

QUALIFICATION FILE

Course in Software Development

☒ Short Term Training (STT) ☐ Long Term Training (LTT) ☐ Apprenticeship

☐ Upskilling ☐ Dual/Flexi Qualification ☐ For ToT ☐ For ToA

☒ General ☐ Multi-skill (MS) ☐ Cross Sectoral (CS) ☐ Future Skills ☐ OEM

NCrF/NSQF Level: 4

Submitted By:

Haryana State Electronics Development Corporation Ltd. (HARTRON)

SCO 111-113, Sector - 17/B, Chandigarh-160017

0172-2562456, 2562231

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Section 1: Basic Details

1.	Qualification Name	Course in Software Development								
2.	Sector/s	IT-ITeS								
3.	Type of Qualification: ☐ New ☒ Revised ☐ Has Electives/Options ☐ OEM	NQR Code & version of previous qualification: (change to previous, once approved) NQR Code: 2019/ITES/HART/3568 Version: 1		Qualification Name of previous version: Diploma in Computer Software Plus						
4.	a. OEM Name b. Qualification Name (Wherever applicable)	N/A								
5.	National Qualification Register (NQR) Code &Version (Will be issued after NSQC approval)	QG-04-IT-03524-2025-V2-HARTRON , Version 2.0		6. NCrf/NSQF Level: 4						
7.	Award (Certificate/Diploma/Advance Diploma/ Any Other) (Wherever applicable specify multiple entry/exits also & provide details in annexure)	Certificate								
8.	Brief Description of the Qualification	This Course helps the students with expertise in programming and to keep pace with the changing face of technology and the requirements of the growing IT industry.								
9.	Eligibility Criteria for Entry for Student/Trainee/Learner/Employee	a. Entry Qualification & Relevant Experience: <table border="1"> <thead> <tr> <th>S. No.</th> <th>Academic/Skill Qualification (with Specialization - if applicable)</th> <th>Required Experience (with Specialization - if applicable)</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>Grade 12th Pass or equivalent OR Pursuing 12th OR Grade 10 Pass with 2 years of NTC OR Grade 10 Pass with 1 years of NTC plus 1 year NAC OR Previous relevant qualification of NSQF Level 3.5 with 1.5 years of relevant experience</td> <td></td> </tr> </tbody> </table>			S. No.	Academic/Skill Qualification (with Specialization - if applicable)	Required Experience (with Specialization - if applicable)	1.	Grade 12th Pass or equivalent OR Pursuing 12th OR Grade 10 Pass with 2 years of NTC OR Grade 10 Pass with 1 years of NTC plus 1 year NAC OR Previous relevant qualification of NSQF Level 3.5 with 1.5 years of relevant experience	
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		b. Age: N/A																			
10.	Credits Assigned to this Qualification, Subject to Assessment (as per National Credit Framework (NCrF))	16	11. Common Cost Norm Category (I/II/III) (wherever applicable): <i>Category II</i>																		
12.	Any Licensing requirements for Undertaking Training on This Qualification (wherever applicable)	N/A																			
13.	Training Duration by Modes of Training Delivery (Specify <i>Total Duration</i> as per selected training delivery modes and as per requirement of the qualification)	☒ Offline ☐ Online ☐ Blended <table border="1"> <thead> <tr> <th>Training Delivery Modes</th><th>Theory (Hours)</th><th>Practical (Hours)</th><th>Employability Skills</th><th>OJT Mandatory (Hours)</th><th>OJT Recommended (Hours)</th><th>Total (Hours)</th></tr> </thead> <tbody> <tr> <td>Classroom (offline)</td><td>135</td><td>285</td><td>30</td><td>30</td><td>-</td><td>480</td></tr> </tbody> </table> <i>(Refer Blended Learning Annexure for details)</i>						Training Delivery Modes	Theory (Hours)	Practical (Hours)	Employability Skills	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)	Classroom (offline)	135	285	30	30	-	480
Training Delivery Modes	Theory (Hours)	Practical (Hours)	Employability Skills	OJT Mandatory (Hours)	OJT Recommended (Hours)	Total (Hours)															
Classroom (offline)	135	285	30	30	-	480															
14.	Aligned to NCO/ISCO Code/s (if no code is available mention the same)	2512.0100																			
15.	Progression path after attaining the qualification (Please show Professional and Academic progression)	<i>In Academic: Higher/Specialized courses in the same domain.</i> <i>In Professional: Software Developer -> Sr. Software Developer</i>																			
16.	Other Indian languages in which the Qualification & Model Curriculum are being submitted	Yes, Hindi																			
17.	Is similar Qualification(s) available on NQR-if yes, justification for this qualification	☐ Yes ☒ No URLs of similar Qualifications:																			
18.	Is the Job Role Amenable to Persons with Disability	☒ Yes ☐ No If "Yes", specify applicable type of Disability: <i>Any disable person who is able operate computer</i>																			
19.	How Participation of Women will be Encouraged	N/A																			
20.	Are Greening/ Environment Sustainability Aspects Covered (Specify the NOS/Module which covers it)	☐ Yes ☒ No																			
21.	Is Qualification Suitable to be Offered in Schools/Colleges	Schools ☒ Yes ☐ No Colleges ☒ Yes ☐ No																			
22.	Name and Contact Details of Submitting / Awarding Body SPOC (In case of CS or MS, provide details of both Lead AB & Supporting ABs)	Name: Rajesh Deswal Email: hartron.awarding@gmail.com Contact No.: 97797-06237, 0172-2562456 Website: hartron.org.in																			
23.	Final Approval Date by NSQC: 18.02.2025	24. Validity Duration: 3 years			25. Next Review Date: 18.02.2028																

Section 2: Module Summary

NOS/s of Qualifications

(In exceptional cases these could be described as components)

Mandatory NOS/s:

Specify the training duration and assessment criteria at NOS/ Module level. For further details refer curriculum document.

Th.-Theory **Pr.**-Practical **OJT**-On the Job **Man.**-Mandatory Training **Rec.**-Recommended **Proj.**-Project

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)				Assessment Marks					
						Th.	Pr.	OJT	Total	Th.	Pr.	OJT/Project & Viva	Internal Assessment	Total	Weightage (%) (if applicable)
1.	IT Foundation and Digital Tools	HART/AWD/ITFDT/01, V1	Core	2.5	3	30	60	0	90	36	15		30	81	27.00
2.	Building Programming and Database management Skills (Web programming, OOPS & SQL)	HART/AWD/BPDMS/01, V1	Core	4	4	45	75	0	120	33	15		15	63	21.00
3.	Application Development Technology Elective Module:- one out of two given modules in Elective NOS is to be chosen		Core	4	7	60	150	0	210	40	30		15	85	28.33
4.	Employability Skills DGT	DGT/VSQ/N0101	Non-Core	3	1	0	0	0	30	11			0	11	3.67
5.	OJT/ Project & Viva	N/A		0	1	0	0	30	30	0		60	0	60	20.00
Duration (in Hours) / Total Marks					16	135	285	30	480	120	60	60	60	300	100

Elective NOS/s:

One Module out of the following two modules to be chosen

S. No	NOS/Module Name	NOS/Module Code & Version (if applicable)	Core/ Non-Core	NCrF/ NSQF Level	Credits as per NCrF	Training Duration (Hours)					Assessment Marks					
						Th.	Pr.	OJT-Man.	OJT-Rec.	Total	Th.	Pr.	OJT/Project & Viva	Internal Assessment	Total	Weightage (%) (if applicable)
1.	Elective:- .Net Technology	HART/AWD/DNT/01, V1	Core	4	7	60	150	0		210	40	30		15	85	
2.	Elective:- Java Technology	HART/AWD/JT/01, V1	Core	4	7	60	150	0		210	40	30		15	85	

Assessment - Minimum Qualifying Percentage

Please specify **any one** of the following:

Minimum Pass Percentage – Aggregate at qualification level: 50 % (Every Trainee should score specified minimum aggregate passing percentage at qualification level to successfully clear the assessment.)

Section 3: Training Related

1.	Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Minimum Educational Qualification: Graduate (Computer Science/ IT) with proficiency in domain-specific technologies offered in the qualification Certification: Certified as Trainer/Teacher in IT domain from a reputed organization. Experience: Preferably 1 year
2.	Master Trainer's Qualification and experience in the relevant sector (in years) (as per NCVET guidelines)	Minimum Educational Qualification: Graduate (Computer Science/ IT) with proficiency in domain-specific technologies offered in the qualification Certification: Certified as Trainer/Teacher in IT domain from a reputed organization. Experience: Minimum 3 years in the relevant field

3.	Tools and Equipment Required for Training	☒ Yes ☐ No (If "Yes", details to be provided in Annexure)
4.	In Case of Revised Qualification, Details of Any Upskilling Required for Trainer	N/A

Section 4: Assessment Related

1.	Assessor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Minimum Educational Qualification: Graduate (Computer Science/ IT) with proficiency in domain-specific technologies offered in the qualification Certification: Certified as Assessor/Examiner in IT domain from a reputed organization.
2.	Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Minimum Educational Qualification: Graduate (Computer Science/ IT) with proficiency in domain-specific technologies offered in the qualification Certification: Certified as Assessor/Examiner in IT domain from a reputed organization.
3.	Lead Assessor's/Proctor's Qualification and experience in relevant sector (in years) (as per NCVET guidelines)	Minimum Educational Qualification: Graduate (Computer Science/ IT) with proficiency in domain-specific technologies offered in the qualification Certification: Certified as Assessor/Examiner/Proctor in IT domain from a reputed organization. Experience: Minimum 3 years in the relevant field.
4.	Assessment Mode (Specify the assessment mode)	Online Mode
5.	Tools and Equipment Required for Assessment	☒ Same as for training ☐ Yes ☐ No (details to be provided in Annexure-if it is different for Assessment)

Section 5: Evidence of the need for the Qualification

Provide Annexure/Supporting documents name.

1.	Latest Skill Gap Study (not older than 2 years) (Yes/No) : No
2.	Latest Market Research Reports or any other source (not older than 2 years) (Yes/No): No
3.	Government /Industry initiatives/ requirement (Yes/No) : The course is running successfully from number of years and is also considered for the recruitment in public and private sectors. The requirement of the job roles defined in the qualification are posted on placement websites like www.indeed.co.in , www.placementindia.com , www.naukari.com justifies the need of the qualification.
4.	Number of Industry validation provided: 20

5.	Estimated nos. of persons to be trained and employed: Mentioned at Annexure - 4
6.	Evidence of Concurrence/Consultation with Line Ministry/State Departments: This course is being run by Hartron after getting the approval from the State Government.

Section 6: Annexure & Supporting Documents Check List

Specify Annexure Name / Supporting document file name

1.	Annexure: NCrf/NSQF level justification based on NCrf level/NSQF descriptors <i>(Mandatory)</i>	Annexure 1 - 'Evidence of Level'
2.	Annexure: List of tools and equipment relevant for qualification <i>(Mandatory, except in case of online course)</i>	Annexure 2 - 'Tools & Equipment'
3.	Annexure: Industry Validations Summary	Annexure 3 - 'Industry Validations Summary'
4.	Annexure: Training & Employment Details	Annexure 4- 'Training & Employment Details'
5.	Annexure: Detailed Assessment Criteria <i>(Mandatory)</i>	Annexure 5- 'Detailed Assessment Criteria'
6.	Annexure: Assessment Strategy <i>(Mandatory)</i>	Annexure 6- 'Assessment Strategy'
7.	Supporting Document: Model Curriculum <i>(Mandatory – Public view)</i>	Available
8.	Supporting Document: Occupational Map <i>(Mandatory)</i>	Available
9.	Supporting Document: Assessment SOP <i>(Mandatory)</i>	Available

Annexure 1: Evidence of Level

NCrf/NSQF Level Descriptors	Key requirements of the job role/ outcome of the qualification	How the job role/ outcomes relate to the NCrf/NSQF level descriptor	NCrf/NSQF Level
Professional Theoretical Knowledge/Process	Candidate is able to design, test, and develop application using appropriate programming language to meet the required need of the job. The work will however be done within a familiar, predictable and routine range of situations of clear choice.	- Possesses specialized knowledge of procedures employed in both routine and non-routine contexts. - Possesses specialized operational knowledge and understanding of the work. - Has complete knowledge of concept of time required for delivery; and Quality for a range of issues.	4

		Has knowledge of collecting and interpreting the available information, drawing conclusions & communicating the same.	
Professional and Technical Skills/ Expertise/ Professional Knowledge	The candidate will have a factual knowledge in the field of computer hardware and software, application of information technology, programming languages and the key processes used for developing application software.	- Possesses specialized professional and technical skills; displays clarity of professional knowledge and technical skills in broad range of activities/ tasks. - Can apply the required knowledge for successfully implementing or applying techniques/ processes in a specific field/ job role. - The ability to gain, and where relevant apply a range of knowledge, skills and understanding - Can clearly identify the relevant tools; and has advanced knowledge of materials in most routine/ non routine contexts. - Possesses the required operational skills for the work/ job. Skill to deliver job/ work with the required precision and in the estimated timelines. - Capabilities of carrying out a choice of processes and procedures within the range of familiar / unfamiliar contexts.	4
Employment Readiness & Entrepreneurship Skills & Mind-set/Professional Skill	- Introduction to Employability Skills - Constitutional values - Citizenship - Becoming a Professional in the 21st Century - Basic English Skills - Career Development & Goal Setting - Communication Skills - Diversity & Inclusion - Financial and Legal Literacy - Essential Digital Skills	- Have much broader Employability Skills including understanding of career planning, digital skills, financial and legal literacy. - Good Communication skills, both oral and written. - Initiative and Leadership Abilities. - Advanced literacy and Numeracy skills - Has good skills for self-employment and entrepreneurship skills/ entrepreneurial Mind-set which may potentially create job for more persons (say 3 to 5).	4

	• Entrepreneurship • Customer Service • Getting Ready for Apprenticeship & Jobs	• Skills for accurate workshop/ mathematical calculation and estimations, and understanding of arithmetic and algebraic principles. • Can comfortably use most of the basic digital tools, has clear understanding of Financial and Digital literacy, Aadhaar and Mobile, uses digital payments etc. with proficiency • Good understanding of Constitutional values & Citizenship, inclusion and Diversity. • Very Good understanding of social political and work environment	
Broad Learning Outcomes/Core Skill	• Candidate needs to recall and demonstrate practical skill related to computer operating skills. He/she needs to develop, test, write, modify and debug software based applications in routine and repeat them until required outcomes are met. The outcomes of these test cases are recorded using appropriate rules, tools & using quality concepts through appropriate templates.	• The candidate must be able to carry out a specialized job/ work/ tasks in a familiar/ unfamiliar, predictable/ unpredictable, routine/ non-routine, situation of multiple options/ choices. • Focus on range of application of standard and non-standard procedures and somewhat complex operations in production/ services. Able to identify the problems and a wider possible range of solutions with pros and cons in production/ services.	4
Responsibility	• Candidate is independently responsible to perform all the tasks as per requirements of the job, hence is responsible for own work and learning.	• Takes complete responsibility for delivery and quality of own work and output as also the subordinates. • Shares responsibility for the group tasks. • Can perform all non-standard procedures and non-routine tasks with confidence.	4

Annexure 2: Tools and Equipment (Lab Set-Up)

List of Tools and Equipment

Batch Size:

S. No.	Tool / Equipment Name	Specification	Quantity for specified Batch size
1.	Computer /laptop	latest configuration	1:1
2.	Stationaries such as Notepad, Pen etc.	As per requirement/batch size	1:1
3.	Internet connectivity	with good speed	-
4.	IT Foundation & Digital tools	MS office/ open office, & typing software, Web Browser, Search Engines, Cloud Storage (Google Drive, One Drive), Social Media and Networking platforms, Antivirus Software	
5.	Web Designing Tools	Text Editor like Sublime Text, Notepad++, XML Editor, Web Browsers: Google Chrome, Mozilla Firefox	
6.	Programming and SQL tools	C++ Compiler, Code::Blocks or Dev-C++ IDE, Visual Studio, Java Development Kit (JDK), Eclipse or NetBeans IDE, Java Frameworks (Hibernate, Spring) Database Management System (DBMS) (e.g., MySQL, PostgreSQL, Microsoft SQL Server (Express Edition), Oracle (Express Edition), SQLite) or any online SQL Editor	
7.	Printer and Scanner		2

Classroom Aids

The aids required to conduct sessions in the classroom are:

1. White/Black board , Marker and Duster
2. Reference books, Notepad, Pen/Pencil
3. other basic infrastructure

Annexure 3: Industry Validations Summary

Provide the summary information of all the industry validations in table. This is not required for OEM qualifications.

S. No	Organization Name	Representative Name	Designation	Contact Address	Contact Phone No	E-mail ID	LinkedIn Profile (if available)
1.	Anmol Enterprises	Krishan Bisla	Prop	SCO-44, Sector - 11, Panchkula	94160913676	anmol11enterprises@gmail.com	
2.	Army Decorators	Rohit Mehra	Prop	Shop No. 104-106, Deep Plaza, Opp. District Court, Gurgaon-122001	9717953888	armydecorators@yahoo.com	
3.	Govt Sr. Sec School Bahari (KNL)	Wazir Singh	Principal	Govt Sr. Sec School Bahari Karnal	9466236196	gsssbahri1774@gmail.com	
4.	Galaxy Computers	Atul	Owner	VPO-Ismailabad, Distt - Kurukshetra	9996988369	er.atul004@gmail.com	
5.	Vikas Motors	Anil	Owner	Mugal Pura, Old Sabzi Mandi Gohara, Sonipat	9812500181	anilmehta1979@gmail.com	
6.	Jawahar Lal Nehru Senior Secondary School, Gohana	Sachin	Owner	Jawahar Lal Nehru Senior Secondary School, Gohana	9466635000	jlnschoolgohana@gmail.com	
7.	Sharma Computers	Vikas	Owner		9728571022	vikassharma1022@gmail.com	
8.	Deep Computers	Deepak Verma	Owner	Ground Floor, Sun Plaza Mall, Rewari Road, Narnaul - 123001 (Hry.)	9992207770	deepcomputers@gmail.com	

9.	Govt Girls High School Kanina (3965) M/Garh	Naresh Kumar	Head Master	Govt Girls High School Kanina (3965) M/Garh	7015030770	gghskanina@gmail.com	
10.	Panchsheel Modern Sr. Sec. School, Gohana Road, Sonipat	Ravinder	Principal	Panchsheel Modern Sr. Sec. School, Gohana Road, Sonipat	8930484815	panchsheelschool@gmail.com	
11.	Shree Balaji Institute Panchkula	Navneet Singh	Managing Director		9501448764	sbipanchkula@gmail.com	
12.	Shree Computer & Printer Repair	Arun Sharma	Prop	#193 Near MC, Market, Near Idea office, Sirsa - 125055			
13.	Splendid Immigration	Neha	Senior Visa Counselor	near aggarsain chowk, Ambala City	9996983211	neha@splendidimmigration.com	
14.	Star Computer Centre - Dahina (Rewari)	Sahil Sharma	Centre Head	Dahina (Rewari)	8708131393	sahilsharma1993@gmail.com	
15.	Umesh Painter	Umesh Kumar	Owner	Palika Bazar, Gohana - 131301 (Sonipat)	9253171144	umeshpainter13301@gmail.com	
16.	RK Computer, VPO - Ismailabad, Distt - Kurukshetra	Rajesh Kumar	Owner	VPO-Ismailabad, Distt - Kurukshetra	9671006526	rajeshkaner@gmail.com	
17.	Harsh Infotech	Neeru	Owner	VPO-Ismailabad, Distt - Kurukshetra	9896131343	sunnyahuja.in@gmail.com	
18.	PYRAMID COMPUTER C/o Aadarsh Enterprises	Sandeep Mabbar	Prop	DSS - 49, Huda Complex, Old Bus Stand, Sirsa - 125055 (Hry.)	9215575236		
19.	MAHADEV AUTO	Sanjay Duhan	Owner	Dr. Vir Singh Complex, Near Gajraj Hospital, Gohana, Distt. Sonapat - 131301 (Haryana)	9416012936	sanjayduhangohana@gmail.com	

20.	KRISHNA ENTERPRISES	Narender	Manager	Krishna Enterprises, Opp. Bus Stand, Gohana (Sonipat)	9991072000	narender.gohana@gmail.com	
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Annexure 4: Training & Employment Details

Training and Employment Projections:

Year	Total Candidates		Women		People with Disability	
	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities	Estimated Training #	Estimated Employment Opportunities
2024	380				N/A	
2025	420				N/A	
2026	460				N/A	

Training, Assessment, Certification, and Placement Data for previous versions of qualifications:

Qualification Version	Year	Total Candidates				Women				People with Disability			
		Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed	Trained	Assessed	Certified	Placed
Version 1	2020	222	216	93	0	46	44	38	0	N/A			
Version 1	2021	418	435	291	3	131	127	96	1	N/A			
Version 1	2022	357	317	148	0	138	132	67	0	N/A			
Version 1	2023	342	38	13	0	153	9	02	0	N/A			

Applicable for revised qualifications only, data to be provided year-wise for past 3 years.

List Schemes in which the previous version of Qualification was implemented:

Qualification was implemented through fee based model. No sponsored training/ scheme was conducted.

Content availability for previous versions of qualifications:

☐ Participant Handbook ☐ Facilitator Guide ☐ Digital Content ☐ Qualification Handbook ☒ Any Other: Reference books are recommended in addition with the class notes provided by Faculties

Languages in which Content is available: English, Hindi

Annexure 5: Detailed Assessment Criteria

Detailed assessment criteria for each NOS/Module are as follows:

NOS/Module Name	Assessment Criteria for Performance Criteria/Learning Outcomes	Theory Marks	Practical Marks	Internal Marks	Total
IT Foundation and Digital Tools	- Understand the meaning, characteristics and applications of Computer. - Know the history, generation and classification of Computers. - Know the various components of Computer. - Understanding the concept of input and output devices of Computers and how computer works. - Understand the concept of Data and Information and number conversion. - Learn the basic concepts of operating system. - Understand the settings and working of Windows. - Identify and fix peripherals mishaps and malfunctions. - Learn to create and manipulate document. - Learn to apply formula and functions in spreadsheet. - Using various tools of word processor and spreadsheet. - Know to present information visually & effectively using digital presentation - Know the correct posture while typing. - Learn to type with accuracy and speed. - Learn basic concepts of network and internet skills. - Learn communication over Internet. - Learn to register for an email account, navigate an email interface, compose, send and receive messages, and upload and download attachments. - Recognize the various security and privacy issues on internet and safety measures - Understand cloud and cloud storage.	36	15	30	81

Building Programming and Database management Skills	- Learn to create a basic structure of a web page using HTML and to enhance the appearance and interactivity using CSS and JavaScript respectively. - Understand the XML to structure data. - Learn to use C++ language semantics and syntax to build basic programming skills. - Understand the concepts of Database and learn to write SQL commands to create and manipulate.	33	15	15	63
Application Development Technology	- Understand the architecture and components of the .NET framework. - Learn to Develop applications using the C# and vb.net programming language - Learn to develop dynamic web applications using ASP.NET that interact with database and also to create and consume web services.	40	30	15	85
Elective 1: .NET TECHNOLOGY					
Elective 2: JAVA TECHNOLOGY	- Understand the syntax, semantics, and core concepts of the Java programming language, including object-oriented programming principles. - Learn to implement input/output operations, file handling, and exception handling in Java applications. - Learn to develop web applications using Java Enterprise Edition (Java EE) technologies such as Servlets and Java Server Pages (JSP). - Learn advance concepts of java programming with database connectivity and to develop java applications with graphical user interface (GUI).				
Employability Skills, DGT	- Learn communication and employability skills to get job ready in the industry. - Learn secured offline/online financial transaction.	11	0	0	11
OJT/ Project & Viva	Learn to apply skills and knowledge practically in work/ job environment	0	0	0	60
Grand Total		120	60	60	300

Annexure 6: Assessment Strategy

This section includes the processes involved in identifying, gathering, and interpreting information to evaluate the Candidate on the required competencies of the program.

Mention the detailed assessment strategy in the provided template.

1. Assessment System Overview:

- Online Exam Request: After completion of training/course concerned Hartron Skill Centres sends examination request through Franchise Management System (FMS) Portal.
- Request Verification: Online examination request is Approve/disapprove (as the case may be) by Awarding Division, Hartron and prepare final list of candidate to appear in the Examination.
- Assessment Division, Hartron prepare the exam Schedule as per the final list and same is intimated to concern Hartron Skill Centre (HSC), where exam is to be conducted.
- Assessment Division deploy Assessors to execute assessment.
- Awarding Division monitors the assessment process and records.

2. Testing Environment:

- The exam is conducted online at concerned Hartron Skill Centre by the deputed Assessors.
- Assessment is done in a transparent manner, under CCTV surveillance.
- Authenticity of learner is duly checked by Assessors and their attendance is marked accordingly.
- Online examination of candidate is followed by Viva which is taken by Assessors of Hartron.
- Candidate should submit project/OJT report when appear for Viva.
- Result is stored securely for declaration and publication through FMS portal.

3. Assessment Quality Assurance levels/Framework:

- SMEs of Assessment Division create the Question Bank which is further vetted by Awarding Division.
- Questions in the question bank are of different difficulty levels and reviewed periodically.
- Exam is conducted online and questions of different difficulty levels are picked randomly from vetted question bank.
- No unfair activity is allowed.

4. Types of evidence or evidence-gathering protocol:

- Attendance of Assessors as well as students is being taken as standardized procedure.
- Whole exam is conducted under CCTV surveillance and recording of the same is taken as evidence.

5. Method of verification or validation:

- Surprise checks during conduct of assessment at respective Hartron Skill Centre

6. Method for assessment documentation, archiving, and access

- The required assessment documents are stored in a safe manner for a certain period of time.
- Assessment results are stored on physical files as well as on the FMS portal.

NSQC Approved