

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

NSDA Reference

To be added by NSDA

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

Name and address of submitting body:

Directorate General of Training (DGT),
Ministry of Skill Development & Entrepreneurship (MoSDE)
Shram Shakti Bhawan, Rafi Marg,
New Delhi

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List of documents submitted in support of the Qualifications File

1. Qualification document - Web Designing & Publication Assistant
2. Curriculum for Web Designing & Publication Assistant under Information and Communication Technology Sector for Modular Employable Scheme (MES)
3. Executive Summary of Human Resource and Skill Requirements in IT & ITes by NSDC
4. List of number of trainees of trained under MES in 2015-16 & 2016-17.
5. List of candidates' placed for this course in 2016.

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

SUMMARY

Qualification Title	Web Designing & Publication Assistant
Qualification Code	ICT 707
Nature and purpose of the qualification	Nature of the Qualification is NCVT Certificate in job role Web Designing & Publication Assistant Main Purpose of the Qualification is to get conversant with the concepts of Computer Fundamentals, web design, Photoshop and web publishing in an organisation
Body/bodies which will award the qualification	National Council for Vocational Training (NCVT)
Body which will accredit providers to offer courses leading to the qualification	GOI Ministries and State departments who have adopted MES qualifications accredit training providers for their programs and schemes (only in case of SDIS schemes Training providers accredited by States on behalf of NCVT)
Body/bodies which will carry out assessment of learners	Independent Agency empanelled as Assessing Bodies (ABs)
Occupation(s) to which the qualification gives access	After completion of the course the trainees shall be qualified for one or more of the following job roles: 1. Web Development 2. Office Automation 3. Publication Assistant 4. Web Designer 5. Computer and Information Systems Assistant
Licensing requirements	-NA-
Level of the qualification in the NSQF	Level 3
Anticipated volume of training/learning required to complete the qualification	1000 Hours
Entry requirements and/or recommendations	Passed 10th class examination
Progression from the qualification	The trainee can rise vertically to higher qualification. Can start its own business set up of Web designing.
Planned arrangements for the Recognition of Prior learning (RPL)	RPL arrangements are not planned under this qualification.
International comparability where known	-NA-
Date of planned review of the qualification.	2 years after approval of the Qualification
Formal structure of the qualification	

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

Title of component and identification code.	Mandatory/ Optional	Estimated size (learning hours)	Level
(i) DGT/MES/ICT/N01: Understand the Fundamentals of Computer and Windows OS	M	50	3
(ii) DGT/MES/ICT/N02: Understand the Elementary Structure of MS Office and able to use basic tools of MS-Word and MS- Excel	M	75	3
(iii) DGT/MES/ICT/N19: To have the basic awareness of Internet concepts, web, HTML and Multimedia objects	M	125	3
(iv) DGT/MES/ICT/N20: Acquire the Basic Concepts of computer Graphics and web design basics and their applications.	M	150	3
(v) DGT/MES/ICT/N21: Understanding of the digital imaging, photoshop and web publishing softwares and their tools.	M	150	3
(vi) DGT/MES/ICT/N22: to have the knowledge of fundamentals of Javascripting, web layout design standards	M	200	3
(vii) DGT/MES/ICT/N23: To have awareness of Cyber security; information security, overview of security threats, information security vulnerability, risk management, Risk Management, Software Development Security, Legal Framework, Privacy Protection, Audit and Testing	M	250	3
Total		1000	

Please attach any document giving further detail about the structure of the qualification – eg a Curriculum Document or a Qualification Pack.

Curriculum for Accounts Assistant using Tally under Information and Communication Technology Sector for Modular Employable Scheme (MES) attached as annexure.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

SECTION 1 **ASSESSMENT**

Body/Bodies which will carry out assessment:

DGT empanelled Assessing Bodies (ABs)

How will RPL assessment be managed and who will carry it out?

RPL arrangements are not planned under this qualification.

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.

Criteria for selection of Assessment body

Minimum Eligibility Criteria

- The applicant shall be a legal entity, registered in India.
- The applicant should have in last two years carried out competency / skill assessment for minimum 1000 persons or should have trained minimum 1000 persons and got tested by some agencies such as NCVT, Sector Skill Council, State, board/ council and reputed industry Association. Organizations having experience in testing of competencies would be preferred.
- In case more number of applications is received, preference will be given to those organizations that have trained/assessed larger number of persons.
- The applicant is not a Training Provider (TP) in the same sector and in same State, but it can be TP in other States, other Sectors or other scheme.
- The applicant shall have access to technically qualified personnel of repute and integrity in different industrial trades and technology.
- The applicant shall develop dedicated human resource for handling the processes in assessment process.
- The applicant shall declare its linkages with other organization(s), if any to ensure independence and avoid any conflict of interest.
- Institutions/ Firms blacklisted by any Government Department shall not be considered in this RFP.
- The Applicant shall provide the information and supporting documents towards their claims.
- Initially provisional empanelment will be awarded to the organizations based on the evaluation of eligibility of the Assessing Body based on the criteria.
- Based on the module and sector that will be handled by the assessor, the assessing body shall send its assessor for competency evaluation in the institutions which will be notified by DGT time to time. The assessor will be assessed to ascertain the competency to carry out competency based assessment.
- Final empanelment would be granted subject to the Assessing Body fulfilling the following conditions of getting the competencies of 2 assessors of each module per State evaluated in the institutes notified by the DGT. Testing charges for evaluating the competencies of the assessors will be borne by the Assessing Bodies.

(1) Assessment process:

The assessment process aims to test and certify the competency of the persons through Assessing Bodies who seek certification of their skills acquired informally or the persons who have been trained at the registered TPs. The competency assessment of the candidate is being done by the Assessor Competency Evaluation (ACE) qualified assessor of the independent Assessing Bodies (AB) which is not involved in training delivery, to ensure an impartial assessment. ACE is conducted to evaluate the competency of the assessor. In the assessment process, identification of competency, ways to measure the competency and deciding on the type of evidence that has to be collected are the responsibility of the Assessing bodies whereas administering the assessment and collecting the evidence and reporting the results are the responsibility of the assessors. The assessment process consists of following components:

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

Theory Test:

- It must assess the knowledge which is essential for a person to do the job. Without this knowledge, the person will not be able to do the job.
- The questions shall be of objective type involving selection of correct response.
- The question paper should contain sketches/ diagrams/ photographs/ drawing to overcome the problems of reading comprehension.
- The test shall be of short duration.

Practical Test:

It shall be able to test:

- Manipulative skills to handle tools and equipment.
- Speed in doing work.
- Accuracy maintained
- Quality in workmanship.
- Sequence of performance.
- Economical use of material.
- Neatness & housekeeping.
- All the competencies prescribed in the course curriculum.

The Assessment Parameters adopted during assessment:

- Knowledge of equipment, limitation of use of tools and equipment, and methods & procedure.
- Understanding of functioning of equipment & tool, criteria to be used in selecting tools for given job, and the process of measurement.
- Skill in finishing to required measurement, handling measurement & calculations, handling tools and equipment with ease, finishing neatly.
- Abilities to take corrective steps, use correct work habits, take measurements, complete the job within stipulated time, and adopt safe practices.
- Attitude towards the work, accurate & precise work and co-workers and supervisor.

(2) Duration of Test:

The duration of test vary according to the task. Theory test shall be of 1 hour duration and practical test for engineering trade shall be 6 to 8 hours minimum and non-engineering it shall be of 4 hours minimum. Assessing Bodies while preparing practical test shall ensure that candidate shall be tested on all the competencies prescribed in the course module.

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

Terminal competency	Maximum marks
Application of knowledge	30
Care for tools & equipment	15
Economic use of materials	15
Safety consciousness	10
Speed	10
Accuracy	15
Quality of workmanship	20
Amount of work	15
No. of attempts	10
Attitude	10
Total maximum marks for Practical	150
Maximum marks for theory	50

(3) **Minimum pass mark:**

Minimum passing marks for Practical is 60%

Minimum pass marks for theory is 40%

(4) **Testing and certifications process for the course:**

Pre- Assessment

- Regional Directorate of Apprenticeship Training (RDAT) allot batches to the Assessing Bodies on rotational basis depending on the presence of assessing body in that region sector wise and the assessing

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

body in coordination with Training Provider and assessor should confirm and schedule the assessment.

- The Assessing Body confirms the date of assessment in consultation with Training Provider and communicate to the RDAT/State.
- The Assessing Body forms a panel of ACE qualified assessors of high repute and integrity, sector wise and location wise.
- The assessment of the candidates is done by the Assessing Bodies in designated Testing Centre (TC). The Testing Centre where the assessment is carried out and Testing Centre can be Training Center also. The Assessing Body select the TC based on the location, accessibility and the infrastructure facilities available for conducting the test.
- The testing center is approved by the RDAT incase of courses run by DGT,MSDE. Incase where the courses are run by the Sate Govt., TC is approved by State Govt.. Training conducted by other dept. at their accredited Training Centre, same training centre is designated as Testing centre.
- The Assessing Body provide details of selected TC along with skill areas in which assessment can be done at the TC, to the RDAT and respective States/UTs.
- The Assessing Bodies depute ACE qualified assessors for assessments whose details are furnished by Assessing Bodies to DGT in advance.
- Assessing Body has to communicate to the Testing Centre following:
 - Details of the candidates to appear for assessment in various MES courses.
 - Details of Assessors selected with their contact details.
 - Requirement of infrastructure, raw material etc.
 - Testing charges to be reimbursed to Testing Centre

Preparation of assessment tools and prerequisites:

- The assessment tools contain components for testing the knowledge, application of knowledge and demonstration of skill. The knowledge test is objective paper based test or short structured questions based. The application of knowledge is verified based on questioning or seeking response for a case. Demonstration of skill is verified based on practical demonstration by the candidate.
- The type of assessment tools to be used for assessment are to be prepared in advance by the assessing body in accordance to the guidelines as prescribed below:
 - Define the performance objective – This is based on the course objectives and competency in workplace as prescribed by MES curriculum. The written tests and practical tests assess all the competencies mentioned in course curriculum.
 - In case of practical test, the operations which are to be observed in case of process test (how a particular task is being carried out) are clearly mentioned and the specifications of the final product in case of product test (the task in itself).
 - List of tools, infrastructure, and equipment to carry out the assessment are prepared based on the test instruments that are planned to be used.
 - Written directions are given to the candidates before the task is attempted.
 - Scoring system, observations and rating is prepared for each competency which is going to be assessed.

Pre-assessment activities for Assessor at the Testing Centre

- Verification of student credentials: The assessor check the application form submitted by the candidates and verify the photo pasted on the forms with candidates who are taking assessment in accordance with checklist
- Verification of testing centre for adequate infrastructure, tools and equipment: The assessor verifies the availability of infrastructure, tools and equipment for carrying out both theory and practical assessments. The minimum requirement prescribed under the MES modules is used as benchmark.
- Attendance verification: The assessor checks the attendance register of candidates and instructors until the time biometric attendance system is put in place. Once the biometric attendance system is in place, the biometric attendance of assessors along with that of trainees/candidates has to be captured during the assessment at the start as well as end of theory and practical test.
- Attendance during assessment: The assessor takes the attendance of all the students who appear for assessment after the successful verification of the student credentials and before the start of the assessment. The assessor also provides his/her attendance during start and end of the practical and theory test.
- Verification of the documents related test carried out by Training Provider/ Testing Centre (TC) for candidates who were not able to produce document in support of having passed the qualification.

Assessment activities

- Before the start of assessment, read out the instructions to the students.

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

- The written test & practical test is for fixed duration as prescribed.
- It is ensured that individual attention is given to all the candidates during the practical test.
- The assessor takes photographs during the assessment process of all the students in the testing centre, the students during theory and practical tests, practical lab/workshop showing the equipment to be used for assessment, the assessor along with the students appearing for the assessment.

Post-assessment activities

- The assessor consolidates all the theory and practical test papers and ensures that all the mandatory information is filled. The total score for each student should be calculated and recorded in result sheet.
- The assessor send the attendance sheet, result sheet, answer papers by courier/post to the assessing body immediately after the completion of assessment
- Uploading outcome of the assessment and photos in portal by assessing body
- Assessing body upload the results within one week of the assessment date.
- Photos taken by the assessors during assessment are sent to respective RDATs through e-mail only. Non dispatch of photos of assessment to RDAT makes assessment void. Re-assessment of such batch is done by the Assessing Bodies on their own expenses.
- Details of assessors are emailed to RDAT at the time of uploading the outcome of the assessment. Outcome of the assessment is not accepted in case details of assessors are not emailed to respective RDAT.
- Maintaining assessment records
- Publishing of results and Certificate issue
- RDAT verifies the outcome of the assessment, details of assessors, photos and print and sign the certificates for successful candidates and send it to the respective candidates. In case of direct candidate's assessment, the Certificates are sent to the Assessing Body.
- Certificates which will be issued carry photograph of the trainee, name of Training Provider, start date & end date of training and duration of training once the systems for the same are put in place.
- The certificate is issues under the aegis of NCVT. All the communications are done through portal.

ASSESSMENT EVIDENCE

Complete a grid for each component as listed in “Formal structure of the the qualification” in the Summary.

NOTE: this grid can be replaced by any part of the qualification documentation which shows the same information – ie Learning Outcomes to be assessed, assessment criteria and the means of assessment.

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

Title of Component: Web Designing & Publication Assistant

Outcomes to be assessed		Means of Assessment
Learning Outcome	Assessable Criteria	
DGT/MES/ICT/N01: Understand the Basic Fundamentals of Computer and Windows OS	AO1. Demonstrate the turn a computer system on and off	Practical Test
	AO2. Demonstrate the Identify different parts of a Computer System.	Practical Test
	AO3. Explain the knowledge of functions of Different parts of a Computer, System Software and Application Software	Theory Test
	AO4. Explain the awareness of different Desktop Icons like My Computer, My Documents etc	Theory Test
	AO5. Demonstrate the perform minor computer functions like Changing Desktop Backgrounds, Mouse Pointer, Screen Saver etc.	Practical Test
	AO6. Demonstrate the work on applications like Notepad , WordPad, MS Paint	Practical Test
DGT/MES/ICT/N02: Understand the Basic Structure of MS Office and able to use basic tools of MS-Word and MS- Excel	AO1. Explain the Basic Knowledge of MS Office and associated Softwares like MS-Word, Spreadsheet and Excel.	Theory Test
	AO2. Demonstrate the execute following functions in MS-Word: <ul style="list-style-type: none"> • Document formatting options • Tables, Bullets and Numbering • Font, Alignment, paragraph formatting • Insert Picture, Clipart, Shapes, WordArt • Header & Footer, Text Box • Page Layout, Mail Merge • Spell check & Grammar check 	Practical Test
	AO3. Demonstrate the perform following functions in MS-Excel: <ul style="list-style-type: none"> • Cell Formatting Options • Formulas and Functions • Charts • Sort, Filter, What if Analysis, Grouping • Subtotal • Pivot Table 	Practical Test
DGT/MES/ICT/N19: To have the basic awareness of Internet concepts, web, HTML and Multimedia objects.	AO1. Explain the knowledge of overview of internet and web pages, web browsers, search engines, web sites and server	Theory Test
	AO2. Demonstrate the open websites, browse and search on the same with the use of internet. Should also able to write, read, edit and send the emails	Practical Test
	AO3. Explain the thorough knowledge of HTML features and uses, creating HTML document, adding	Theory Test

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>body text and comments, Creating Tables and Lists, Creation of animated GIF. Sizing the picture, Adding external images, video, and sound file Setting and releasing frames, Creating basic forms & style sheets, using DHTML</p>	
	<p>AO4. Demonstrate to perform the following tasks:</p> <ul style="list-style-type: none"> • Creating simple HTML documents • Creating web pages with all features, effects, tables, images, video • Using HTML for creating web pages with links to other pages and link to tables/lists, design different type of forms with boxes, buttons, menu and field • Animation graphics using GIF animator or some other software • Inserting Images, Video & Sound effects • Designing web pages with taught elements along with style elements for different characteristics • Creating animation in the web pages using layers • Cascading style sheets. 	<p>Practical Test</p>
<p>DGT/MES/ICT/N20 Acquire the Basic Concepts of computer Graphics and web design basics and their applications</p>	<p>AO1. Explain the knowledge of basic understanding of:</p> <ul style="list-style-type: none"> • Internet, Web design techniques and study of designs as per content, • formation of images, image file formats and their properties; 	<p>Theory Test</p>
	<p>AO2: Explain the following:</p> <ul style="list-style-type: none"> • Design principles and color theory along with the Importance of each primary and secondary color • Introduction of primary and Secondary colors in both RGB & CMYK schemes/modes • GIGW, OWSP, GCIG Concepts, • design issues in Web medium and visualizing intuiting web designs • use of various fonts and type issues with Web design 	<p>Theory Test</p>
	<p>AO2. Demonstrate the practical awareness of:</p> <ul style="list-style-type: none"> • difference between Vector Graphics & Raster Graphics and Screen Graphics and Pixel Graphics • Understanding of the the formats :- .pdf, .eps, .svg, .svgz, .psd,, mp, .gif, .jpg, .pcx, .pct,.png, .raw, .sct, .tga, .tiff, .vst • Proper Application of colors and Analyze colors applied in different print media • Typography : Study different fonts and typo issues with Web design and Use of Multi-lingual Software 	<p>Practical Test</p>

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>AO4: Demonstrate the Following :</p> <ul style="list-style-type: none"> • open web pages using URL and domain name. able to Save and Store web pages as favourites • Use search engines to find sites offering free Email services. • create Email account and work on email like sending, copying/printing email, uploading and downloading the attachment • to Set-up for Chat i.e. audio or video and join news group 	<p>Practical Test</p>
<p>DGT/MES/ICT/N21: Understanding of the digital imaging, photoshop and web publishing softwares and their tools</p>	<p>AO1. Explain the knowledge for the following:</p> <ul style="list-style-type: none"> • Introduction to various versions, concepts and applications of Photoshop • Print Industry, Printing technology and their applications • Design principles and color theory • use of various fonts and typo issues with Web design. • Designing standards, Print layout Design and creative visualization for intuitive layouts 	<p>Theory Test</p>
	<p>A O2 Demonstrate the Working knowledge of Images in Photoshop :</p> <ul style="list-style-type: none"> • Working with Palettes, i.e., layers palette, navigator palette, info palette, color palette, Swatches palette, Styles palette, History palette, Actions Palette, Tool preset palette, Channels Palette and Path Palette. Working with Layers. Photo editing • Image adjustment options – Labels, Auto labels, Auto contrasts, Curves, Color balance, Brightness /Contrast, Posterize , Variations • Preparing the file and work area. Creating different shapes. • Creating three Dimensional effects using Layers. Working with the magic wand tool and lasso tool. Creating images using Symbol Sprayer Tool. Edit the images using options of Warp Tool. Using Dodge tool, Burn tool, Sponge Tool and Clone Stamp Tool • Editing Selections. Creating images and giving special effects using Filters. Using Layer Styles. Produce an image by mixing two or more different images using Layer Masking & Vector Masking 	<p>Practical Test</p>

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>AO3. Demonstrate the work on web Publishing using Dreamweaver :</p> <ul style="list-style-type: none"> • Design Professional Web Layouts, Author and Publish websites on the internet • Design Professional Web Layouts, Author and Publish websites on the internet using Dreamweaver 	Practical Test
DGT/MES/ICT/N22: To have the knowledge of fundamentals of Javascripting, web layout design standards	<p>A O1: Describe the Web Design Basics:</p> <ul style="list-style-type: none"> • Getting connected using FTP. Downloading software. • Upgrading Browser versions. • Using Telnet to get connected to remote computer. • About Flash and General overview – Stage and Work area of Flash, using guides, grid & rulers 	Theory Test
	<p>A O2: Describe the Knowledge of studying design issues in Web medium and visualizing intuiting web designs</p>	Theory Test
	<p>A O3: Explain the knowledge of Internet, Web design techniques and study of designs as per content and creating interactive animations and applications for web using Flash</p>	Theory Test
	<p>A O4: Demonstrate the Working knowledge of following:</p> <ul style="list-style-type: none"> • Javascripting & VB Script: <ul style="list-style-type: none"> - Creating scripts for Web for Dynamic websites - Validation on Forms • PHP & MySQL <ul style="list-style-type: none"> - Using PHP & MySQL to create dynamic web Pages enabled with forms and database usage - ODBC Concepts for Connection with Database with PHP. Difference between Server Side & Client Side Script - Hosting & Deploying Website 	Practical Test
	<p>A O5: Demonstrate the work on web designing Flash with scripting:</p> <ul style="list-style-type: none"> • Using frames and key frames Working with time line. Using layers, Using Guide layers. Drawing in Flash tooling colors in Flash, to use a gradient fill. • Importing Artwork, Video and Audio. Different file formats in Video & Audio. Flash Compatible Audio & Video file formats Create interactive animations for learning medium • Programming simple interactive applications using Action Scripting • Creating Banners, Logo Animation, simple 2D1 animation content used in Web and E-learning medium 	Practical Test

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

DGT/MES/ICT/N23: To have awareness of Cyber security; information security, overview of security threats, information security vulnerability, risk management, Risk Management, Software Development Security, Legal Framework, Privacy Protection, Audit and Testing	AO1 .Module 1: Overview of Information Security	
	AO1 (a). Explain the following basics: <ul style="list-style-type: none"> • Understanding Information Security • Need of the Information security • Basics of IS (CIA) • History and evolution of IS • Dimensions of Information Security • Intranet/Internet • Information Security and Cyber Security relationship • Why Care About Security? • Challenges to Information Security • Benefits of Information of Security 	Theory Test
	AO1 (b). Demonstrate the knowledge of following <ul style="list-style-type: none"> • Understanding techniques to enforce IS in an organization • Identifying tools to enforce Information Security 	Practical Test
	AO2 .Module 2: Overview of Security threats. <ul style="list-style-type: none"> • Overview of Information SecurityThreats • Types of threats – DDoS, Malicious codes, Espionage, External threats and internal threats etc • Identification, probing, scanning, sources of Threats • Best Practices or Guidelines used to Identify Threats & in mitigation of threats • Conduct regular education and awareness trainings for employees and third parties • Maintaining Systems and Procedures • Collaborate with peers and experts through different forums to understand contemporary issues and solutions 	Theory Test
	A O3 .Module 3: Information Security Vulnerabilities	

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>AO3 (a). Explain the knowledge of :</p> <ul style="list-style-type: none"> • Understanding Security Vulnerabilities • Types of Technical & Native Vulnerabilities • Flaws in Software or Protocol Designs • Weaknesses of Protocols/ Software Implementation; System/ Network Configurations; Web or Cloud applications and Online e-transactions • Browser Security and Role of cookies and pop-ups • Security holes in Browser, Web Applications, OS, and Smartphones <p>Identifying role of Social sites and media in cyber security and vulnerability</p>	Theory Test
	<p>AO3 (b). Demonstrate the awareness of following assessment Tools and Techniques:</p> <ul style="list-style-type: none"> • Techniques to fix and Exploit Vulnerabilities • Identify security vulnerabilities on a regular basis using requisite tools and processes. • How to fix the security gaps and holes • Identifying liabilities of service providers, software vendors, Software authors, system owners, and third parties • Best Practices and Guidelines to mitigate security Vulnerabilities 	Practical Test
	A O4 .Module 4: Risk Management	
	<p>A O4 (a): Explain the following:</p> <ul style="list-style-type: none"> • Definitions of risk. Value of an asset, threat source, agent. • Relationship between Threat, Vulnerability, and Risk • Examples of Some Vulnerabilities that Are Not Always Obvious • What Is a Control, Risk Likelihood and consequences, Impact? • Control Effectiveness • Risk Management, its phases, types and purpose 	Theory Test
	<p>A O4 (b): Demonstrate the practical awareness of :</p> <ul style="list-style-type: none"> • Different Approaches to Risk Analysis • Best Practices and Guidelines in assessing and Calculating and mitigating Risks • Developing and implementing policies and procedures to mitigate risks arising from ICT supply chain and outsourcing. 	Practical Test
	A O5. Module 5: Software Development Security	

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>A O5 (a) Explain the knowledge of following:</p> <ul style="list-style-type: none"> • Basics of Software Development Security <ul style="list-style-type: none"> - Device vs. Software Security - Reasons for not Improving at a Higher Rate - Trend of Dealing with Development Level Security • Issues in application security (SQL injection, cross scripting, etc.) • Security in SDLC <ul style="list-style-type: none"> - Development Methodologies, Maturity Models, Security Issues, OWASP Top Ten (2011) • Modularity of Objects and Security <ul style="list-style-type: none"> - Object-Oriented Programming & Module Characteristic - Mobile Code with Active Content, World Wide Web OLE, ActiveX Security, Java and Applets o API • Security of Embedded Systems • Virtualization <ul style="list-style-type: none"> - Type 1 & type 2; Software Security 	Theory Test
	<p>A O5 (b) Demonstrate the practical knowledge of following:</p> <ul style="list-style-type: none"> • Implementation Software Development Security • Linking through COM • Mobile Code with Active Content, World Wide Web OLE, ActiveX Security, Java and Applets o API • Common Gateway Interface <ul style="list-style-type: none"> - Working of CGI Scripts Work, Cookies & PCI Requirements 	Practical Test
	<p>A O6: Module 6: Legal Framework Demonstrate the practical knowhow of following:</p> <ul style="list-style-type: none"> • Need for Legal Framework and its enforcement • Types of Law (Foundational Concepts of Law Common Laws – Criminal; Common Laws – Civil Common Laws – Administrative; Intellectual Property Laws; Intellectual Property Laws; Software Licensing • Historic Examples of Computer Crime • IT (Amendment) Act 2008; Cybercrimes, Authorities, Enforcement and Penalties, Security measures and Privacy protection, Digital Signature legal ecosystem & Intermediary Guidelines • National Cyber Security Policy Identification Protection & Prosecution <ul style="list-style-type: none"> - Computer Crime and Its Barriers 	Theory and Practical Test

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<ul style="list-style-type: none"> - Security Principles for International Use - Determine if a Crime Has indeed been Committed - When Should Law Enforcement Get Involved? - Citizen versus Law Enforcement Investigation - Investigation of Any Crime <ul style="list-style-type: none"> • Role of Evidence in a Trial General Rules for Evidence; Evidence Requirements Evidence Collection Topics; Chain of Custody Processing of Evidence; Evidence Types; Hearsay Rule Exception; • Privacy of Sensitive Data Privacy Issues; Section 43A, 72 of IT (Amendment) Act, Justice A.P. Shah Report; European Union Principles on Privacy; US Laws on Privacy; Routing Data Through Different Countries; Employee Privacy Issues • Ethics Sets of Ethics (Ethics – Mile2 & Ethics – Computer Ethics); Ethics Institute– Internet Architecture Board • GAISP- Generally Accepted Information Security Principles 	
	<p>A O7: Module 7: Privacy Protection</p>	
	<p>A O7 (a) Acquaintance of following:</p> <ul style="list-style-type: none"> • Explain the Privacy as a Domain • Relationship between security and privacy • Revitalizing security program to enable Privacy Protection 	<p>Theory Test</p>
	<p>A O7 (b) Demonstrate the practical knowledge of following:</p> <ul style="list-style-type: none"> • Assess privacy implications of security technologies • Privacy impact assessment • Develop and implement privacy protection measures within the organization 	<p>Practical Test</p>
	<p>A O8: Module 8: Audit and Testing</p>	
	<p>A O8(a) Explain the following</p> <ul style="list-style-type: none"> • What is Information Security Audit? • Importance of Information Security Audit • Identifying the Information Security Audit Objectives • Audit Planning and preparations • Ethics and codes of conduct for Auditors 	<p>Theory Test</p>

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

	<p>A O8 (b) Demonstrate to perform the following</p> <ul style="list-style-type: none">• Performing Security Audits and Reviews• Vulnerability assessment and Penetration testing• Code reviews• Audit Controls• Logical security audit• Security Policies and Procedure Audits and Compliance Audits• Conduct and Close internal audits• Information Security audit tools• Reporting to senior management on defined parameters	Practical Test
<p>Means of assessment 1</p> <p>The assessment comprise of</p> <ul style="list-style-type: none">• Theory Examination: MCQ, VIVA Voce• Practical assessment: Demonstration		
<p>Pass/Fail</p> <p>The trainee is judged as pass in the qualification if minimum passing marks is obtained in each test i.e Theory and Practical.</p> <p>Minimum pass mark: Minimum passing marks for Practical is 60% Minimum pass marks for theory is 40%</p>		

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

SECTION 2

EVIDENCE OF LEVEL

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

OPTION A

Title/Name of qualification/component: Web Designing & Publication Assistant			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
Process	<p>The job holder is expected to have the knowledge and display expertise skills in the field of work like:</p> <ul style="list-style-type: none"> – Basic operation of computer and OS – MS office applications – Fundamentals of Web designing and Publishing – Understanding of concepts of information security, privacy protection etc 	<p>The job requires the limited range of activities routine and predictable like designing web pages, dynamic web sites, applying skills of programming using java, html, dhtml, software of web designing for the organisation in an established method. Using MS office or other software as applicable in the organisation to maintain the records.</p>	3
Professional knowledge	<p>The job holder is required to have knowledge in the related field of work like:</p> <ul style="list-style-type: none"> – Fundamentals of MS office – Application through Communication channels through internet and security – Basic tools and operation of photoshop, and Dreamweaver – Concepts and application, security threats, Information Security Vulnerabilities, audit & testing etc 	<p>The job holder understands the basic facts, process and principles involved in his job role like basics of web designing, computer graphics, web publishing etc</p>	3
Professional skill	<p>The job holder is needs to know and understand :</p> <ul style="list-style-type: none"> – Practical applications of risk management – Preparation and maintaining database, Reports and presentations – Communication through web interface – Practical knowledge of softwares like java language, Photoshop techniques, web designing 	<p>The job role only includes the programming using java, html etc and designing web pages using web design softwares, web publishing softwares etc, which is routine and repetitive in narrow range of application.</p>	3
Core skill	<p>The job holder is expected to be possess knowledge and skills regarding:</p> <ul style="list-style-type: none"> – Technical terms associated with Business Process 	<p>The Assistant will able to create of dynamic websites with basic programming skills. Can create of Web Pages</p>	3

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

Title/Name of qualification/component: Web Designing & Publication Assistant			Level: 3
NSQF Domain	Outcomes of the Qualification/Component	How the job role relates to the NSQF level descriptors	NSQF Level
	Outsourcing – Understanding of fundamentals and concepts of web publishing, web design basics etc – Web designing using Dreamweaver and photoshop	using HTML, DHTML. Perform audit and testing based on concepts of security threats, risk management, legal framework etc.	
Responsibility	The job holder works under the supervision of his superior, as per his directions. He is responsible for his designated task as and when given by the superior.	The job holder works under the supervision of his superiors and is responsible for his own limited work assigned.	3

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

SECTION 3

EVIDENCE OF NEED

What evidence is there that the qualification is needed?

The increase demand in IT industry would be driven by increasing by household spend on IT, Education, as well as domestic IT demand by Indian companies and MNC established in India

The Indian IT & ITeS industry employs about 3 million directly and 9 million indirectly. A majority of employment is generated through the exports business. Exports contribute about 78 percent of the total employment in the sector. Employment growth was high during FY02–09 period, however, it started settling down with the increasing maturity of the sector and the evolution of non-linear business models

The sector is expected to employ about 5.1 million professionals directly in FY22 and exports are likely to dominate

(Executive Summary of Human Resource and Skill Requirements in IT & ITes by NSDC: Annexure 3)

Moreover more than 1600 individuals have been trained under this scheme in last two years, which shows there is huge requirement of this skill in the Market.(Annexure 4)

About 207 candidates have been placed across country by getting trained under this Course under MES in 2016 which indicates the demand of the above qualification. (Annexure 5)

About 777 candidates have been placed across country by getting trained under this Course under DDUGKY till Dec 2016.

What is the estimated uptake of this qualification and what is the basis of this estimate?

According to the NSDC, Modularised skill building in these areas is required to ensure constant up-gradation of skills in the projected workforce of 5.1 million persons by 2022. Out of this about 70% to 80 % would be in the junior to midlevel streams (about 4-5 million). Building skills in this workforce is critical for industry to maintain its competitive edge and innovate

What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF?

The Qualification has been mapped with the National Qualification Register, maintained by NSDA to ensure the qualification does not duplicate. Qualification with name of Web Developer is available in NQR with some similar outcomes. But this qualification only caters web designing part of this qualification.

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?

- 1) DGT interacts with training providers to gather feedback in implementation and updation of qualification.
- 2) Monitoring of results of assessments
- 3) Employer feedback will be sought post-placement
- 4) In a recent initiative, a Mentor Council (MC) for the relevant sector has been formed to review the curriculum of this qualification under the sector.
- 5) CSTARI, the research wing of DGT, reviews and updates the qualification, in consultation with industries and other stakeholders, on a regular basis.

NSQF QUALIFICATION FILE GUIDANCE

Version 6: Draft of 08 March 2016

The qualification is reviewed after every 2 years for updation according to latest Technologies and practices.

Please attach any documents giving further information about any of the topics above.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

SECTION 4

EVIDENCE OF PROGRESSION

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?

An Individual has vertical pathway to promote to higher designations in an organisation. Can further undergo specialization course to excel to the higher post in jobs listed above.

Progression chart:

Junior Web Designer > Senior Web Designer > Web Design Manager

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