

**SARDAR PATEL UNIVERSITY**  
**Programme & Subject: M.Sc – Information Technology (Integrated)**  
**Semester: IV**  
**Syllabus with Effect from: June-2013**

<b>Paper Code: PS04CIIT04</b>	<b>Total Credit: 3</b>
<b>Title Of Paper: Relational Database Management Systems - II</b>	

Unit	Description in detail	Weightage (%)
I	<b>Relational Database Design</b> Consequences of poor database design The process of database normalization Functional dependencies Lossless joins and dependency preservation 1st Normal Form, 2nd Normal Form, 3rd Normal Form, Boyce-Codd Normal Form Examples of normalization	25%
II	<b>Basics Of PL/Sql</b> PL/Sql - Introduction And Advantages Understanding PL /Sql Block Structure Fundamentals Of PL /Sql Language - Data Types (Boolean, Char, Number, Date, Varchar2), Variables, Constants And Expressions (Case Expression) Operators Conditional Statement – If and Case Statements Controlling Loop Iterations – Loop, Exit, Exitwhen, While, For Sequential Control Statement – Goto And Null	25%
III	<b>Cursors And Exception Handling</b> Select..Into Statement Working With Cursor : Introduction, Types, Attributes And Processing (I.E. Declaring, Opening, Fetching And Closing), Using Parameterized Cursor, Using Cursor For Loop Error Handling : Introduction, Advantages Of Exceptions, Types Of Exceptions Working With User-Defined Exceptions – Declaration, Raise_Application_Error, Pragma Exception_Init, Sqlcode And Sqlerrm	25%
IV	<b>Stored Subprograms, Database Triggers and Packages</b> Stored procedures – introduction, creating, modifying, executing and dropping procedures Stored functions – introduction, creating, modifying, executing and dropping functions Database triggers – introduction, creating, modifying and dropping triggers, types of triggers Packages – meaning, advantages, creating, modifying and dropping	25%

**Basic Text & Reference Books:-**

- An introduction to Database Systems : Bipin C. Desai, Galgotia Publications Pvt. Ltd.
- Ivan Bayross : SQL, PL/SQL The programming language of Oracle, 3rd revised edition, BPB Publications



- Kevin Loney, George Koch, Oracle9i The Complete Reference , Oracle Press.
- Buluksu Lakshman : Oracle9i PL/SQL : A developer's guide, Apress, edition 2003.

**Books For Additional Reading :**

- Understanding Database Management System : S. Parthasarthy and B.W.Khalkar, First edition – 2007, Master Academy
- P. S. Deshpande : SQL/PLSQL for Oracle9i, dreamtech press, reprint edition 2009

