M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:Computer Graphics and Animation

Name of the Faculty: Sweta Chheda

Month	**Topics to be Covered**	**Internal Assessment**	**Number of Lectures**
November	Unit 1 - Chap 1 - Introduction to Computer Graphics + Practicals		10
December	Unit 1 - Chap 2 - Scan Conversion Unit 2 - Chap 3 - Two Dimensional Transformation (half) + Practicals		14
January	Unit 2 - Chap 3 - Two Dimensional Transformation Unit 2 - Chap 4 - Three Dimensional Transformations. Unit 5 -Chap 10 - Computer Animation Unit 5 - Chap 11 - Image Manipulation and Storage + Practicals		20
February	Unit 3 - Chap 5 - Viewing in 3D Unit 4 - Chap 8 - Visible Surface Determination Unit 4 - Chap 9 - Plane Curves and Surfaces Unit 3 - Chap 6 - Light+ Practicals		
March	Unit 3 - Chap 7 - Color **Project and Revision**		4 (tentative)

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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:Core Java

Name of the Faculty:Snehal S. Borlikar

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	Unit 1: Introduction ,Data types		10
December	Unit 2:Control Flow Statements, Iterations, Classes		10
January	Unit 3:Inheritance, Packages Unit 4:Enumerations, Arrays, Exceptions		15
February	Unit 4:Multithreading, Byte streams Unit 5: Event Handling ,Abstract Window Toolkit	Internal test	15
March	Unit 5:Abstract Window Toolkit ,Layouts		10

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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:COST (Computer Oriented Statistical Techniques)

Name of the Faculty: Amit Limbasia

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	1. The Mean, Median, Mode, and Other Measures of Central Tendency 2. The Standard Deviation and Other Measures of Dispersion 3. Introduction to R		12
December	4. Moments, Skewness, and Kurtosis 5. Elementary Probability Theory 6. Elementary Sampling Theory 7. Statistical Estimation Theory 8. Statistical Decision Theory		20
January	9. Small Sampling Theory 10. The Chi-Square Test 11. Curve Fitting and the Method of Least Squares - I		20
February	12. Curve Fitting and the Method of Least Squares - II 13. Correlation Theory		8
March			

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M.L.Dhanukar College of Commerce

Teaching Plan: 2019 - 20

Department:B.Sc.IT Semester: IV

Class:S.Y.BScIT

Subject: Introduction To Embedded System

Name of the Faculty:Amit Bane

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	**Unit I** • **Introduction:** • Embedded Systems and general purpose computer systems, history, classifications, applications. • purpose of embedded systems. • **Core of embedded systems**: • microprocessors and microcontrollers, RISC and CISC controllers • Big endian and Little endian processors, • Application specific ICs, Programmable logic devices, COTS, • sensors and actuators, communication interface • embedded firmware, other system components. • **Characteristics and quality attributes of embedded systems:** Characteristics, operational and non-operational quality attributes.		12
December	**UNIT II** • **Embedded Systems –** • Application and Domain Specific: Application specific washing machine, domain specific - automotive. • Embedded Hardware: Memory map, i/o map, interrupt map, processor family, external peripherals, • Memory – RAM , ROM, types of RAM and ROM, memory testing, CRC ,Flash memory. • **Peripherals:** Control and Status Registers, Device Driver, Timer Driver - Watchdog Timers.		12
January	**UNIT III** • **The 8051 Microcontrollers:** Microcontrollers and	Class Test	12

	Embedded processors • Overview of 8051 family. • 8051 Microcontroller hardware, Input/output pins, Ports, and Circuits, External Memory. • **8051 Programming in C:** Data Types and time delay in 8051 C, I/O Programming, Logic operations, Data conversion Programs		
February	**UNIT IV** • Designing Embedded System with 8051 Microcontroller: • Factors to be considered in selecting a controller, why 8051 Microcontroller, Designing with 8051. • **Programming embedded systems:** structure of embedded program, infinite loop, compiling, linking and debugging.		12
March	**Unit I** • **Real Time Operating System (RTOS):** • Operating system basics, types of operating systems, Real-Time Characteristics, Selection Process of an RTOS. • **Design and Development:** Embedded system development Environment – IDE, types of file generated on cross compilation, disassembler/ de-compiler, simulator, emulator and debugging,. • Embedded product development life-cycle, trends in embedded industry.		12

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P.T.V.A.'s

M.L.Dahanukar College of Commerce

Teaching Plan: 2019 – 20

Department: Information Technology

Class: S.Y.B.Sc.(I.T.) – Semester IV

Subject: Software Engineering

Name of the Faculty: Prof. SuprithaBhandary

Month	Topics to be Covered	Internal Assessment	Number of Lectures
Nov	Introduction, Difference between hardware and software, SDLC, software requirements, software processes		08
Dec	waterfall model, prototyping model, iterative model.,RUP, RAD model, Agile software developmentSocio-Technical System: Characteristics, legacy systems, critical systems		19
Jan	security of software systems, Requirements engineering processes, feasibility study, systems models, context model, behavioural model, data model, object modelArchitectural design: modular decomposition styles, control styles,User Interface design: need of UI, Design issues, user analysis		15
Feb	Project Management: project planning, project scheduling, Quality Management: quality planning, quality control, software measurement and metrics, Verification and validation software inspections, formal methods, Software Testing: system testing		10
Mar	component testing, Software Measurement: Function point metrics, Software Cost Estimation: Estimation Techniques, project duration and staffing, Process improvement, software reuse, distributed software engineering		08

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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:Computer Graphics and Animation

Name of the Faculty: Sweta Chheda

Month	**Topics to be Covered**	**Internal Assessment**	**Number of Lectures**
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March	Unit 3 - Chap 7 - Color **Project and Revision**		4 (tentative)

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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:Core Java

Name of the Faculty:Snehal S. Borlikar

Month	Topics to be Covered	Internal Assessment	Number of Lectures
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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 - 20

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

Subject:COST (Computer Oriented Statistical Techniques)

Name of the Faculty: Amit Limbasia

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	14. The Mean, Median, Mode, and Other Measures of Central Tendency 15. The Standard Deviation and Other Measures of Dispersion 16. Introduction to R		12
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January	22. Small Sampling Theory 23. The Chi-Square Test 24. Curve Fitting and the Method of Least Squares - I		20
February	25. Curve Fitting and the Method of Least Squares - II 26. Correlation Theory		8
March			

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M.L.Dhanukar College of Commerce

Teaching Plan: 2019 - 20

Department:B.Sc.IT Semester: IV

Class:S.Y.BScIT

Subject: Introduction To Embedded System

Name of the Faculty:Amit Bane

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	**Unit I** • **Introduction:** • Embedded Systems and general purpose computer systems, history, classifications, applications. • purpose of embedded systems. • **Core of embedded systems**: • microprocessors and microcontrollers, RISC and CISC controllers • Big endian and Little endian processors, • Application specific ICs, Programmable logic devices, COTS, • sensors and actuators, communication interface • embedded firmware, other system components. • **Characteristics and quality attributes of embedded systems:** Characteristics, operational and non-operational quality attributes.		12
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M.L.Dahanukar College of Commerce

Teaching Plan: 2019 – 20

Department: Information Technology

Class: S.Y.B.Sc.(I.T.) – Semester IV

Subject: Software Engineering

Name of the Faculty: Prof. SuprithaBhandary

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