

NSDA Code 2020/ITES/DGT/03708
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CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Directorate General of Training (DGT)
Government of India, Ministry of Skill Development and Entrepreneurship,
1st and 2nd Floor, CIRTES Building
Next to Pusa ITI, Pusa Campus
New Delhi – 110012.

Name and address of submitting body:

Directorate General of Training (DGT)
Government of India, Ministry of Skill Development and Entrepreneurship,
1st and 2nd Floor, CIRTES Building
Next to Pusa ITI, Pusa Campus
New Delhi – 110012.

Name and contact details of individual dealing with the submission

Name: Shri Deepankar Mallick

Position in the organisation: Deputy Director General (C & P)

Address if different from above:

Tel number(s): 011-25847035

E-mail address: deepankar.mallick60@nic.in

List of documents submitted in support of the Qualifications File

1. Competency-based curriculum with following details:

Model Curriculum to be added which will include the following:

1. Indicative list of tools/equipment to conduct the training: Enclosed with curriculum
2. Trainers qualification: Indicated in the curriculum
3. Lesson Plan: All DGT curricula are designed indicating specific practical to be carried out during training along with details of trade theory. Based on this the

concerned instructor prepares the Lesson Plan and demonstration plan with support of IMPs developed by NIMI,DGT.

4. Distribution of training duration into theory/practical/OJT component: Indicated in the curriculum.
2. Curriculum for Core Skills (Employability Skills).

NSQC Approved

5. SUMMARY

1	Qualification Title	'DATABASE SYSTEM ASSISTANT'
2	Qualification Code, if any	DGT/1110
3	NCO code and occupation	2522.0100 - Database Administrator 2521.0202 - Junior Data Associate
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	Prepare skilled technician to undertake the job roles of Database System Assistant and will enable the trainee to design logical and physical databases or review description of changes to database design to understand how changes to be made affect physical database etc. It is long term qualification.
5	Body/bodies which will award the qualification	Directorate General of Training (DGT).
6	Body which will accredit providers to offer courses leading to the qualification	Directorate General of Training (DGT) accredits the Training providers (ITIs/ NSTIs/MSTIs/BTCs/BTPs / Industries / Establishments).
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy)	Yes. The accreditation/ affiliation norms and any amendments made from time to time are available on DGT web portal.
8	Occupation(s) to which the qualification gives access	<ul style="list-style-type: none"> • 2522.0100 - Database Administrator • 2521.0202 - Junior Data Associate
9	Job description of the occupation	The individual co-ordinates physical changes to computer databases; and codes, tests, and implements physical database, applying knowledge of database management system Establishes physical database parameters. Codes database descriptions and specify identifiers of database to database management system or direct others in coding database descriptions. Calculates optimum values for database parameters, such as amount of computer memory to be used by database,

		following manuals and using calculator etc.		
10	Licensing requirements	NOT REQUIRED		
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	NOT APPLICABLE		
12	Level of the qualification in the NSQF	Level 5		
13	Anticipated volume of training/learning required to complete the qualification	Sl. No.	Course Element	Notional Training Hours
		1	Professional Skill (Trade Practical)	1200
		2	Professional Knowledge (Trade Theory)	240
		5	Employability Skills	160
			Total	1600
14	Indicative list of training tools required to deliver this qualification	As per Annexure I of curriculum.		
15	Entry requirements and/or recommendations and minimum age	Passed 12 th class examination with Science & Mathematics or equivalent. Minimum age 14 years as on first day of academic session.		
16	Progression from the qualification (Please show	An Individual can proceed for:		

	Professional and academic progression)	Professional <ul style="list-style-type: none"> • Database System Assistant • Database System Supervisor • Manager • Entrepreneur 	Technical / Academic [] ATS CITS Diploma/ Advance Diploma (Vocational)	
17	Arrangements for the Recognition of Prior learning (RPL)	<ul style="list-style-type: none"> • Yes (For more details refer “Guidelines for Private candidate” in DGT website MIS portal). 		
18	International comparability where known (research evidence to be provided)	-		
19	Date of planned review of the qualification.	5 Yrs. from the Date of Approval		
20	Formal structure of the qualification			
	Mandatory components			
	Title of component and identification code/NOSs/ Learning Outcomes	Estimated size (learning hours)		Level
		Skills	Knowledge	
TRADE SPECIFIC				
(i)	Demonstrate various parts of computer system and practice with Microsoft Word following safety precautions.	30	06	4
(ii)	Familiarize with Operating System and practice with all the system application.	60	12	4
(iii)	Install Operating System and all other related application software.	30	06	5
(iv)	Configure network connection and browsing Internet.	60	12	5

(v)	Create, format, edit a worksheet using Microsoft Excel.	60	12	5
(vi)	Create customized database files using Microsoft Access.	60	12	5
(vii)	Design and develop web pages using HTML.	60	12	5
(viii)	Design and develop web pages using PHP.	120	24	5
(ix)	Install and configure MySQL; and practice on MySQL syntax for database design.	120	24	5
(x)	Create a table and manipulate data using query language.	60	12	5
(xi)	Select data from table using 'select' query and maintain database.	60	12	5
(xii)	Perform transactions in database using SQL programming.	120	24	5
(xiii)	Implement XML data and use it in SQL server.	60	12	5
(xiv)	Design an online Database System using open source software tools.	60	12	5
(xv)	Secure a Database System applying Information Security, Security Threats, Security Vulnerabilities and Risk Management.	60	12	5
(xvi)	Implement Database System backup and restoring backup.	60	12	5
(xvii)	Implement Database System security by creation of roles and functions for Database Users.	60	12	5
(xviii)	Configure and use Web Server, Reporting Services tools	60	12	5
CORE SKILL				

EMPLOYABILITY SKILLS				
(i)	Apply safe working practices.	-	20	5
(ii)	Comply with environment regulation and housekeeping.		20	5
(iii)	Interpret & use formal and technical communication.		20	5
(iv)	Apply the concept in productivity & quality management in day to day work to improve productivity & quality.		20	5
(v)	List and interpret various acts of labour welfare legislation.		20	5
(vi)	Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.		20	5
(vii)	Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.		20	5
(viii)	Utilize computer applications and internet to take benefit of IT developments in the industry.		20	5
Total			1600	

SECTION 1
ASSESSMENT

21	<p>Body/Bodies which will carry out assessment: Controller of Examinations, DGT</p>
22	<p>How will RPL assessment be managed and who will carry it out? DGT will carry out the RPL assessment following the below mentioned eligibility criteria for Trainee:</p> <p>Applicants aspiring to appear as Private Candidates in the AITT under CTS for award of NTC, have been categorized based on their educational background and experience. Subsequently 'Private Candidates' may be admitted under one of the following categories. Category wise 'eligibility criteria' for appearing as 'Private Candidate' in AITT under CTS has been listed below:</p> <p>Category I: Ex-trainees (successful pass-outs) of ITI</p> <p>A. Ex-trainees of ITI who already possess NTC in one of the trades under CTS, are eligible for applying as Private candidate for an allied trade, provided he/ she fulfils all the conditions regarding educational qualification etc. prescribed for that allied trade. (Refer Annexure III for list of allied trades)</p> <p>B. In addition, the applicant should possess minimum of 1 year experience (as on date of submission of application) post the date of AITT result declaration in the desired allied trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State. II.</p> <p>Category II: 'Ex-trainees (successful pass-outs) and current trainees under CoE scheme</p> <p>A. The applicant should have the minimum prescribed entry qualification and should fulfil eligibility criteria for the desired trade under CTS, in which he/she intends to appear for AITT as Private Candidate. Mapping of CoE trades, with that of regular CTS trades is provided in Annexure IV. CoE candidates must register as 'Private Candidate' under CTS in the relevant/mapped CTS trade only.</p> <p>B. There should be a minimum gap of 1 year between successful completions of CoE training i.e. from the date of result declaration to the date of submission of application for 'Private Candidate' certification.</p> <p>C. During this gap of 1 year, the candidate must have undergone Industry training or gained experience in desired trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments</p>

	<p>registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p> <p>Category III: SCVT Candidates (admitted till August 2018 session)</p> <p>A. No special provisions have been made for SCVT Trainees to enrol as 'Private Candidate'. Going forward, SCVT trainees have been granted equivalence vide G.S.R 186(E) dated 2nd March 2017 for undergoing apprenticeship training under the Apprentices Act 1961 to obtain 'NAC' (Refer Annexure V).</p> <p>B. Only for SCVT trainees admitted till August 2018 batch, provision has been made for obtaining NTC by appearing in AITT under 'Private Candidate'. Such trainees will continue to be governed by old guidelines for 'Private Candidate'.</p> <p>Category IV: Other Candidates (candidate not falling in any of the above 3 categories, including SCVT trainees enrolled from admission session 2019 onwards)</p> <p>A. The applicant should have the minimum prescribed entry qualification and should fulfil eligibility criteria for the relevant trade under CTS, in which he/she desires to appear for AITT as Private Candidate.</p> <p>B. Applicant should be minimum 21 years of age on the date of submission of application. There is no upper age limit.</p> <p>C. The applicant should possess minimum of 3 years' experience (on the date of submission of application) in the relevant trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.</p> <p>For updated information please refer to DGT web portal.</p>
<p>23</p>	<p>Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.</p> <p>(1) Assessment process: The assessment for the qualification is carried out by conducting formative assessments, and end of year examinations (Summative). The formative assessments in respect of each Learning Outcome for practical and related</p>

theory are conducted by the concerned instructors for evaluating the knowledge and skill acquired by trainees and the behavioural transformation of the trainees. This formative assessment is primarily carried out by collecting evidence of competence gained by the trainees by evaluating them at work based on assessment criteria, asking questions and initiating formative discussions to assess understanding and by evaluating records and reports. Summative assessment is carried out by All India Trade Test on Trade Theory, Trade practical and Employability Skills. The question papers for the theory Examinations contain objective type questions.

The marking pattern and distribution of marks for the qualification are as under:

Sl. No.	Type of assessment	Subject for the trade test	Marks
1	Summative Assessment	Practical	250
2		Trade Theory	100
3		Employability Skills	50
4	Formative assessment based on Learning Outcomes		200
TOTAL:			600

(2) Minimum pass marks:

The minimum pass percent for Trade Practical and Formative assessment is 60% & for all other subjects is 33%. There will be no Grace marks.

Testing and certifications for the course:

Controller of examinations, DGT carries out the assessment and issues National Trade Certificate (NTC) following the norms and guidelines issued by the Directorate from time to time.

Overall assessment strategy:

Assessment of the qualification evaluates trainees to show that they can integrate knowledge, skills and values for carrying out relevant tasks as per the defined learning outcomes and assessment criteria. The trainees may choose the preferred language for assessment. The underlying principle of assessment is fairness and transparency. While assessing the trainee,

	<p>assessor is directed to assess as per the defined assessment criteria against the learning outcomes. The evidence of the competence acquired by the trainees can be obtained by conducting theory and practical examinations, observing the trainees at work, asking questions and initiating discussions to assess, understand and evaluate records and reports. The ultimate objective of the assessment is to assess the candidates as per the defined assessment criteria for the learning outcomes.</p> <p>Specific Arrangements for assessment:</p> <ul style="list-style-type: none"> • Assessment is outcome-based. • There are formative and summative assessments in Theory and Practical. • Assessment is carried out in Trade theory, Trade Practical and Employability Skills. • While Trade Theory and Trade Practical are used for assessing Trade-related jobs and Employability skills is used to test the communication, professional language, leadership and entrepreneurship and team-work abilities of the trainee. • In addition to demonstration of theory and practical knowledge, trainees get a chance to present total personality. <p>Quality assurance activities:</p> <p>Question papers are set by external paper setters/ software generated. Evaluation of Theory Examinations in Trade and Employability Skill is done by third-party agency.</p> <p>Trade Practical is examined by External Examiner.</p>
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24. Assessment evidences

Title of Component: Formative Assessment Breakup

(on half yearly average of the learning assessment covered)

Means of assessment

Assessment will be evidence based comprising the following for each Learning Outcome:

Serial No.	Terminal Competency	Maximum Weightage (%)
1	Safety consciousness	15
2	Workplace hygiene	5

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3	Attendance/ Punctuality	10
4	Ability to follow Manuals/ Written instructions	5
5	Application of Knowledge	10
6	Skills to handle tools / equipment/ Instruments/ Devices	10
7	Economical use of materials	5
8	Working Strategy	10
9	Quality in workmanship/ Performance	15
10	VIVA	15
	Total Maximum Weightage (%)	100

Pass/Fail

The minimum pass percentage is 60% marks for formative assessment.

LEARNING OUTCOME WITH ASSESSMENT CRITERIA:

LEARNING OUTCOME (TRADE SPECIFIC)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Demonstrate various parts of computer system and practice with Microsoft Word following safety precautions.	Demonstration of various parts of computer system such as mother board, RAM, CPU, serial and parallel ports.
	Open, resize and close MS WORD. Opening, edit and save/ "save as" documents.
	Add Bullets and numbering. Create Hyperlinks. Create brochures. Create book work.
2. Familiarize with Operating System and practice with all the system application.	Using desktop, task bar, start button, title bar, menus and windows help.
	Creating, deleting and renaming of files, folders & short cuts.
	Expand compressed directories and files. Open and manage multiple director windows. View and sort files, creating and renaming files/ directories, disk operation using file manager.
	Introduction Linux – Practicing of Linux commands.
3. Install Operating System and all other related application software.	Practice on Installation of Windows 7, 8, 10, Linux.
	Installation of MS Office, Libre Office, Open source and utilities, remote control, chat, voice and video, Live CD Operations.
4. Configure network connection and browsing Internet.	Operations browsing, downloading messages, pictures from internet, sending and receiving emails, sending attachments of pictures and text information, E-chatting.
	Testing and troubleshooting of Modem. Operating of Routers, Security Implementations, Troubleshooting of internet connection.
	Operating WiFi access points/ modems, setting up of blue tooth and data sharing with mobiles.
5. Create, format, edit a worksheet using Microsoft Excel.	Practice Excel - creating various worksheets, mathematical calculations, using different formulae.
	Preparing various types of Graphs/ charts, different Chart options, colouring etc.
6. Create customized	Creating and designing tables, forms in MS Access.

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database files using Microsoft Access.	Data entering using forms/ tables with different fields, modifying structure, generating queries, reports.
7. Design and develop web pages using HTML.	Practice on creation of HTML tags for text, images, links, list, simple layouts, complex layouts, tables, frames, style, internet style sheets.
	Creating Tables - Adding and Deleting Rows, Columns, and Cells, Background Colors.
	Practicing Hyperlinks - To 'Outside'/ External Sites, Internal Link, Bookmark, Email Addresses, Rollover Styles, Target Frames, Practice on Marquees.
	Practice on Sample Forms Page, Date and Time Stamp, Counter, Page Transitions, Changing your Password.
	Practice on creating Frames, Shared Borders.
8. Design and develop web pages using PHP.	Installation of Apache Web Server.
	Practice on simple PHP programming to test events.
	Practicing the while and do-while statement.
	Practicing user defined functions, dynamic functions, variable scope.
	Practice on The anatomy of a cookie, setting a cookie with PHP.
	Practice on working with the query string, creating query string.
	Practice on working with directories in PHP, checking for existence of file, determining file size.
	Working with Object constructors and destructors, Class constants, Class inheritance, Abstract classes and methods, Object serialization.
9. Install and configure MySQL; and practice on MySQL syntax for database design.	Installation of MySQL.
	Configuration of MySQL.
	Practice on MySQL syntax and creating database design.
	Importing and exporting formats.
	Practice on Database repair and archival.
10. Create a table and manipulate data using query language.	Practicing on Creation and use of database, Data type, Creation of table.
	Practicing on simple insert query and insert query using select.
11. Select data from	Select specific column.

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table using 'select' query and maintain database.	Concatenate the text value in the output.
	Practice on where clause.
	Practice on arithmetic operation, comparisons operator, and/ or operator.
	Practice on Null value, order by Top value of the table, Distinct.
12. Perform transactions in database using SQL programming.	Practice on Aggregate and Group by –Min, Max, Sum, Count, Group by, Compute and compute by Pivot.
	Practice on Sub queries – and exists, Nested sub queries, Correlated sub queries.
13. Implement XML data and use it in SQL server.	Implement XML schemas and handling of XML data.
	XML data: how to handle it in SQL Server and when not to use it, including XML namespaces.
	Import and export XML.
14. Design an online Database System using open source software tools.	Create a online database using any one of Open Tools Postgre SQL (Or) Ingres (Or) Fire Bird, (Or) Cubrid (Or) ISQL.
15. Secure a Database System applying Information Security, Security Threats, Security Vulnerabilities and Risk Management.	Practice on Information Security.
	Practice on Security Vulnerabilities.
	Practice on Risk Management.
	Practice on Securing Database.
16. Implement Database System backup and restoring backup.	Practice on configure and maintain back up strategy, manage different back up models.
	Practice on Restoring a database to point in time.
	Practice on Restoring in, create a restore strategy for redundant server.
17. Implement Database System security by creation of roles and functions for Database Users.	Manage logins and server roles Configure server security; secure the SQL Server using Windows Account / SQL Server accounts, server roles; create login accounts.
	Manage database permissions Configure database security; database level, permissions; protect objects from being modified.

	Create database user accounts; contained login; Troubleshoot security; Manage certificates and keys; endpoints
18. Configure and use Web Server, Reporting Services tools.	Web Sever configuration Manager. Web server management studio. Reporting services configuration.

LEARNING OUTCOME (CORE SKILL)	
LEARNING OUTCOME	ASSESSMENT CRITERIA
EMPLOYABILITY SKILLS	
1. Apply safe working practices	Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements and according to site policy.
	Recognize and report all unsafe situations according to site policy.
	Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.
	Identify, handle and store / dispose off dangerous goods and substances according to site policy and procedures following safety regulations and requirements.
	Identify and observe site policies and procedures in regard to illness or accident.
	Identify safety alarms accurately.
	Report supervisor/ Competent of authority in the event of accident or sickness of any staff and record accident details correctly according to site accident/injury procedures.
	Identify and observe site evacuation procedures according to site policy.
	Identify Personal Productive Equipment (PPE) and use the same as per related working environment.

	Identify basic first aid and use them under different circumstances.
	Identify different fire extinguisher and use the same as per requirement.
2. Comply with environment regulation and housekeeping	Identify environmental pollution & contribute to the avoidance of instances of environmental pollution.
	Deploy environmental protection legislation & regulations
	Take opportunities to use energy and materials in an environmentally friendly manner.
	Avoid waste and dispose waste as per procedure
	Recognize different components of 5S and apply the same in the working environment.
3. Interpret & use formal and technical communication.	Obtain sources of information and recognize information.
	Use and draw up technical drawings and documents.
	Use documents and technical regulations and occupationally related provisions.
	Conduct appropriate and target oriented discussions with higher authority and within the team.
	Present facts and circumstances, possible solutions & use English special terminology.
	Resolve disputes within the team.
	Conduct written communication.
4. Apply the concept in productivity & quality management in day to day work to improve productivity & quality.	Explain the concept of productivity and apply during execution of job.
	Explain the concept of quality tools and apply during execution of job.
5. List and interpret various acts of labour welfare legislation.	Explain basic concept of labour welfare legislation, adhere to responsibilities and remain sensitive towards such laws.
	Knows benefits guaranteed under various acts.
6. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally	Explain the concept of energy conservation, global warming, pollution and utilize the available resources optimally & remain sensitive to avoid environment pollution.
	Explain standard procedure for disposal of waste.

using available resources.	
7. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	<p>Explain personnel finance and entrepreneurship.</p> <p>Explain role of various schemes and institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non-financing support agencies to familiarize with the policies/ programmes, procedure & the available scheme.</p> <p>Prepare a report to become an entrepreneur for submission to financial institutions.</p>
8. Utilize computer applications and internet to take benefit of IT developments in the industry.	<p>Explain the basic hardware of personal computer.</p> <p>Use common application software viz., word, excel, power point etc., in day to day work.</p> <p>Awareness about useful internet websites, search relevant information pertaining to the assigned tasks.</p>

SECTION 2
25. EVIDENCE OF LEVEL

OPTION A

Title/Name of qualification/component: Database System Assistant			Level: 5
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
Process	<p>Requires Well Developed Skill with Clear choice of procedures in familiar context</p> <ul style="list-style-type: none"> • Configure network connection and browsing Internet. • Create customized database files using Microsoft Access. • Install and configure MySQL; and practice on MySQL syntax for database design. • Implement XML data and use it in SQL server. • Design an online Database System using open source software tools. 	<p>The learner is expected to operate WiFi access points/ modems; test & troubleshoot modems, internet connection ; operate routers, implements proper information security system & risk management system; create & design tables, forms in MS Access; feeds data using different forms/tables with different fields, modifying structure, generating queries, reports; installs & configures MySQL; repairs & archives Database; create online database using any one of Open Tools Postgre SQL (Or) Ingres (Or) Fire Bird, (Or) Cubrid (Or) ISQL;</p> <p>The above tasks are performed by the learner which requires well developed skills with clear choice of procedures.</p> <p>Hence the NSQF level as per this descriptor will</p>	5

Title/Name of qualification/component: Database System Assistant			Level: 5
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
		be 5.	
Professional knowledge	<p>Knowledge of facts in a field of work or study</p> <ul style="list-style-type: none"> • Microsoft WORD, Microsoft EXCEL, MS Windows, Microsoft Access, PHP (Hyper Text Pre Processor) <p>Knowledge of Principles and general concepts in a field of work or study</p> <ul style="list-style-type: none"> • Different configurations of Computer system and its peripherals, Compatible 	The learner is expected to know the basic features and functions of Operating systems, different types of operating systems; features and applications of Microsoft word; concept of word processing; mail merge, book marks, bullets & numbering, hyperlinks, creation of brochures/bookworks etc. He/she has the awareness about pre-installation prerequisites, installation procedure, rollback or un-installation procedure etc.	5

Title/Name of qualification/component: Database System Assistant			Level: 5
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<p>with different hardware/ software.</p> <p>Knowledge of processes in a field of work or study</p> <ul style="list-style-type: none"> • Selection of Data (using select query) • Transact-SQL Programming 	<p>The learner demonstrates the knowledge of facts, principles, processes & general concepts of this trade.</p> <p>Hence the NSQF level as per this descriptor will be 5.</p>	
Professional skill	<ul style="list-style-type: none"> • Demonstrate various parts of computer system and practice with Microsoft Word. • Install Operating System and all other related application software. • Create, format, edit a worksheet using Microsoft Excel. • Design and develop web pages using HTML. • Implement Database System backup and restoring backup. 	<p>The learner is expected to develop the skill of creating document, non-documents files; templates; tables. He/she is able to insert pictures and videos; use all menu bar features/ all tool standard bar features; install MS Office, Libre Office, Open source and utilities, remote control, chat, voice and video, Live CD Operations etc. Creates various worksheets, mathematical calculations, using different formulae. He/she is bale to configure and maintain back up strategy, manage different back up models; restore database from corrupted drive.</p> <p>Thus the learner demonstrates a range of</p>	5

Title/Name of qualification/component: Database System Assistant			Level: 5
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
		<p>cognitive & practical skills required to accomplish the above tasks & solves problems by selecting & applying basic methods & tools.</p> <p>Hence the NSQF level as per this descriptor will be 5</p>	
Core skill	<p>Desired Mathematical Skills</p> <ul style="list-style-type: none"> • Explain science in the field of study including simple machine. <p>Understanding of social/political</p> <ul style="list-style-type: none"> • Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth. <p>Organizing information and communication</p> <ul style="list-style-type: none"> • Interpret & use formal and technical communication. 	<p>The learning outcomes for example 'Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth ' and 'Interpret & use formal and technical communication' are the learning outcomes where the learner needs to display desired mathematical skill; understanding of social, political; and some skill of collecting and organising information, communication.</p> <p>Hence NSQF Level is 5 for this descriptor.</p>	5
Responsibility	<ul style="list-style-type: none"> • Create a table and manipulate data using query language. • Select data from table using 'select' 	<p>The learner is able to create & use database , data type & tables; inserts query using select, updates & deletes query; configures and</p>	5

Title/Name of qualification/component: Database System Assistant			Level: 5
NSQF Domain	Outcomes of the Qualification/Component	How the outcomes relates to the NSQF level descriptors	NSQF Level
	<p>query and maintain database.</p> <ul style="list-style-type: none"> • Implement Database System security by creation of roles and functions for Database Users. • Configure and use Web Server, Reporting Services tools. 	<p>maintains back up strategy; creates restore strategy for redundant server on his own.; designs and develops web pages using PHP. He/ she is able to resolve conflicts among the team members & acts as a responsible member in the organisation</p> <p>Thus learner is responsible for his own work & learning & takes some responsibility of other's work & learning.</p> <p>Hence NSQF Level 5 is justified for this descriptor.</p>	

SECTION 3
EVIDENCE OF NEED

26	<p>What evidence is there that the qualification is needed? What is the estimated uptake of this qualification and what is the basis of this estimate?</p> <table border="1" data-bbox="339 551 1390 1697"> <thead> <tr> <th data-bbox="339 551 627 692">Basis</th> <th data-bbox="627 551 1390 692">In case of other Awarding Bodies (Institutes under Central Ministries and states departments)</th> </tr> </thead> <tbody> <tr> <td data-bbox="339 692 627 1072">Need of the qualification</td> <td data-bbox="627 692 1390 1072">IT & ITES Sector has a significant presence of organized as well as unorganized skilled manpower requirement. This sector is poised to grow exponentially in the years to come and is highly labor intensive and there are many emerging trends in this sector. Hence the qualification has been designed keeping in view to cater to the ever-increasing demand of skilled manpower in consultation with stakeholders.</td> </tr> <tr> <td data-bbox="339 1072 627 1498">Industry Relevance</td> <td data-bbox="627 1072 1390 1498">The job role defined for the qualification is as per the National Classification of Occupations 2015 which is developed by Employment Directorate under the ministry of Labour and Employment in collaboration with different industry partners and as per ILO guidelines. Moreover, the training is imparted in ITIs/NSTIs/MSTIs/BTC/ BTPs/ Industries / Establishments etc. where such requirement is available. This justifies the qualification is very much relevant for industry.</td> </tr> <tr> <td data-bbox="339 1498 627 1626">Usage of the qualification</td> <td data-bbox="627 1498 1390 1626">The Proposed qualification will create skilled craftsman for various establishments in different Sectors.</td> </tr> <tr> <td data-bbox="339 1626 627 1697">Estimated uptake</td> <td data-bbox="627 1626 1390 1697">The present seating capacity is 48.</td> </tr> </tbody> </table>	Basis	In case of other Awarding Bodies (Institutes under Central Ministries and states departments)	Need of the qualification	IT & ITES Sector has a significant presence of organized as well as unorganized skilled manpower requirement. This sector is poised to grow exponentially in the years to come and is highly labor intensive and there are many emerging trends in this sector. Hence the qualification has been designed keeping in view to cater to the ever-increasing demand of skilled manpower in consultation with stakeholders.	Industry Relevance	The job role defined for the qualification is as per the National Classification of Occupations 2015 which is developed by Employment Directorate under the ministry of Labour and Employment in collaboration with different industry partners and as per ILO guidelines. Moreover, the training is imparted in ITIs/NSTIs/MSTIs/BTC/ BTPs/ Industries / Establishments etc. where such requirement is available. This justifies the qualification is very much relevant for industry.	Usage of the qualification	The Proposed qualification will create skilled craftsman for various establishments in different Sectors.	Estimated uptake	The present seating capacity is 48.
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27	<p>Recommendation from the concerned Line Ministry of the Government/Regulatory Body. To be supported by documentary evidences.</p> <p>The qualification originally designed for Craftsman Training Scheme is in existence for many years and approved by DGT (Regulatory Body) under Ministry of Skill Development and Entrepreneurship, Govt. of India.</p>										

28	<p>What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF? Give justification for presenting a duplicate qualification</p> <p>The qualification is originally designed and approved by DGT for the Craftsman Training Scheme and is in existence for many years. No such duplicate qualification of same duration and competencies exists.</p>
29	<p>What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated? Specify the review process here</p> <ul style="list-style-type: none"> • The research wing of CSTARI & DGT reviews and updates the qualification, in consultation with industries and other stakeholders, on a regular basis by conducting trade committee meetings. • DGT will monitor any duplicity by comparing existing qualifications with upcoming ones in the National Qualifications Register (NQR) and relevant sectors.

SECTION 4
EVIDENCE OF PROGRESSION

30 **What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector? Show the career map here to reflect the clear progression**

On completion of the training the trainee will have an opportunity to move in vertical/horizontal pathways to promote to higher designations. The learner can further undergo other specialised courses to excel in the relevant field.

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graph LR
    A[Database System Assistant] --> B[Database System Supervisor]
    B --> C[Manager]
    B --> D[Entrepreneur]
  
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