Computer Practical
Advanced 'C' Programming and Relational database Management System
[CORE COURSE]

Semester – II	Credits:1.5	Subject Code: BSP22009	Lectures: 40

Course Outcomes:
At the end of this course, the learner will be able to: • Solve real world computational problems. • Use all advanced concepts to develop projects. • Write the programs to solve complex Problems • Perform database management operations • Apply the fundamental concepts of RDBMS (PL/PgSQL) • Apply their mind to implement data security.

Unit 1: Advanced 'C' Programming(Section A)	20

• Assignment 1: Arrays (1-D and 2-D)
• Assignment 2:
  o Simple Pointers.
  o Pointer initialization and use of pointers.
  o Pointer Arithmetic.
  o Dynamic Memory Allocation
• Assignment 3: String handling using standard library functions
• Assignment 4: Structure and Unions
• Assignment 5:
  o File Handling
  o C Preprocessors.
  o Assignment 6: Activity	

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Practical Course on Relational Database Management Systems

Unit 2: Relational Database Design Using PLSQL	20

• Assignment 1: Stored Function
   o A Simple Stored Function
   o A Stored Function that returns
   o A Stored Function recursive
• Assignment 2: Exception Handling
   o Simple Exception- Raise Debug Level Messages
   o Simple Exception- Raise Notice Level Messages
   o Simple Exception- Raise Exception Level Messages
• Assignment 3 : Cursors
   o A Simple Cursor
   o A Parameterize Cursor
• Assignment 4 : Triggers
   o Before Triggers (insert, update, delete)
   o After Triggers (insert, update, delete)
• Assignment 5 : Database Backup
   o Using pg_dump
   o Using pg_restore	

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