

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY, SONIPAT

LESSON PLAN

Name of Faculty: Mr. Anil Kumar

Discipline:- B. Tech. (CSE)

Semester: 8th

Subjects: Database Administration (CSE 402 B, CSE 422 B)

Lesson Plan Duration: 15 Weeks (from January, 2018 to April, 2018)

Workload (Lecture/Practical) per week (in hours) : Lecture-03, Practicals -02 hours

Week	Theory		Practical	
	Lecture Day	Topic (including assignment/test)	Practical Day	Topic
1st	1st	Oracle overview and Architecture	1st	To Study architecture of the oracle DBMS.
	2nd	Installing and managing oracle.		
	3rd	creating a database		
2nd	4th	creating and maintaining data dictionary	2nd	To study the installation of the Oracle and MySQL DBMS (standalone mode Mode) in windows environment
	5th	Use of control and redo log files		
	6th	Test		
3rd	7th	Managing Table spaces and data files	3rd	File Check & Viva
	8th	Managing tables		
	9th	Managing indexes		
4th	10th	Managing users.	4th	To study the installation of the Oracle and MySQL DBMS (Client server Mode) in windows environment
	11th	Managing security.		
	12th	Test		
5th	13th	Working with Data Constraints	5th	To study different types of users and create users in Oracle (using cmd prompt & GUI)
	14th	Performing SQL queries		
	15th	Basic Oracle net architecture		
6th	16th	basic net server side configuration	6th	File Check & Viva
	17th	basic net client-side configuration.		
	18th	Test		
7th	19th	Usage of Oracle shared server architecture.	7th	Study of various types of privileges to the users in Oracle.
	20th	Configuration of Oracle shared server architecture.		
	21st	Backup and Recovery		
8th	22nd	Transporting data between databases	8th	Granting and Revoking of privileges to users.
	23rd	export and import utility		
	24th	Loading data into database-SQL*loader		
9th	25th	database performance tuning	9th	File Check & Viva
	26th	Test		
	27th	Basic constructs of PL/SQL		
10th	28th	Control structures of PL/SQL	10th	To study Use of Import/Export utilities in Oracle
	29th	Linking tables/database with PL/SQL		
	30th	Use of different types of variables		
11th	31st	Cursors: need and types	11th	Study of Commit/Rollback of Transactions in Oracle
	32nd	Syntax of explicit cursors		
	33rd	Cursors: implementation,		
12th	34th	Test	12th	File Check & Viva
	35th	Need for Stored Procedures		
	36th	Examples related to Stored Procedures		
13th	37th	Need for Functions	13th	Study of concurrency control mechanism of Oracle.
	38th	Examples related to Stored functions		
	39th	Test		
14th	40th	Active Database, ECA Rules	14th	Study of Recovery technique used by Oracle.
	41st	Implementation ECA rules in PL/SQL		
	42nd	Understanding CUBE technology		
15th	43rd	Concept of Data ware house	15th	File Check & Viva
	44th	creating a Data ware House in oracle.		
	45th	Test		

GATEWAY INSTITUTE OF ENGINEERING AND TECHNOLOGY,SONIPAT
LESSON PLAN

Name of Faculty: Ms. Taruna

Discipline:- B. Tech. (CSE)

Semester: 8th

Subjects: LINUX (CSE 404 B)

Lesson Plan Duration: 15 Weeks (from January,2018 to April,2018)

Workload(Lecture/Practical) per week (in hours) : Lecture-03

Theory		
Week	Lecture Day	Topic (including assignment/test)
1st	1st	History of unix
	2nd	History of linux
	3rd	Architecture of linux
2nd	4th	Advantage of linux
	5th	Creating an Installation Diskette
	6th	Booting Linux Installation Program
3rd	7th	Partitioning Hard Drive(s)
	8th	Setting up Swap Space
	9th	Choosing Partitions to Format
4th	10th	Booting with LILO
	11th	Multi-boot with Other Operating Systems
	12th	Test
5th	13th	Types of Shell
	14th	Feature and benefits of Shell
	15th	I/O redirection and Piping
6th	16th	Pipes
	17th	Filters
	18th	Introduction to various text editor
7th	19th	Vi editing modes
	20th	Scrolling, Yank and paste
	21st	Put and delete, set commands
8th	22nd	Comparison of EmacsEditor
	23rd	Vi Editor, Pico Editor
	24th	Test
9th	25th	Rules for creating files
	26th	File printing
	27th	Searching files using grep
10th	28th	Change permission to set files, Change owner of the files
	29th	Process
	30th	Listening with ps, killing with kill
11th	31st	PID, UID
	32nd	Nice, Renice
	33rd	Test
12th	34th	Root account, Creating user in Linux
	35th	Changing password
	36th	Deleting user, disabling user account
13th	37th	Linux Password & Shadow File Formats System
	38th	Shutdown and Restart creating groups
	39th	Custom Configuration and Administration Issues
14th	40th	IDE, SCSI, USB and its interface
	41st	Pin configuration of various devices, Disk Geometry
	42nd	Configuration of web server
15th	43rd	FTP and Telnet
	44th	Shell programming, network configuration
	45th	Test

Name of Faculty: Ms. Alisha Sikri

Discipline:- B. Tech. (CSE)

Semester: 8th

Subjects: Software Project Management(SPM) (CSE 404 B)

Lesson Plan Duration: 15 Weeks (from January,2018 to April,2018)

Workload(Lecture) per week (in hours) : Lecture-03

Week	Theory	
	Lecture Day	Topic (including assignment/test)
1st	1st	Definition of a Software Project (SP)
	2nd	SP VS Other types of projects activities covered by SPM
	3rd	Fundamentals of Software Project Management (SPM)
2nd	4th	Need, Identification, Vision and Scope Document
	5th	Project Management Cycle
	6th	Test
3rd	7th	SPM Objectives, project as a system, management control, requirement specification, information and control
	8th	Project Management & CMM
	9th	Stepwise Project planning: Introduction
4th	10th	Electing a project, identifying project scope and objectives, identifying project infrastructure
	11th	Analyzing project characteristics, identifying project products and activities
	12th	estimate efforts each activity, identifying activity risk, allocate resources, review/ publicize plan
5th	13th	Cost benefit analysis, cost benefit evaluation techniques
	14th	Selection of an appropriate project approach: structured methods, rapid application development
	15th	Water fall-, V-process-, spiral- models
6th	16th	Prototyping, delivery. Albrecht function point analysis
	17th	Objectives of activity planning, project schedule, projects and activities
	18th	Test
7th	19th	Identifying activities, sequencing and scheduling activities, network planning model
	20th	Network Diagrams, CPM representation of lagged activities, backward and forward pass
	21st	Identifying critical path, activity throat,
8th	22nd	Shortening project , precedence networks.
	23rd	Introduction, the nature of risk, managing risk, risk identification, risk analysis
	24th	Reducing the risks, evaluating risks to the schedule, calculating the z values.
9th	25th	Project Monitoring & control: identifying resource requirements, scheduling resources
	26th	PERT, Gantt Charts, Earned Value Analysis
	27th	Earned Value Indicators: Budgeted Cost for Work Scheduled (BCWS),
10th	28th	Cost Variance (CV), Schedule Variance (SV), Cost Performance Index (CPI), Error Tracking, Software
	29th	Reviews, Types of Review: Inspections, Deskchecks, Walkthroughs, Code Reviews, Pair Programming
	30th	Types of contract, stages in contract, placement,
11th	31st	Typical terms of a contract, contract management, acceptance, Managing people and organizing terms:
	32nd	Introduction, understanding behavior, organizational behavior: a back ground, selecting the right person for the job
	33rd	Instruction in the best methods, motivation, working in groups, becoming a team, decision
12th	34th	Decision making, leadership, organizational structures
	35th	Software quality Assurance and Testing: Testing Objectives, Testing Principles, Test Plans, Test Cases,
	36th	Types of Testing, Levels of Testing, Test Strategies, Program Correctness,
13th	37th	Program Verification & validation, Concept of Software Quality,
	38th	Software Quality Attributes, Software Quality Metrics and Indicators
	39th	The SEI Capability Maturity Model CMM
14th	40th	SQA Activities
	41st	Formal SQA Approaches: Proof of correctness
	42nd	Statistical quality assurance
15th	43rd	MS-Project, Cleanroom process.
	44th	Software Project Management Tools: CASE Tools, Planning and Scheduling
	45th	Test

Name of Faculty: Ms. Kirti Rana

Discipline:- B. Tech. (CSE)

Semester: 8th

Subjects: Software Standards and Quality (CSE 464 B)

Lesson Plan Duration: 15 Weeks (from January,2018 to April,2018)

Workload(Lecture) per week (in hours) : Lecture-03

Week	Theory	
	Lecture Day	Topic (including assignment/test)
1st	1st	Concepts of software quality
	2nd	quality attributes
	3rd	software quality control
2nd	4th	software quality assurance
	5th	evolution of SQA
	6th	major SQA activities, major SQA issues
3rd	7th	zero defect software
	8th	The philosophy of assurance, the meaning of quality
	9th	the relationship of assurance to the software life cycle
4th	10th	SQA techniques
	11th	Tailoring the Software Quality Assurance Program
	12th	Management review process
5th	13th	technical review process
	14th	walkthrough
	15th	software inspection process
6th	16th	configuration audits, document verification
	17th	Test
	18th	Software requirements, preliminary design,detailed design,
7th	19th	coding and unit test
	20th	integration and testing, system testing, types of evaluations
	21st	Identification of defect, analysis of defect, correction of defect
8th	22nd	implementation of correction, regression testing
	23rd	Categorization of defect, relationship of development phases
	24th	Test
9th	25th	Error quantity, error frequency
	26th	program unit complexity
	27th	compilation frequency
10th	28th	Identifying the requirement for corrective action
	29th	determining the action to be taken
	30th	implementing the corrective action
11th	31st	documenting the corrective action
	32nd	periodic review of actions taken
	33rd	Test
12th	34th	CASE tools and their effect on Software Quality
	35th	Software Quality Metrics
	36th	Standards, certification and assessment
13th	37th	Quality management standards
	38th	Quality standards with emphasis on ISO approach
	39th	Capability Maturity Models-CMM and CMMI
14th	40th	TQM Models
	41st	Bootstrap methodology
	42nd	The SPICE project
15th	43rd	ISO/IEC 15504
	44th	Six Sigma Concept for Software Quality
	45th	Test

