



GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP  
DIRECTORATE GENERAL OF TRAINING

**COMPETENCY BASED CURRICULUM**

# **DATABASE SYSTEM ASSISTANT**

(Duration: One Year)

**CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL- 5**



**SECTOR – IT & ITES**



Directorate General of Training

# **DATABASE SYSTEM ASSISTANT**

**(Non-Engineering Trade)**

**(Revised in 2019)**

**Version: 1.2**

**CRAFTSMEN TRAINING SCHEME (CTS)**

**NSQF LEVEL - 5**

Developed By

Ministry of Skill Development and Entrepreneurship

Directorate General of Training

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## 1. COURSE INFORMATION

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During the one-year duration of Database System Assistant trade a candidate is trained on professional skill, professional knowledge and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work and extra-curricular activities to build up confidence. The broad components covered under Professional Skill subject are as below:-

The trainee learns about demonstration of various parts of computer system and practice with Microsoft Word. Familiarize with Operating System and practice with all the system application. Install Operating System and all other related application software. Configure network connection and browsing Internet. Create, format, edit a worksheet using Microsoft Excel. Create customized database files using Microsoft Access. Design and develop web pages using HTML. Design and develop web pages using PHP. Install and configure MySQL; and practice on MySQL syntax for database design. At the end of this year trainees can go on industrial visit or projects specified in the syllabus.

The trainee learns to create a table and manipulate data using query language. Select data from table using 'select' query and maintain database. Practice on transaction in database using SQL programming. Implement XML data and use it in SQL server. Design an online Database System using open source software tools. Secure a Database System by applying Information Security, Security Threats, Security Vulnerabilities and Risk Management. Implement Database System backup and restoring backup. Implement Database System security by creation of roles and functions for Database Users. Configure and use Web Server, Reporting Services tools. At the end of year trainees can go on industrial visit or projects specified in the syllabus.

***Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.***

### 5.1 LEARNING OUTCOMES (TRADE SPECIFIC)

1. Demonstrate various parts of computer system and practice with Microsoft Word following safety precautions.
2. Familiarize with Operating System and practice with all the system application.
3. Install Operating System and all other related application software.
4. Configure network connection and browsing Internet.
5. Create, format, edit a worksheet using Microsoft Excel.
6. Create customized database files using Microsoft Access.
7. Design and develop web pages using HTML.
8. Design and develop web pages using PHP.
9. Install and configure MySQL; and practice on MySQL syntax for database design.
10. Create a table and manipulate data using query language.
11. Select data from table using 'select' query and maintain database.
12. Perform transactions in database using SQL programming.
13. Implement XML data and use it in SQL server.
14. Design an online Database System using open source software tools.
15. Secure a Database System applying Information Security, Security Threats, Security Vulnerabilities and Risk Management.
16. Implement Database System backup and restoring backup.
17. Implement Database System security by creation of roles and functions for Database Users.
18. Configure and use Web Server, Reporting Services tools.