CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

DEPARTMENT - COMPUTER SCIENCE

Course Pack
FOR
DATABASE MANAGEMENT SYSTEMS AND SOFTWARE ENGINEERING-CSC331

CSC331 - DATABASE MANAGEMENT SYSTEMS AND SOFTWARE ENGINEERING

Total Teaching Hours For Semester : 60 **Total Teaching Hours For Semester : 4**

Max Marks : 100 **Credits : 4**

Course Objectives/Course Description:

I Database Management System Course Description The course describes the data, organizing the data in database, database administration. It also gives introduction to SQL language to retrieve the data from the database with suitable application development. Provide strong foundation of database concepts and to introduce students to application development in DBMS. **II Software Engineering Course Description** It provides the study on the application and engineering to the design, development, testing and maintenance of software. It makes the students to focus on the important steps in designing the software project and software engineering principles. To prepare the students to develop the skills necessary to handle software projects.

Learning Outcome

Course Learning Outcome • Understanding the fundamentals of RDBMS.€• Building foundation for implementation through project work. **Course Learning Outcome** On completion of the course the student shall • Understand the importance of the stages in the software life cycle.• Understand the various process models.• Understand the importance of Software testing.

Unit-1 **Teaching Hours:7**

Introduction and DBMS Architecture

Introduction- Data, Database, Database management system, Characteristics of the database approach, Role of Database administrators, Role of Database Designers, End Users, Advantages of Using a DBMS and When not to use a DBMS.DBMS Architecture – Data Models – Categories of Data models, Schemas, Instance, and Database states, DBMS Architecture and Data Independence – The Three schema architecture, Data Independence. DBMS language and interface, Classifications of Database Management Systems.

Unit-2 **Teaching Hours:6**

Data Modeling Using Entity-Relationship Model

Using high level conceptual Data models for Database Design, Example Database applications. Entity types, Entity Sets, Attributes and Keys. Relationships, Relationship types, Roles and Structural constraints. Weak Entity Types and Drawing E- R Diagrams.

Unit-3 **Teaching Hours:5**

Database Design

Functional dependencies and Normalization for Relational Databases - Normalization concepts, first, second, third normal forms.

Unit-4 **Teaching Hours:7**

SQL

SQL data definition and data types, specifying constraints in SQL, schema change statements, Basic queries, INSERT, DELETE and UPDATE statements in SQL, Views – Concept of a view in SQL.

Unit-5 **Teaching Hours:5**

Transaction Processing Concepts and Concurrency Control

Transaction and System concepts – Desirable properties of Transactions – Schedules and Recoverability. Lock-Based Protocols – Locks, Granting of Locks, and Two phase locking protocol

Unit-6 **Teaching Hours:5**

Software and Software Engineering

Nature of software- Defining software, Software Application Domains, Legacy Software-, Software Engineering, The software process, Software Engineering practice –The essence of Practice, General Principles -, Software Myths.

Unit-7 **Teaching Hours:6**

Process Models

A generic process model – Defining a framework activity, identifying a Task Set,Process Patterns -, Process Assessment and improvement, Prescriptive Process Models – The waterfall Model, Incremental Model, Evolutionary Process Model, Concurrent Models-, A Final Word on Evolutionary Processes.

Unit-8 **Teaching Hours:6**

Understanding Requirements

Requirement Engineering, Establishing the Groundwork, - Identifying Stakeholders, Recognizing multiple viewpoints, Working toward Collaboration, Asking the first questions-, Eliciting requirements – Collaborative requirement gathering, Quality function Deployment, Usage Scenario Elicitation Work Products - , Developing use cases, building the requirements model – Elements of the requirements Model, Analysis pattern -, Negotiating requirements, validating requirements.

Unit-9 **Teaching Hours:6**

Design Concepts

The design within the context of Software Engineering, The design process – Software quality guidelines and attributes, The evolution of software design – Design concepts – Abstraction, Architecture, Patterns, Separation of concerns, Modularity, information hiding, Functional Independence, Refinement, Aspects, Refactoring, Object Oriented design concepts Design classes. The design Model – Data Design elements, Architectural Design elements, Interface Design Elements, Component- Level Design elements, Deployment level Design elements.

Unit-10 **Teaching Hours:7**

Software Testing

A Strategic approach to testing- Verification and Validation, Organizing for software testing, software testing strategy, Criteria for completion of testing-, Test strategies for conventional software – Unit testing, Integration testing- , Test strategies for Object Oriented software-Unit testing in the OO Context, Integration testing in the OO Context-, Validation testing, White-box testing, Basic path testing- Flow Graph Notation, Independent program paths, Deriving test cases, Graph matrices-, control structure testing – Condition testing, Data flow testing, loop testing-, Black-box testing-Graph-based testing methods, Equivalence partitioning, boundary value analysis.

Text Books And Reference Books:

[1] Elmasri & Navathe, *Fundamentals of Database Systems,* 5th edition, Addison – Wesley, 2007.[1] Pressman S Roger, *Software Engineering A Practitioner's Approach* , McGraw Hill International Editions, 7th edition, 2010.

Essential Reading / Recommended Reading:

Essential Reading [1] Elmasri & Navathe, *Fundamentals of Database Systems,* 5th edition, Addison – Wesley, 2007. **Essential Reading** [1] Pressman S Roger, *Software Engineering A Practitioner's Approach*, McGraw Hill International Editions, 7th edition, 2010. **Recommended Reading** [1] Sommerville, Ian, *Software Engineering*, Addison Wesley, 9thEdition, 2010. [2] Rumbaugh, James, *Object Oriented Modeling and design*, Pearson Education, New Delhi, 2005. **Recommended Reading** [1] O`neil Patric and O`neil Elizabeth, *Database Principles Programming and Performance,* 2nd Edition, Margon Kaufmann Publishers Inc., 2001. [2] Silberschatz, Korth, Sudarshan, *Database System Concepts*, 5th Edition, McGraw Hill, 2006.

Evaluation Pattern

Component	Marks
CIA I	10
Mid Semester Examination CIA II	25
CIA III	10
Attendance	5
End Semester Exam	50
Total	100

Course Plan

Class Name : 3CMS **Subject Name : DATABASE MANAGEMENT SYSTEMS AND SOFTWARE ENGINEERING**

Subject Code : CSC331 **Teacher Name : NIJUP.JOSEPH, KIRUBANAND.VB**

Planned Date	No of Hours	Unit	Heading	Details	Method	Reading/Ref
29/05/2018	1.00	Unit-6	Software and Software Engineering	Nature of software-Defining software	PPT along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
31/05/2018	1.00	Unit-6	Software and Software Engineering	Nature of software-Defining software,Software Application Domains	PPT along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
02/06/2018	1.00	Unit-1	Introduction and DBMS Architecture	Introduction to Data, Database and Database Management System (DBMS), Characteristics of the database approach, Different people involved in a DBMS and their roles, Advantages of using a DBMS and when not to use a DBMS.	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
04/06/2018	1.00	Unit-1	Introduction and DBMS Architecture	Overview of various DBMS, Important role of DBMS in industry and latest advancements, Various DBMS softwares, Introduction to SQL	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
05/06/2018	1.00	Unit-6	Software and Software Engineering	Legacy Software-, Software Engineering, The software process,	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
07/06/2018	1.00	Unit-6	Software and Software Engineering	Software Engineering practice ,The essence of Practice	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
09/06/2018	1.00	Unit-4	SQL	SQL installation, SQL data definition and data types, Introduction to DDL,DML	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
11/06/2018	1.00	Unit-4	SQL	CREATE, INSERT and SELECT statements with examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
12/06/2018	1.00	Unit-6	Software and Software Engineering	General Principles , Software Myths.	Chalk and Talk	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
14/06/2018	1.00	Unit-7	Process Models	A generic process model Defining a framework activity, identifying a Task Set.	PPT along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
18/06/2018	1.00	Unit-4	SQL	UPDATE, ALTER , DELETE and DROP with examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
19/06/2018	1.00	Unit-7	Process Models	Process Patterns , Process Assessment and improvement	PPT along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
21/06/2018	1.00	Unit-7	Process Models	Prescriptive Process Models , The waterfall	PPT along with relevant example.	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw

				Model,		Hill International Editions, 7th edition, 2010.
23/06/2018	1.00	Unit-4	SQL	Filtering Data Using Where	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
25/06/2018	1.00	Unit-4	SQL	SQL Functions(String, Math and Date)	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
26/06/2018	1.00	Unit-7	Process Models	Incremental Model, Evolutionary Process Model	PPT along with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
28/06/2018	1.00	Unit-7	Process Models	Concurrent Models	Lecture with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
30/06/2018	1.00	Unit-1	Introduction and DBMS Architecture	MINUS, UNION,INTERSECT operations with examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
02/07/2018	1.00	Unit-1	Introduction and DBMS Architecture	Introduction to Data Models ,Categories of data models	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
03/07/2018	1.00	Unit-7	Process Models	A Final Word on Evolutionary Processes.	Chalk and talk	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
05/07/2018	1.00	Unit-8	Understanding Requirements	Requirements Engineering, Establishing the groundwork. Identifying Stakeholders, Recognizing multiple viewpoints	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
07/07/2018	1.00	Unit-1	Introduction and DBMS Architecture	Schemas, Instances, and Database states	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
09/07/2018	1.00	Unit-1	Introduction and DBMS Architecture	Data Independence , Three schema architecture	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
10/07/2018	1.00	Unit-8	Understanding Requirements	toward Collaboration, Asking the first questions-, Eliciting requirements	PPT relevant with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
12/07/2018	1.00	Unit-8	Understanding Requirements	Collaborative requirement gathering, Quality function Deployment	PPT relevant with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
14/07/2018	1.00	Unit-1	Introduction and DBMS Architecture	DBMS Languages and Interfaces	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
16/07/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	Using High Level Conceptual Data Models for Database Design, Example of Database applications	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
17/07/2018	1.00	Unit-8	Understanding Requirements	Usage Scenario Elicitation Work Products - , Developing use cases	PPT presentation relevant with examples	Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
19/07/2018	1.00	Unit-8	Understanding Requirements	building the requirements model ? Elements of the requirements Model	PPT presentation relevant with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
21/07/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	Entity,Entity types, Entity Sets, Weak Entity	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
23/07/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	Attributes, classification of attributes, Keys, Different types of Keys	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
24/07/2018	1.00	Unit-8	Understanding Requirements	Analysis pattern -, Negotiating requirements, validating requirements.	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
26/07/2018	1.00	Unit-9	Design Concepts	The design within the context of Software Engineering, The design process ? Software quality guidelines and attributes	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
28/07/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	Relationships, Relationship types, Roles and Structural constraints.	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
30/07/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	Drawing E- R Diagrams , Examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
31/07/2018	1.00	Unit-9	Design Concepts	The evolution of software design -, Design concepts ? Abstraction,	Lecture along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.

				Architecture, Patterns, Separation of concerns, Modularity, information hiding.		
02/08/2018	1.00	Unit-9	Design Concepts	hiding, Functional Independence, refinement,Aspects, Refactoring, Object Oriented 16 design concepts Design classes	Lecture along with relevant example	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
04/08/2018	1.00	Unit-4	SQL	Integrity Constraints ,Types of constraint , Referential Integrity , Defining Constraints	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
06/08/2018				MID SEMESTER EXAM	MID SEMESTER EXAM	MID SEMESTER EXAM
07/08/2018				MID SEMESTER EXAM	MID SEMESTER EXAM	MID SEMESTER EXAM
09/08/2018				MID SEMESTER EXAM	MID SEMESTER EXAM	MID SEMESTER EXAM
11/08/2018				MID SEMESTER EXAM	MID SEMESTER EXAM	MID SEMESTER EXAM
13/08/2018	1.00	Unit-4	SQL	Retrieving Data from Multiple Tables: Equi-Joins, Non-Equi-Joins,Aliases for Table Names	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
14/08/2018	1.00	Unit-10	Software Testing	A Strategic approach to testing- Verification and Validation, Organizing for software testing, software testing strategy, Criteria for completion of testing	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
16/08/2018	1.00	Unit-10	Software Testing	Test strategies for conventional software ? Unit testing, Integration testing- , Test strategies for Object Oriented software		TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
18/08/2018	1.00	Unit-4	SQL	Introduction to subqueries,Basic Sub queries	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
20/08/2018	1.00	Unit-4	SQL	Multiple Column sub queries , Sub queries with Having	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
21/08/2018	1.00	Unit-9	Design Concepts	The design Model ? Data Design elements, Architectural	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
23/08/2018	1.00	Unit-9	Design Concepts	Design elements, Interface Design Elements, Component-Level Design elements	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
25/08/2018	1.00	Unit-3	Database Design	Functional dependencies and Normalization for Relational Databases, Normalization concepts	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
27/08/2018	1.00	Unit-3	Database Design	1NF rules,Examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
28/08/2018	1.00	Unit-9	Design Concepts	Deployment level Design elements.	PPT and chalk and talk presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
30/08/2018	1.00	Unit-10	Software Testing	A Strategic approach to testing- Verification and Validation, Organizing for software testing, software testing strategy, Criteria for completion of testing	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
01/09/2018	1.00	Unit-3	Database Design	2NF rules,Examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
03/09/2018	1.00	Unit-3	Database Design	3NF rules,Examples	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
04/09/2018	1.00	Unit-10	Software Testing	Test strategies for conventional software ? Unit testing, Integration testing- , Test strategies for Object Oriented software-Unit testing in the Object oriented Context,	PPT along with relevant examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
06/09/2018	1.00	Unit-10	Software Testing	Integration testing in the object oriented Context-,	PPT along with relevant examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw

				Validation testing, White-box testing, Basic path testing- Flow Graph Notation, Independent program paths, Deriving test cases		Hill International Editions, 7th edition, 2010.
08/09/2018	1.00	Unit-3	Database Design	Normalization Practice questions	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
10/09/2018	1.00	Unit-5	Transaction Processing Concepts and Concurrency Control	Transaction concept, Desirable properties of Transactions	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
11/09/2018	1.00	Unit-10	Software Testing	Graph matrices-, control structure testing ? Condition testing, Data flow testing, loop testing	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
13/09/2018	0.00			MOHARAM	MOHARAM LEAVE	MOHARAM LEAVE
15/09/2018	1.00	Unit-5	Transaction Processing Concepts and Concurrency Control	ACID properties , Schedules and Recoverability	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
17/09/2018	1.00	Unit-5	Transaction Processing Concepts and Concurrency Control	Introduction to Locks and Lock-Based Protocols	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
18/09/2018	1.00	Unit-10	Software Testing	Black-box testing-Graph-based testing methods	Lecture/PPT Presentation	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
20/09/2018	1.00	Unit-10	Software Testing	Equivalence partitioning, boundary value analysis.	Lecture/PPT Presentation with examples	TEXT BOOK: Pressman S Roger, Software Engineering A Practitioners Approach, McGraw Hill International Editions, 7th edition, 2010.
22/09/2018	1.00	Unit-5	Transaction Processing Concepts and Concurrency Control	Granting of Locks, Two phase locking protocol	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
24/09/2018	1.00	Unit-4	SQL	REVISION	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
29/09/2018	1.00	Unit-5	Transaction Processing Concepts and Concurrency Control	REVISION	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.
01/10/2018	1.00	Unit-2	Data Modeling Using Entity-Relationship Model	REVISION	Lecture/PPT Presentation	Textbook: Fundamentals of Database Systems by Elmasri and Navathe.

CIA 1

Component/Task 1

CIA Details

CIA-1Details SUBJECT: DBMSIndividual assignment-Briefly mention the different types of databases and their applications.Perform a compartitive study on any two database softwares.Upload the softcopy in IEEE format in the Moodle linkon or before July 5 2018.CIA Details will display form 16/06/2018CIA 1SOFTWARE ENGINEERING Component/Task 1 Assignment Description: CIA Details: CIA Component Type : Assignment Grade Points : 10 Points / Marks Topic :1. Software Application Domain and Legacy Software 2. Software Process,Engineering Practice and Myths Page Limit : 08

CIA Details will display form 16/06/2018

Learning Objective

SUBJECT: DBMSssignment Learning Objectives:This assignment helps to :Understand the different types of databases and database softwares.Apply the queries in different database softwares.Evaluate the performance of basic queries in any two different database softwares.Understand and apply the IEEE format.Assessment Strategies aligned to LO: Presenting the document in IEEE format,Similarity check,TestTechnology Tools used along with their Purpose: Moodle- uploading documents,Turnitin- Plagiarismcheck Assignment Learning Objectives:This assignment helps to :Understand the different types of databases and database softwares. Apply the queries in different database softwares.Evaluate the performance of basic queries in any two different database softwares. Understand and apply the IEEE format.Assessment Strategies aligned to LO: Presenting the document in IEEE format,Similarity check,TestTechnology Tools used along with their Purpose: Moodle- uploading documents,Turnitin- Plagiarismcheck

SOFTWARE ENGINEERING Assignment Learning Objectives: To Evaluate relevant to the topic. To provide exposure to the students about Software Process model and Application Domain . technologyTo

provide them with the fundamental knowledge of software myths,software process and engineering practices.Upload assignment in GOOGLE CLASSROOM

SUBJECT: DBMSssignment Learning Objectives:This assignment helps to :Understand the different types of databases and database softwares.Apply the queries in different database softwares.Evaluate the performance of basic queries in any two different database softwares.Understand and apply the IEEE format.Assessment Strategies aligned to LO: Presenting the document in IEEE format,Similarity check,TestTechnology Tools used along with their Purpose: Moodle- uploading documents,Turnitin- Plagiarismcheck Assignment Learning Objectives:This assignment helps to :Understand the different types of databases and database softwares. Apply the queries in different database softwares.Evaluate the performance of basic queries in any two different database softwares. Understand and apply the IEEE format.Assessment Strategies aligned to LO: Presenting the document in IEEE format,Similarity check,TestTechnology Tools used along with their Purpose: Moodle- uploading documents,Turnitin- Plagiarismcheck

SOFTWARE ENGINEERING Assignment Learning Objectives: To Evaluate relevant to the topic. To provide exposure to the students about Software Process model and Application Domain . technologyTo

provide them with the fundamental knowledge of software myths,software process and engineering practices.Upload assignment in GOOGLE CLASSROOM

Evaluation Rubrics

Evaluation Rubrics of DBMS:

DBMS:

Explanation and content- 5 marksIEEE format -5 marksPlagiarism report- 5marksTest - 5 marks---------- ---------- SUBJECT :SOFTWARE ENGINEERING **Evaluation Rubrics**

Criteria	Max. Marks	Very Good	Good	Satisfactory	Needs Improvement
Understanding of concepts related to software application, legacy software ,process & Engineering Practice	**5**	**(5 marks)**	**(4 marks)**	**(3 marks)**	**(2 mark)**
		The student is able to conceive, understand and present the concepts very clearly taught in the class	The student is able to present the the concepts almost clearly	The student is able to present the concepts with little difficulty	The student is not able to present concepts clearly
Able to analyze, relate with real time application	**5**	**(5 marks)**	**(4 marks)**	**(3 marks)**	**(2 mark)**
		The student is able to analyze and relate the concepts with real time scenario very clearly	The student is able to analyze and relate the concepts with real time scenario almost clearly	The student is able to analyze and relate the concepts with real time scenario with little difficulty	The student is not able to analyze and relate the concepts with real time scenario .

Component/Task 2

CIA Details

Component/Task 2SUBJECT: SOFTWARE ENGINEERING Assignment Description:CIA DetailsCIA Component Type : Class TEST Grade Points : 10 Points / MarksTopic : Unit I and Unit II based Questions.Page Limit : 5 Pages

CIA Details will display form 24/06/2017

Learning Objective

Assignment Learning Objectives: To enable the students uderstand and remeber the concepts of Software Engineering practices and myths. To enable the students to identify the generic process model and prescriptive model. **Assessment Strategies aligned to LO:** Five 2 marks Questions.**Technology Tools used along with their Purpose:NIL**

Assignment Learning Objectives: To enable the students uderstand and remeber the concepts of Software Engineering practices and myths. To enable the students to identify the generic process model and prescriptive model. **Assessment Strategies aligned to LO:** Five 2 marks Questions.**Technology Tools used along with their Purpose:NIL**

Evaluation Rubrics

SOFTWARE ENGINEERING Evaluation Rubrics:Very Good:90% and above.Good:70% and above. Avearge 50% and abovePoor:less than 50%

CIA 3

Component/Task 1

Learning Objective

SUBJECT: DBMSLearning ObjectiveAssignment Learning Objectives: This assignment helps to : Understand and apply the concepts of ER,DFD and database design.Analyze the project requirementsCreate the ER,DFD and database which can be used for project development. Assessment Strategies aligned to LO: Submission of the hardcopy, presentationTechnology Tools used along with their Purpose: Google drive- for sharing the documentsAssignment Learning Objectives: This assignment helps to :Understand and apply the concepts of ER,DFD and database design.Analyze the project requirementsCreate the ER,DFD and database which can be used for project development.Assessment Strategies aligned to LO: Submission of the hardcopy, presentationTechnology Tools used along with their Purpose: Google drive- for sharing the documents SOFTWARE ENGINEERINGAssignment Learning Objectives: To Evaluate relevant to the topic. **Assessment Strategies aligned to LO:**To understand the Software Engineering Design Concepts and the prinnciples.To develop a strategic approach to define how Design elements occurred. **Technology Tools used along with their Purpose:**Assignment upload in GOOGLE CLASSROOM

SUBJECT: DBMSLearning ObjectiveAssignment Learning Objectives: This assignment helps to : Understand and apply the concepts of ER,DFD and database design.Analyze the project requirementsCreate the ER,DFD and database which can be used for project development. Assessment Strategies aligned to LO: Submission of the hardcopy, presentationTechnology Tools used along with their Purpose: Google drive- for sharing the documentsAssignment Learning Objectives: This assignment helps to :Understand and apply the concepts of ER,DFD and database design.Analyze the project requirementsCreate the ER,DFD and database which can be used for project development.Assessment Strategies aligned to LO: Submission of the hardcopy, presentationTechnology Tools used along with their Purpose: Google drive- for sharing the documents SOFTWARE ENGINEERINGAssignment Learning Objectives: To Evaluate relevant to the topic. **Assessment Strategies aligned to LO:**To understand the Software Engineering Design Concepts and the prinnciples.To develop a strategic approach to define how Design elements occurred. **Technology Tools used along with their Purpose:**Assignment upload in GOOGLE CLASSROOM

Evaluation Rubrics

SUBJECT : DBMS Presentation (Content and explanation)- 10 marksHardcopy submission-5 marksInnovative idea/ Need for the chosen topic- 5 marks SUBJECT :SOFTWARE ENGINEERING **Evaluation Rubrics**

Criteria	Max. Marks	Very Good	Good	Satisfactory	Needs Improvement
Understanding of Concepts related to Context of Software Engineering, Evolution of Software Design.	**5**	**(5 marks)**	**(4 marks)**	**(3 marks)**	**(2 mark)**
		The student is able to conceive, understand and present the concepts very clearly taught in the class	The student is able to present the concepts almost clearly	The student is able to present the concepts with little difficulty	The student is not able to present concepts clearly
Able to analyze Design elements.	**5**	**(5 marks)**	**(4 marks)**	**(3 marks)**	**(2 mark)**
		The student is able to analyze and relate the concepts Architectural, Interface and Component Design scenario very clearly	The student is able to analyze and relate the concepts with Design elements almost clearly	The student is able to analyze and relate the concepts with Design elements with little difficulty	The student is not able to analyze and relate the concepts with Design elements..

Component/Task 2

Learning Objective

Assessment Strategies aligned to LO: To enable the students understand and remeber the concepts and impacts of Design concepts in Software Engineering. To enable the students understand the level of elements in the Design process.

Assessment Strategies aligned to LO: Five 2 marks Questions.

Assessment Strategies aligned to LO: To enable the students understand and remeber the concepts and impacts of Design concepts in Software Engineering. To enable the students understand the level of elements in the Design process.

Assessment Strategies aligned to LO: Five 2 marks Questions.

Evaluation Rubrics

SOFTWARE ENGINEERING Evaluation Rubrics:Very Good:90% and above.Good:70% and above. Avearge 50% and abovePoor:less than 50%

Course Plan Reference Materials

1. csc331-Reference

III Semester

CSC331: Database Management Systems and Software Engineering

Essential Reading

[1] Elmasri & Navathe, *Fundamentals of Database Systems,* 5th Edition, Addison – Wesley, 2007.

Recommended Reading

[1] O`neil Patric and O`neil Elizabeth, *Database Principles Programming and Performance,* 2nd Edition, Margon Kaufmann Publishers Inc., 2001.

[2] Silberschatz, Korth, Sudarshan, *Database System Concepts*, 5th Edition, McGraw Hill, 2006.