M.L. Dahanukar College of Commerce

Teaching Plan: 2018 - 19

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		30
February	Unit 4: Multithreading, Byte streams Unit 5: Event Handling ,Abstract Window Toolkit	Internal test	20
March	Unit 5:Abstract Window Toolkit ,Layouts		20

Sign of Faculty　　　　　　　　　　　　　　　**Sign of Coordinator**

M.L. Dahanukar College of Commerce

Teaching Plan: 2018 - 19

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

Subject: Introduction to Embedded Systems

Name of the Faculty: Amit Bane

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	**Introduction:** Embedded Systems and general purpose computer systems, history, classifications, applications and 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	**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	**The 8051 Microcontrollers:** Microcontrollers and Embedded processors, Overview of 8051 family. 8051 Microcontroller hardware,		12

	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	**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.	Internal test (20)	12
March	**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

Sign of Faculty   **Sign of Coordinator**

M.L. Dahanukar College of Commerce

Teaching Plan: 2018 - 19

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

Subject: COST

Name of the Faculty:Neha Joshi

Month	Topics to be Covered	Internal Assessment	Number of Lectures
November	Measures of central tendency		5
December	Measures of Dispersion Curve fitting and method of least squares Probability theory		15
January	Correlation theory Moments Skewness Kurtosis Sampling theory		15
February	Estimation theory Decision theory	Class test	10
March	Small sampling theory Chi square test		10

Sign of Faculty   **Sign of Coordinator**

M.L.Dahanukar College of Commerce

Teaching Plan: 2018 – 19
Department: Information Technology

Class: S.Y.B.Sc.(I.T.) – Semester IV
Subject: Software Engineering
Name of the Faculty: Prof. Supritha Bhandary

Month	Topics to be Covered	Internal Assessment	Number of Lectures
DEC	Introduction, Difference between hardware and software, SDLC, software requirements, software processes, waterfall model, prototyping model, iterative model.		08
JAN	RUP, RAD model, Agile software development Socio-Technical System: Characteristics, legacy systems, critical systems, security of software systems, Requirements engineering processes, feasibility study, systems models, context model, behavioural model, data model, object model		19
FEB	Architectural design: modular decomposition styles, control styles, User Interface design: need of UI, Design issues, user analysis, Project Management: project planning, project scheduling, Quality Management: quality planning, quality control, software measurement and metrics, Verification and validation	Class Test	15
MAR	software inspections, formal methods, Software Testing: system testing, component testing, Software Measurement: Function point metrics, Software Cost Estimation: Estimation Techniques, project duration and staffing, Process improvement, software reuse, distributed software engineering		18

Sign of Faculty   **Sign of Coordinator**

M.L. Dahanukar College of Commerce

Teaching Plan: 2018 - 19

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 (half) + Practicals		08
December	Unit 1 - Chap 1 - (complete) Unit 1 - Chap 2 - Scan Conversion + Practicals		10
January	Unit 2 - Chap 3 - Two Dimensional Transformation Unit 5 -Chap 10 - Computer Animation Unit 5 - Chap 11 - Image Manipulation and Storage + Practicals		24
February	Unit 2 - Chap 4 - Three Dimensional Transformations. Unit 3 - Chap 5 - Viewing in 3D Unit 4 - Chap 8 - Visible Surface Determination Unit 4 - Chap 9 - Plane Curves and Surfaces + Practicals	Internal test	20
March	Unit 3 - Chap 6 - Light Unit 3 - Chap 7 - Color **Project and Revision**		8 (tentative)

Sign of Faculty   **Sign of Coordinator**