

Approved in 23rd NSQC, Dated: 22nd August, 2019

NSQF QUALIFICATION FILE: Certificate in Computer Applications [CCA]

CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE

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List of documents submitted in support of the Qualifications File

1. Annexure-I Detailed Curriculum
2. Annexure-II Industry Validations
3. Annexure-III Placement Records

Model Curriculum to be added which will include the following:

- **Indicative list of tools/equipment to conduct the training**

(for a batch of 10 students)

SI No	Item	Quantity
1.	PC with Windows XP or later and	10

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	Linux with internet connection	
2.	MS office	10
3.	Open office	10
4.	All relevant application soft wares	10 License
5.	UPS	(suitable for supporting 10 PCs)
6.	Printer	1

- **Trainers qualification**
Graduate with certificate in Computer Application
- **Lesson Plan**

Title of Component and Identification Code	Mandatory /Optional	Estimated Size (Learning hours)	Theory	Practical	Credit (Theory)	Credit (Practical)
Computer Fundamentals	M	80	30	50	2	2
System Maintenance & Information Security	M	80	32	48	2	2
Internet Technology & Web Design	M	80	32	48	2	2
Multimedia	M	80	29	51	2	2
Concepts of DBMS	M	20	8	12	1	0
Soft Skills	M	30	12	18	1	1
Project (no marks assigned)	M	30	-	30	-	-
Total		400			19	

- **Distribution of training duration into theory/practical/OJT component**
 - Overall the theory to lab proportion is 40:60
 - No OJT involved

- **SUMMARY**

1	Qualification Title	Certificate in Computer Applications (CCA)
2	Qualification Code, if any	
3	NCO code and occupation	3341.1000
4	Nature and purpose of the qualification (Please specify whether qualification is short term or long term)	- Learners who attain this qualification are competent in Office Applications, Internet usage, maintain and handle computers hardware, editing images and videos and can get a job in Govt. or Private IT Enterprises or become an entrepreneur.
5	Body/bodies which will award the qualification	Examination wing, HQ National Institute of Electronics and Information Technology, New Delhi
6	Body which will accredit providers to offer courses leading to the qualification	HQ National Institute of Electronics and Information Technology, New Delhi
7	Whether accreditation/affiliation norms are already in place or not , if applicable (if yes, attach a copy)	Not applicable
8	Occupation(s) to which the qualification gives access	Office Assistant / Assistant Multimedia Content Creator / Assistant Computer Technician,, Technical support(Desktop), Assistant Network Administrator, IT Support Staff, WebDesigner, Graphics Designer, Data Entry Operator, Computer instructor
9	Job description of the occupation	A person who has completed CCA can apply as a computer operator in any firm, can get placed at clerical levels like receptionist, computer operator or cyber cafe owner, can also work at BPO. CCA certificate holder can execute basic computer tasks and can also become a computer teacher at primary level

		or can also own Computer teaching Centre for children or adults who wish to learn computer basics
10	Licensing requirements	Licence of all relevant software mentioned in syllabus
11	Statutory and Regulatory requirement of the relevant sector (documentary evidence to be provided)	NA
12	Level of the qualification in the NSQF	Level 5
13	Anticipated volume of training/learning required to complete the qualification	400 hours
14	Indicative list of training tools required to deliver this qualification	PC with Windows XP or later and Linux with internet connection, MS Office, Open Office, All relevant application soft wares
15	Entry requirements and/or recommendations and minimum age	XII pass
16	Progression from the qualification (Please show Professional and academic progression)	<p>Professional: Data Entry Operator/Junior Technician → Senior Technician → Programmer → Project Leader → Project Manager → Senior manager(Project Planning)</p> <p>Academic: CCA → NIELIT A level → B Level → C level After completion of the course, student can go for further specialised course in Multimedia, Hardware & Networking.</p>
17	Arrangements for the Recognition of Prior learning (RPL)	RPL Policy will be described as and when available
18	International comparability Where known (research evidence to be provided)	NA
19	Date of planned review of the qualification	After Every 2 Years

20 Formal structure of the qualification			
Mandatory components			
Title of component and identification code/ NOSs/ Learning outcomes		Estimated Size (learning hours)	Level
Computer Fundamental	Various parameters like familiarity with the computers, handling of computer. Interfacing basic parts of computer.	80	5
System Maintenance & Information Security	General Maintenance of systems Identify RAM Hard Disk etc. Configuration of floppy disk drives, optical drives. Troubleshooting computers: Identifying power problems, POST error codes, boot failures and peripheral failures.	80	5
Internet Technology & Web Design	Anatomy of Internet, ARPANET and Internet history of the World Wide Web. Basic Internet terminology, Net etiquette. Commerce on the Internet, governance on the Internet, Design HTML page, document, table etc.	80	5
Multimedia	Identify Components of Multimedia, use of Multimedia, images, tools Usage of text in multimedia, families and faces of fonts, outline fonts, bitmap fonts Manipulate Image using various tools.	80	5
Concepts of DBMS	Basics of DBMS, Advantages of DBMS. Data Base Operations: Operations: Creating, dropping, manipulating table structure. Manipulation of Data, SQL	20	5

	<p>Design and Development of Applications using MS Access: Creation of Tables, Queries, GUI, Creation of Forms – text box, labels, list box, combo box, buttons and controls, Generation of Reports , Web browsing to a form , Web Page reports</p> <p>Design and Development of Applications using MySQL :Creation of Tables, Queries using MySQL.</p>		
Soft Skills	<p>Importance of communication, Types of communication – Verbal/ Non-verbal, Barriers of Communication</p> <p>Interview dress code, controlling nerves, positive visualization, creating an impression, Selling yourself at the interview, Mock interview</p> <p>Importance of etiquette, Professional etiquette, Social etiquette Unit, Corporate Culture, Professional ethics, Mutual respect, Time management</p> <p>Report writing, CV writing, Business lettersfor general/professional purposes</p>	30	5
Project	Preparation of a project report based the theoretical knowledge and practical skills acquired	30	5
Sub Total (A)		400	
Optional components			
Title ofComponent and Identification Code/NOSs/Learning Outcomes		Estimated Size (Learning Hours)	Level

Nil	Nil	Nil
Sub Total (B)	0	
Total (A+B)	400	

Detailed Curriculum attached as - **Annexure I**

SECTION 1 **ASSESSMENT**

21	<p>Body/Bodies which will carry out assessment: National Institute of Electronics and Information Technology</p>
22	<p>How will RPL assessment be managed and who will carry it out? RPL Policy will be described as and when available</p>
23	<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>The emphasis is on practical demonstration of skills & knowledge based on the performance criteria. Each OUTCOME is assessed & marked separately. Student is required to pass in all OUTCOMES individually and marks are allotted. Following assessment methodologies are used.</p> <ul style="list-style-type: none"> A. Written Assessment (Multiple Choice Questions) B. Practical Assessment C. Viva Voce Assessment <p>Supporting evidences for Assessment</p> <p>The assessment results are backed by following evidences.</p> <p>1 The assessor collects a copy of the attendance for the training done under the scheme. The attendance sheets are signed and stamped by the In-charge / Head of the Training Centre.</p>

	<p>2 The assessor verifies the authenticity of the candidate by checking the photo ID card issued by the institute as well as any one Photo ID card issued by the Central/Government. The same is mentioned in the attendance sheet.</p> <p>3 The assessor assigns roll number.</p> <p>4 The assessor takes photograph of all the students along with the assessor standing in the middle and with the centre name/banner at the back as evidence.</p>
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24. Assessment evidences

Title of Component: Certificate in Computer Applications

Outcomes to be assessed/NOSs to be assessed	Assessment criteria for the outcome
Computer Fundamental	<p>Various parameters like familiarity with the computers, handling of computer.</p> <p>Interfacing basic parts of computer.</p>
System Maintenance & Information Security	<p>General Maintenance of systems</p> <p>Identify RAM Hard Disk etc.</p> <p>Configuration of floppy disk drives, optical drives.</p> <p>Troubleshooting computers: Identifying power problems, POST error codes, boot failures and peripheral failures.</p>
Internet Technology & Web Design	<p>Anatomy of Internet, ARPANET and Internet history of the World Wide Web.</p> <p>Basic Internet terminology, Net etiquette.</p> <p>Commerce on the Internet, governance on the Internet,</p> <p>Design HTML page, document, table etc.</p>
Multimedia	<p>Identify Components of Multimedia, use of Multimedia, images, tools Usage of text in multimedia, families and faces of fonts, outline fonts, bitmap fonts</p> <p>Manipulate Image using various tools.</p>
Concepts of DBMS	<p>Basics of DBMS, Advantages of DBMS.</p> <p>Data Base Operations: Operations: Creating, dropping, manipulating table structure. Manipulation of Data, SQL</p>

	<p>Design and Development of Applications using MS Access: Creation of Tables, Queries, GUI, Creation of Forms – text box, labels, list box, combo box, buttons and controls, Generation of Reports , Web browsing to a form , Web Page reports</p> <p>Design and Development of Applications using MySQL :Creation of Tables, Queries using MySQL.</p>
Soft Skills	<p>Importance of communication, Types of communication – Verbal/ Non-verbal, Barriers of Communication</p> <p>Interview dress code, controlling nerves, positive visualization, creating an impression, Selling yourself at the interview, Mock interview</p> <p>Importance of etiquette, Professional etiquette, Social etiquette Unit, Corporate Culture, Professional ethics, Mutual respect, Time management</p> <p>Report writing, CV writing, Business letters for general/professional purposes</p>
Project	<p>Preparation of a project report based the theoretical knowledge and practical skills acquired</p>

SI No	Examination Pattern	Modules Covered	Duration in Minutes	Maximum Marks
1	Theory Paper – 1	Module 1 & 2	90	100
2	Theory Paper – 2	Module 3, 4, 5 & 6	90	100
3	Practical -1	Module 1 to 6	180	90
4	Internal Assessment	Module 1 to 6	-	30
5	Project/Presentation /Assignment	Module 1 to 6	-	30
	Total			350

Both Paper1 and Paper2 objective type questions.

Pass/Fail

Following Grading Scheme (on the basis of total marks) will be followed:

Grade	S	A	B	C	D	Fail
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Marks Range (in)	$\geq 85\%$	$\geq 75\%$ and $< 85\%$	$\geq 65\%$ and $< 75\%$	$\geq 55\%$ and $< 65\%$	$\geq 50\%$ and $< 55\%$	$< 50\%$
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SECTION 2

25. EVIDENCE OF LEVEL

Option A			
Title / Name of the Qualification / Component : Certificate in Computer Applications (CCA)			
Level :			
NSQF Domain	Key requirements of the job role	How the job role relates to the NSQF level descriptors	Level
Process	Individual understands the routine activities of operating computers and preparing reports. Process involving limited range of activities such as to setup systems or resolves issues is also understood. Knowledge of facts and principles of document design, sheet design, charts, Multilingual presentations with Multimedia, Web Page Design, Information Security, Data base management.	Individual must have basic knowledge to help set up systems or resolve issues, operate and maintain a computer, troubleshooting systems and network problem, diagnosing and solving basic hardware/software faults etc. Individual must also be able to prepare reports, presentations and even edit images and videos as per required. Work in familiar, predictable, routine, situation of clear choice such as multimedia content development and web page development.	5
Professional knowledge	This job requires the individual to apply basic knowledge and facts, process and principle in design, development of Web Pages, sheets , Documents, Multilingual presentations with Multiple media, use of Multimedia and secure Communications.	The individual should know and understand how to prepare various kinds of Reports, Presentations, basic editing principles and knowledge about usage of Image/ Audio/ Video Editors, monitor and perform requests or incidents that may occur and how to resolve them, methods and techniques used to identify and evaluate workarounds or new solutions, etc, to ensure smooth running of computer systems. Job Holders have factual knowledge of field of	

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		website development & database design & secure communication. Therefore this is pegged at Level 5.
Professional skill	Individuals have to deal directly with IT service requests/incidents. They must be able to recall and demonstrate practical skills which are routine and repetitive. Develop practical skills for designing Web Pages, sheets, charts, documents and use Multimedia. Will be able to effectively communicate the design and understand the requirements	The professional skills required at this level are necessary to address tasks to monitor systems, identify and diagnose promptly any hardware/software faults and organization service requests. It is also necessary to analyze network and even perform services to manage proper connectivity. Image/ Audio/ Video editing may be contributed towards practical skills as and when demanded. Recall and demonstrate practical skill, routine and repetitive in narrow range of application for multimedia content and web site design, using appropriate rule and tool, using quality concepts
Core skill	He/she should be highly motivated and energetic with the ability to self-direct daily activities and have fluency to communicate in written or oral mediums, with required clarity. Candidate will acquire theoretical, practical problem solving skill in Web Page Design, Creating documents, Sheets, charts, Multilingual presentations with Multiple media, and using applications involving them.	The jobholder needs to have Generic Skills of writing, Oral Communication Skills with required clarity related to their day to day work. Jobholder needs to understand the task requirements as assigned by superiors which requires clarity in oral and the written skills and while working on the content he needs to be aware of the social, political and natural environment and skill to basic arithmetic and algebraic principles. Therefore, it is pegged at level 5.

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Responsibility	Individuals at this job are mainly responsible for the smooth running of computer systems, preparation of reports, presentations, audio/video editing and any other related task as per demanded. Candidate will be able to work independently for development of web site, database, multimedia applications, and information security with responsibility for own work and integrate pages designing by team.	Job holder is required to carry out functions such as maintaining of computer systems, typing; editing audio and video effects using software's such as photoshop, adobe etc. In these activities job holder is doing the tasks and taking responsibility for own work and learning and some responsibility for other's works. Therefore, it is pegged at level 5
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SECTION 3

EVIDENCE OF NEED

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?

Need of the Qualification

This course has been designed to meet the growing demand for skilled professionals in Data Entry, Presentations, Web page Development Operations.

A computer programmer or operator are in high demand in all sectors of the market. They are used at shops to create a database for all the items with their serial numbers, price and quantity ratios. At schools, computer operators are required to sit behind the desk and manage the computer database for the school, list of all the students, their details, fee payment, enrollment details and all other activities of students are recorded in the computer.

An efficient computer operator is needed to handle such large data. In offices, computer operator takes care of the back door operating and keeps employees information in the computer. The benefits of computer are many and an efficient computer technician is required to facilitate computer tasks. That is why CCA is created as it imparts knowledge related to computers in a short period of time.

Industry Relevance:

Approved by Kerala government for job of Assistant in Government Secretariat, Kerala Public Service Commission, Local Fund Audit Department etc., Attached in Annexure II.

Estimated uptake

Estimated uptake is 30 students / Batch with 2 Batches / Year and on the basis of Facilities and Infrastructure in training centres

SECTION 4

EVIDENCE OF PROGRESSION

30	<p>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?</p> <p><i>Show the career map here to reflect the clear progression</i></p> <p>This qualification comprises both technical and analytic skills and can be linked to any qualification higher than this one in software & IT Field such as A Level, B Level. existing or to come.</p> <p>As an educational progression, the trainee will be able to apply for specialised courses in the field of existing NSQF aligned computer hardware, networking and Multimedia courses.</p>
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