

## LESSON PLAN

<b>Department: CSE</b>		<b>Semester: 4<sup>th</sup> , Name of Faculty : SMT. KUMARI JYOTI</b>
<b>Subject: Database Management System (DBMS)</b>	<b>No. of days/ week Class allotted: 4</b>	<b>Effective From Date: 04.02.2025</b>
		<b>No. of Week- 15</b>
		<b>Topic to be Covered:</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory</b>
<b>1<sup>st</sup></b>	<b>1st</b>	<b>UNIT 1: BASIC CONCPETS OF DBMS</b>
	<b>2nd</b>	<b>1.1</b> Purpose of database Systems
	<b>3rd</b>	<b>1.2</b> Explain Data abstraction
	<b>4th</b>	<b>1.3</b> Database users
<b>2<sup>nd</sup></b>	<b>1st</b>	<b>1.4</b> Data definition language
	<b>2nd</b>	<b>1.5</b> Data Dictionary
	<b>3rd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>4th</b>	<b>UNIT 2: DATA MODELS</b>
<b>3<sup>rd</sup></b>	<b>1st</b>	<b>2.1</b> Data independence
	<b>2nd</b>	<b>2.2</b> Entity relationship models
	<b>3rd</b>	<b>2.3</b> Entity sets and Relationship sets
	<b>4th</b>	<b>2.4</b> Explain Attributes
<b>4<sup>th</sup></b>	<b>1st</b>	<b>2.5</b> Mapping constraints
	<b>2nd</b>	<b>2.6</b> E-R Diagram
	<b>3rd</b>	<b>2.7</b> Relational model
	<b>4th</b>	<b>2.8</b> Hierarchical model
<b>5<sup>th</sup></b>	<b>1st</b>	<b>2.9</b> Network model
	<b>2nd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>3rd</b>	<b>UNIT 3: RELATIONAL DATABASE</b>
	<b>4th</b>	<b>3.1</b> Relational algebra
<b>6<sup>th</sup></b>	<b>1st</b>	<b>3.2</b> Different operators select
	<b>2nd</b>	<b>3.2.1</b> project, join , simple Examples
	<b>3rd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>4th</b>	<b>UNIT 4: NORMALIZATION IN RELATIONAL SYSTEM</b>
<b>7<sup>th</sup></b>	<b>1st</b>	<b>4.1</b> Functional Dependencies
	<b>2nd</b>	<b>4.2</b> Lossless join
	<b>3rd</b>	<b>4.3</b> Importance of normalization
	<b>4th</b>	<b>4.4</b> Compare First second and third normal forms
<b>8<sup>th</sup></b>	<b>1st</b>	<b>4.5</b> Explain BCNF

	<b>2nd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>3rd</b>	<b>UNIT 5: STRUCTURED QUERY LANGUAGE</b>
	<b>4th</b>	<b>5.1 Elementary idea of Query language</b>
<b>9<sup>th</sup></b>	<b>1st</b>	<b>5.2 Queries in SQL</b>
	<b>2nd</b>	<b>5.3 Simple queries to create</b>
	<b>3rd</b>	<b>5.3.1 Update</b>
	<b>4th</b>	<b>5.3.2 insert in SQL</b>
<b>10<sup>th</sup></b>	<b>1st</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>2nd</b>	<b>UNIT 6: TRANSACTION PROCESSING CONCEPTS</b>
	<b>3rd</b>	<b>6.1 Idea about transaction processing</b>
	<b>4th</b>	<b>6.2 Transaction &amp; system concept</b>
<b>11<sup>th</sup></b>	<b>1st</b>	<b>6.3 Desirable properties of transaction</b>
	<b>2nd</b>	<b>6.4 Schedules and recoverability</b>
	<b>3rd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>4th</b>	<b>UNIT 7: CONCURRENCY CONTROL CONCEPTS</b>
<b>12<sup>th</sup></b>	<b>1st</b>	<b>7.1 Basic concepts</b>
	<b>2nd</b>	<b>7.2 Locks</b>
	<b>3rd</b>	<b>7.2.1 Live Lock</b>
	<b>4th</b>	<b>7.2.2 Dead Lock</b>
<b>13<sup>th</sup></b>	<b>1st</b>	<b>7.3 Serializability (only fundamentals)</b>
	<b>2nd</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
	<b>3rd</b>	<b>UNIT 8: SECURITY AND INTEGRITY</b>
	<b>4th</b>	<b>8.1 Authorization and views</b>
<b>14<sup>th</sup></b>	<b>1st</b>	<b>8.2 Security constraints</b>
	<b>2nd</b>	<b>8.3 Integrity Constraints</b>
	<b>3rd</b>	<b>8.4 Discuss Encryption</b>
	<b>4th</b>	<b>1. Doubt Clearing class</b> <b>2. Quiz test</b> <b>3. Assignment</b>
<b>15<sup>th</sup></b>	<b>1st</b>	<b>Revision</b>
	<b>2nd</b>	<b>Revision</b>
	<b>3rd</b>	<b>Previous Year Question Discussions</b>
	<b>4th</b>	<b>Previous Year Question Discussions</b>

Signature of Faculty

HOD,  
Senior Lecture, CSE  
Govt. Polytechnic,  
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