

# Govt. Polytechnic Hamirpur (H.P.)

## Lecture Planning (Theory)

Branch : Computer Engineering

Semester : 4<sup>th</sup>

Subject : Relational Database Management System Session: April-July 2021

Teacher : Er. Hem Raj, Lecturer- Computer Engg.

Laboratory:

Sr. No.	No. of Lectures	Chapter/ Unit Description	Detail of Contents	Reference Resources	Remarks
1.	1-4	Introduction to Database Systems	Database systems and its purpose. Advantages & disadvantages of database systems. Comparison of database approach, classification of database users, role of DBA	An Introduction to Database Systems by C.J. Date, Adison Wesley, MySQL. The Reference by Vikram Vaswani, TMH	
2.	5-8	Data base system concepts and Architecture	Data Models, Schemas and instances, ANSI/SPARC Architecture, The External level, The conceptual level, The internal level, Mappings, Data Independence,	-Do-	
3.	9-12	Relational Model	Relational Database Model, Relations, Attributes, Tuples, Domains, Keys	-Do-	
4.	13-16	Entity Relationship Model	Entity, Entity Set, Strong and weak entities, Attributes and keys, Relationships, Roles, Constraints, ER Diagrams	-Do-	
5.	17-20	SQL using MySQL	Object Naming conventions, keywords, database tables, view, Alias, index, Data Types	-Do-	
6.	21-24	-Do-	DDL, DML, Joins & Operators	MySQL8 Cookbook by Karthik Appigatla	
7.	25-28	-Do-	Set Operations, DCL & TCL	-Do-	
8.	29-32	Dependencies and Normalisation	Prime and Non-Prime Attributes Dependencies	-Do-	
9.	33-36	-Do-	Normalisation & Forms	An Introduction to Database Systems by C.J. Date, Adison Wesley, MySQL. The Reference by Vikram Vaswani, TMH	
10	37-40	Functions in SQL	Numeric Functions, Date & Time Functions	MySQL8 Cookbook by Karthik Appigatla	
11.	41-44	-Do-	String Functions & Aggregate Functions	-Do-	
12.	45-46	-Do-	Conversion Functions, User Defined Procedures & Functions	-Do-	


Signature of Teacher with Date


Signature of H.O.D.

**Govt. Polytechnic Sundernagar (H.P.)**  
**Practical Planning & Coverage**

Branch : Computer Engineering Semester : 6<sup>th</sup>  
 Subject : RDBMS Session : April - July 2021  
 Teacher : Er. Hem Raj, Lecturer- Computer Engg. Lab : Computer Centre

Pract. No.	Description of Practical	Reference for Procedure/ Writeup	Likely Dates	Actual Dates	Signature
1.	To install and configure MYSQL DBMS	<a href="https://www.w3schools.com/MySQL/8_Cookbook_by_Karthik_Appigatla_Packt_Publishing">https://www.w3schools.com/MySQL/8_Cookbook_by_Karthik_Appigatla_Packt_Publishing</a>	April 5,6,9,10		
2.	To create tables having columns with different data types, widths and precision	-Do-	April 12,13,16,17		
3.	To alter tables to add new columns, delete existing columns and change column names, data types and widths	-Do-	April 19,20,23,24		
4.	To apply integrity constraints to the tables.	-Do-	April /May 26,27, 30,1		
5.	To insert data of different data types in tables (INSERT statement).	-Do-	May 3,4,7,10		
6.	To view the data stored in different tables (SELECT statement).	-Do-	May 11,15,17,18		
7.	To demonstrate join operation on tables using left, right and inner join.	-Do-	May 21,22,24,25		
8.	To demonstrate different row functions	-Do-	May/June 28,29,31,1		
9.	To demonstrate group functions SUM, MAX, MIN, COUNT	-Do-	June 4,5,7,8		
10.	To use WHERE, HAVING, ORDER BY and GROUP BY clauses with SELECT.	-Do-	June 11,14,15,18		
11.	To demonstrate different string functions	-Do-	June 19,21,22,25		
12.	To execute date & time functions	-Do-	June/July 26,28,29,2		
13.	To convert data from one data type to other.	-Do-	July 2,3,5,6		
14.	To write a MySQL stored procedure that accepts parameter(s).	-Do-	July 9,12,13,16, 17		
15.	To write a MySQL function that returns whether the passed parameter is even or odd.	-Do-	July 19,20,23,24, 27		

  
Teacher's Signature

  
Signature of H.O.D.