

Certified PostgreSQL Database Developer (CPSDBD)

Training Certification Name	Exam	Duration
Certified PostgreSQL Database Developer	Exam Number: CPSDBD	80 Hours

Overview:

The Certified PostgreSQL Developer (CPSDBD) program is designed to equip professionals with the skills needed to effectively develop and manage applications using PostgreSQL, one of the world's most powerful open-source relational database systems. This course offers a deep dive into PostgreSQL architecture, SQL programming, advanced querying, performance optimization, and integration techniques essential for developers and engineers.

Whether you're starting your journey in database development or aiming to upgrade your backend development skills, this program provides hands-on experience, practical labs, and real-world scenarios to ensure you are job-ready.

CPSDBD validates a developer's ability to work effectively with PostgreSQL as a core application platform across enterprise, cloud, and hybrid environments

Pre-Requisite:

- Basic SQL & Linux Commands

Target Audience:

- Oracle, MySQL or Database Administrator
- Fresh graduate ICT, MIS, etc.
- Application developers working with PostgreSQL
- Backend and full-stack developers
- Software engineers building data-driven applications
- Developers transitioning from other database platforms
- Technical consultants and solution architects
- Professionals supporting enterprise or cloud-based application

Program Objectives

Domain 1 – PostgreSQL Foundations

1. Introduction to PostgreSQL
2. Installing and Configuring PostgreSQL
3. PostgreSQL Architecture
4. Database Objects and Data Types

Domain 2 – SQL Development

5. SQL Fundamentals
6. Advanced SQL Queries
7. Joins and Analytical SQL
8. Transactions and Concurrency Control

Domain 3 – Database Programming

- 9. Indexing and Query Optimization
- 10. Functions and Stored Procedures
- 11. Triggers and Automation
- 12. JSON and Modern PostgreSQL Features

Domain 4 – Application Development

- 13. Python and PostgreSQL Integration
- 14. Security and Access Control
- 15. Backup and Recovery
- 16. Monitoring and Maintenance

Domain 5 – Enterprise Development & Cloud Technologies

- 17. Docker and PostgreSQL Development
- 18. Cloud PostgreSQL Development
- 19. Development Best Practices and Enterprise Deployment

Extensive Hands-On Laboratory Exercises

The CPSDBD program includes extensive instructor-guided laboratory exercises that provide participants with practical experience in real-world PostgreSQL application development. The official laboratory guide includes hands-on exercises covering the following major topics:

- 1. PostgreSQL Installation & Development Environment Setup
- 2. Database Creation & Schema Management
- 3. Table Design & Data Modeling
- 4. Constraints & Data Integrity
- 5. Working with PostgreSQL Data Types
- 6. SQL Query Fundamentals
- 7. Advanced Querying Techniques
- 8. Joins & Analytical SQL
- 9. Transactions & Concurrency Control
- 10. Indexing & Query Optimization
- 11. Functions & Stored Procedures

Certification Exam Details

Field	Details
Course Name	Certified PostgreSQL Developer (CPSDBD)
Required Exam	CPSDBD
Number of Questions	Maximum of 90 questions
Type of Questions	Multiple-choice and performance-based
Length of Test	180 minutes
Passing Score	70% (Pass/Fail only, no scaled score)
Retirement	Usually three years after launch
Languages	English

For more details, kindly contact **33553818 or 34457597**.