



Month	April	May	June	July
<b>Content</b>	<b>Computer Networks-I/ Computer Networks-II/ Relational Database.</b>	<b>Relational Database/ Simple Queries in SQL/ Table creation and data Manipulation Commands</b>	<b>Table creation and data Manipulation Commands/ Grouping Records, Joins in SQL/ Interface Python with MySQL</b>	<b>Interface Python with MySQL/ Python Revision Tour-I/ Python Revision Tour-II</b>
<b>Learning Outcomes</b>	<ul style="list-style-type: none"> <li>Students will be able to :</li> <li>Define networks and its types.</li> <li>Comprehend transmission media</li> <li>Describe network devices.</li> <li>Comprehend different protocols.</li> <li>Evaluate network security concepts.</li> <li>Analyze DBMS and MySQL.</li> <li>History of SQL.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Explain SQL elements</li> <li>Implement SQL commands.</li> <li>Execute SQL function</li> <li>Create Database Tables.</li> <li>Execute DML and DDL commands</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Execute ALTER and DROP TABLE command.</li> <li>Execute SQL functions.</li> <li>Comprehend joins.</li> <li>Introduce connection of MySQL to python.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Perform insert and update queries.</li> <li>Explain python and its data types</li> <li>Describe looping statements.</li> <li>Execute simple output and input.</li> <li>Execute and Differentiate between strings, list &amp; tuples.</li> </ul>
<b>Skills</b>	Understanding/Creation	Creation/Application/Knowledge	Creation/Application/Knowledge	Creation/Application/Knowledge
<b>Software</b>	Power Point/MySQL	Power Point/MySQL	Power Point/MySQL	Power Point/MySQL
<b>Competency skills based activity / Experiential learning</b>	Create a presentation stating the importance of learning SQL. <b>Integration with: English, Commerce, Social Science.</b>	Create a database and apply SQL commands. <b>Integration with: English, Commerce, Social Science, Science and math</b>	<b>Integration with :English, math Science</b>	Create a database and perform insert and update queries. <b>Integration with: English, Math and Science</b>

**Assessment:** Class Response, Homework, Class Test and Practical Work.



Month	August	September	October	November
<b>Content</b>	<b>Python Revision Tour-II/ Working with Functions/ Project</b>	<b>Working with Functions/ Using Python Libraries File Handling/ Project</b>	<b>File Handling/ Exception Handling/ Project</b>	<b>Exception Handling/ Data Structure</b>
<b>Learning Outcomes</b>	Students will be able to : <ul style="list-style-type: none"> <li>Describe sorting techniques</li> <li>Execute and describe function and calling a function.</li> <li>Implement passing of parameters</li> <li>Comprehend scope of variables</li> <li>Create a <b>project</b> using SQL concepts.</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Illustrate properties of passed data.</li> <li>Describe libraries and modules in python.</li> <li>Implement library functions.</li> <li>Create and use data files.</li> <li>Analyze input, output and error streams</li> <li>Create a <b>project</b> using python</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Access onto a binary file</li> <li>Explain concepts of exception handling</li> <li>Analyze exception handling in python</li> </ul>	Students will be able to : <ul style="list-style-type: none"> <li>Handle multiple errors.</li> <li>Represent elementary data</li> <li>Differentiate between data structures.</li> <li>Describe stacks</li> <li>Analyze operations on data structure.</li> </ul>
<b>Skills</b>	Understanding/Creation	Understanding/Creation/Application/ Knowledge	Implementation/Creation/Application/ Knowledge	Implementation/Creation/Application/ Knowledge
<b>Software</b>	Python/Visual Studio	Python/ Visual Studio	Python/ Visual Studio	Python/ Visual Studio
<b>Competency skills based activity / Experiential learning</b>	Create a program using python function. <b>Integration with: English, Math and Science.</b>	Create a program using python <b>Integration with: : English, Math and Science</b>	<b>Create a major</b> project using python. <b>Integration with: : English, Math and Science</b>	Create a major project using MySQL. <b>Integration with: : English, Math and Science</b>

**Assessment:** Class Response, Homework, Class Test and Practical Work.