Course Outcomes & CO-PO-PSO Mapping and Justification

Subject	Database Management System	17CS53
COURSE OUTCOMES:		
CO No.	**On completion of this course, students will be able to:**	**Cognitive Level**
17CS53.1	Summarize the concepts of database objects; enforce integrity constraints on a database using RDBMS.	L2 Understand
17CS53.2	Use Structured Query Language (SQL) for database manipulation	L3 Apply
17CS53.3	Design simple database systems for some application to interact with databases	L6 Design
17CS53.4	Implement normalization algorithms using database design theory for different applications	L6 Design
17CS53.5	Analyze and implement transaction processing, concurrency control and database recovery protocols in databases.	L2 Understand

CO-PO-PSO MAPPING

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
17CS53.1	3	2	1	-	-	-	-	-	-	-	-	2	2	-	-
17CS53.2	2	1	2	1	3	-	-	-	-	-	-	1	3	-	-
17CS53.3	2	1	2	1	2	-	-	-	-	-	-	1	2	-	-
17CS53.4	2	3	-	-	1	-	-	-	-	-	-	2	3	-	-
17CS53.5	1	1	2	1	-	-	-	-	-	-	-	1	2	-	-
17CS53	**2.0**	**1.6**	**1.8**	**1.0**	**2.0**	**-**	**-**	**-**	**-**	**-**	**-**	**1.4**	**2.4**	**-**	**-**

CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
17CS53.1	PO1	3	The students will be able to determine the requirements of the real world database applications with some knowledge of engineering fundamentals to design conceptual schema.
	PO2	2	Able to identify, formulate, review, and analyze real world problems to define the conceptual data base using the principles of mathematics and engineering sciences.
	PO3	1	A Database designer can able to design a conceptual schema for understanding the Entities, Attributes and Relationships of the real world problem.
	PO12	2	Moderately mapped as students can identify the changing trends in engineering knowledge by building a database for any application.
	PSO1	2	Understand data models to build any application software.
17CS53.2	PO1	2	Able to write SQL queries with knowledge of mathematics to interact with the designed database.
	PO2	1	The Students can develop database applications with SQL to interact with the database.
	PO3	2	Students will be able to understand the formulation and working of SQL queries
	PO4	1	A Database designer can choose appropriate procedure, data set and test cases to analyze data and build a valid database.
	PO5	3	Able to use modern tools to interact with the database using basic SQL commands.
	PO12	1	With the change of technologies students will be able to adopt themselves with different SQL versions.
	PSO1	3	Develop an application software using SQL commands.
17CS53.3	PO1	2	Able to write SQL queries with knowledge stored procedures, triggers to interact with the designed database application.
	PO2	1	Students will be able to classify different indexing schemes used in retrieval.
	PO3	2	Students gain competency in PL/SQL programming.
	PO4	1	A Database designer can choose appropriate database connectivity to interact with a database.
	PO5	2	Able to use modern tools to interact with the database.
	PO12	1	With the change of technologies students will be able to adopt themselves with different SQL versions.
	PSO1	2	Develop an application software using SQL commands.
17CS53.4	PO1	2	Students will be able to identify different normalization procedures used in database design
	PO2	3	Students will gain knowledge in classifying different normal forms

	PO5	1	Students will be able to apply proper normalization for developing well-tuned database
	PO12	2	With the change of normalization schemes students will be able to adopt themselves with different SQL.
	PSO1	3	Design and develop normalized database application.
17CS53.5	PO1	1	Students will be able to describe transaction processing and related issues
	PO2	1	Students will be able to classify different concurrency control techniques
	PO3	2	Students gain competency in understanding different query processing & optimization
	PO4	1	Students can able to choose appropriate concurrency control techniques and recovery protocols in database.
	PO12	1	Students can analyze the transactions to achieve feasibility, viability and sustainability.
	PSO1	2	Design a serializable transaction of a database application.

Prepared by: HoD

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