, % type attributes, sequence, control structure(if , if then else, case, loop, while, for, goto), cursors(implicit, explicit), exception handling, package, procedure, function,		20

	trigger		

Sign of Faculty   **Sign of Coordinator**

M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 2020

Department: I.T.   **Class:S.Y.B.Sc.(I.T.)**   **Semester:III**

Subject:DATABASE MANAGEMENT SYSTEM

Name of the Faculty: SUPRITHA BHANDARY

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Introduction to database and transactionsWhat is database system, purpose, view of data, relational databases, database architectureData models: importance, business rules, degree of data abstraction. Database design and ER model: overview, ER model, issues, weak entity sets, codd's rule		16
July	Relational data modelLogical view of data, keys, integrity rules, relational database design, atomic domain and normalization Relational Algebra and calculus Introduction, selection and projection, set operations, joins, tuple relational calculus		20
August	Constraints and views: types of constraints, data independence, security, aggregate functions, NULL values, triggers. Transaction Management and concurrency: ACID properties, serializability and concurrency control, 2PL, time stamping methods, database recovery management		18
September	PL-SQL: Identifiers and keywords, sequences, control structures, cursors, collections and composite data types, exception handling, procedures, functions, packages		06

Sign of Faculty   **Sign of Coordinator**

M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

Department: I.T.   **Class:S.Y.B.Sc.(I.T.)**   **Semester:III**

Subject:Data Structures

Name of the Faculty: Aruta Anand Jayswal

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	Unit I: Introduction Array Sorting and Searching Techniques		18
July	Unit II: Linked List		12
August	Unit III: Stack Queue		10
September	Unit IV: Tree and Advanced Tree Structure Unit V: Hashing Techniques Graph		20

Sign of Faculty   **Sign of Coordinator**

M.L.Dhanukar College of Commerce
Teaching Plan: 2019 - 20

Department:**Information Technology**   Semester:**III**
Class:**S.Y.B.Sc.I.T.**
Subject**: Python Programming**
Name of the Faculty:**ArchanaTalekar**

Month	Topics to be Covered	Internal Assessment	Number of Lectures
June	**Unit I** • Introduction • Variables and Expressions • ConditionalStatements • Looping • Control statements **Unit II** • Functions: Function Calls, Math Functions, Functions Definitions and Uses, Parameters and Arguments, Return Values, Boolean Functions		16
July	**Unit II** • Strings: Sequence, Traversal with for Loop, String Slices, Searching, Looping, Counting, String Methods, Comparison**,** Operations **Unit III** • Lists • Tuples and Dictionaries • Files • Exceptions **Unit IV** • Regular Expressions • Classes and Objects		24
August	**Unit IV** • Multithreaded Programming • Modules	Class Test	10
September	**Unit V** • Creating the GUI Form and Adding Widgets • Layout Management • Look and Feel Customization: • Storing Data in Our MySQL Database via Our GUI		10

Sign of Faculty   **Sign of Coordinator**