

Maharashtra State Board of Technical Education, Mumbai
TUTORIAL PLAN (TP)

Academic Year: 2026-27

Institute Name: K. K. Wagh Polytechnic, Nashik

Programme and Code: Artificial Intelligence and Machine Learning (AN)

Course Name: Database Management System

Semester: IIIrd Scheme: 'K' Allocated Hrs: 15

Class: SYAN-NOVA

Date: 16/06/2026

Institute Code: 0078

Course Index: 301

Course Abbr. Code: DMS-313302

Name of Faculty: Mrs. J. S. Mahajan

- **Course Outcomes (COs): Practical**

By learning course Database Management System (DMS-313302), Second Year students will be able to:

CO301.1 - Explain concept of database management system.

CO301.2 - Design the database for a given problem.

CO301.3 - Manage databases using SQL.

CO301.4 - Implement PL/SQL codes for a given application.

CO301.5 - Apply security and backup methods on databases.

● **Teaching-Learning and Assessment Scheme:**

Course Code	Course Title	Abbr	Course Category/s	Actual Contact Hrs./Week			SLH	NLH	credits	Paper Duration	Theory				Based on LL & TL				Based on SL		Total Marks
				CL	TL	LL					FA-TH	SA-TH	Total	Practical				SLA			
														FA-PR	SA-PR						
															Max	Max	Max	Min	Max	Min	
313302	DATABASE MANAGEMENT SYSTEM	DMS	DSC	3	1	4	2	10	5	3	30	70	100	40	50	20	25#	10	25	10	200

Abbreviations: CL- ClassRoom Learning , TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA -Summative assessment, SLA - Self Learning Assessment

Legends; # External Assessment,

- **Tutorial Plan:**

Tut. No.	Course Outcomes	Title of Tutorial	Planned Date		Actual Date	Remark/ Assessment Date with Staff sign
			From	To		
1	CO301.1 CO301.2	Tutorial No. 1 Questions On: ● Design E-R Diagram ● Three Level Architecture of Database ● E. F. Codd's Rule for RDBMS ● Data Abstraction, Instance and schema, Data independence- Logical and Physical Independence ● Overall Structure of DBMS ● Data Model, Network, Hierarchical Model	14/07/2026	21/07/2026		
2	CO301.2	Tutorial No. 2 Questions On: ● Relational Structure ● Applying Keys: ● Candidate key, Primary key, Foreign key ● Data Constraints ● Normalization Concepts ● Entity Relationship Model: ER Diagrams	04/08/2025	18/08/2025		
3	CO301.3	Tutorial No. 3 Questions On: ● DDL,DML,DCL,TCL command statement ● Joins-Inner & Outer Join, Sub Queries ● Queries using Group by, having and Order by clause, ● Operator: Relational, Arithmetic, Logical, Set ● Functions: String, Arithmetic, Date and time, Aggregate Function ● Create View Command, Updating Views, Views and Joins, Dropping Views. ● Creating Sequences, Altering Sequences, Dropping Sequences. ● Indexes : Simple Unique and Composite Index, Dropping Indexes.	25/09/2025	01/09/2025		

4	CO301.3 CO301.4	Tutorial No. 4 Questions On: • The PL/SQL Block Structure • Control Structure: Conditional Control, Iterative Control, Sequential Control. • Exception handling: Predefined Exception, User defined Exception. • Cursors: Implicit and Explicit Cursors, • Procedures: Creating, Executing and Deleting a Stored Procedure. • Functions: Creating, Executing and Deleting a Function. • Database Triggers: • Types of Triggers • Syntax for Creating Trigger	15/09/2025	22/09/2025		
5	CO301.5	Tutorial No. 5 Questions On: • Types of database users- Creating, Altering users • Protecting the data within database: Database Privileges • Granting & Revoking privileges: Grant & Revoke Command • Transaction: Concept, Properties & States of Transaction • Database Backup: Types of Failures, Causes of Failure, • Database Recovery: Roll Forward, Rollback	29/09/2025	06/10/2025		

Ms. J.S.Mahajan
(Name & Signature of Staff)

Mrs. R.Y. Thombare
(Name & Signature of HOD)