

COMPETENCY STANDARD

Computer Operation

Level: 03

(ICT Sector)

Competency Standard Code: CS-ICT-CO-L3-EN-V1



National Skills Development Authority
Prime Minister's Office
Government of the People's Republic of Bangladesh

Copyright

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This Competency Standard for Computer Operation is a document for the development of curricula, teaching and learning materials, and assessment tools. It also serves as the document for providing training consistent with the requirements of industry in order to meet the qualification of individuals who graduated through the established standard via competency-based assessment for a relevant job.

This document has been developed by NSDA in association with ICT Sector ISC, industry representatives, academia, related specialist, trainer and related employee.

Public and private institutions may use the information contained in this standard for activities benefitting Bangladesh.

Introduction

The NSDA aims to enhance an individual's employability by certifying completeness with skills. NSDA works to expand the skilling capacity of identified public and private training providers qualitatively and quantitatively. It also aims to establish and operationalize a responsive skills ecosystem and delivery mechanism through a combination of well-defined set of mechanisms and necessary technical supports.

Key priority economic growth sectors identified by the government have been targeted by NSDA to improve current job skills along with existing workforce to ensure required skills to industry standards. Training providers are encouraged and supported to work with industry to address identified skills and knowledge to enable industry growth and increased employment through the provision of market responsive inclusive skills training program. "Computer Operation" is selected as one of the priority occupations of ICT Sector. This standard is developed to adopt a demand driven approach to training with effective inputs from Industry Skills Councils (ISC's), employer associations and employers.

Generally, a competency standard informs curriculum, learning materials, assessment and certification of trainees enrolled in Skills Training. Trainees who successfully pass the assessment will receive a qualification in the National Skills Qualification Framework (NSQF) under Bangladesh National Qualification Framework (BNQF) and will be listed on the NSDA's online portal.

This competency standard is developed to improve skills and knowledge in accordance with the job roles, duties and tasks of the occupation and ensure that the required skills and knowledge are aligned to industry requirements. A series of stakeholder consultations, workshops were held to develop this document.

The document also details the format, sequencing, wording and layout of the Competency Standard for an occupation which is comprised of Units of Competence and its corresponding Elements.

Overview

A competency standard is a written specification of the knowledge, skills and attitudes required for the performance of an occupation, trade or job corresponding to the industry standard of performance required in the workplace.

The purpose of a competency standards is to:

- provide a consistent and reliable set of components for training, recognising and assessing people's skills, and may also have optional support materials
- enable industry recognised qualifications to be awarded through direct assessment of workplace competencies
- encourage the development and delivery of flexible training which suits individual and industry requirements
- encourage learning and assessment in a work-related environment which leads to verifiable workplace outcomes

Competency standards are developed by a working group comprised of representative from NSDA, Key Institutions, ISC, and industry experts to identify the competencies required of an occupation in Informal Sector.

Competency standards describe the skills, knowledge and attitude needed to perform effectively in the workplace. CS acknowledge that people can achieve technical and vocational competency in many ways by emphasizing what the learner can do, not how or where they learned to do it.

With competency standards, training and assessment may be conducted at the workplace or at training institute or any combination of these.

Competency standards consist of a number of units of competency. A unit of competency describes a distinct work activity that would normally be undertaken by one person in accordance with industry standards.

Units of competency are documented in a standard format that comprises of:

- unit title
- nominal duration
- unit code
- unit descriptor
- elements and performance criteria
- variables and range statement
- curricular content guide
- assessment evidence guides

Together, all the parts of a unit of competency:

- describe a work activity
- guide the assessor to determine whether the candidate is competent or not yet competent. The ensuing sections of this document comprise of a description of the relevant occupation, trade or job with all the key components of a unit of competency, including:
 - a chart with an overview of all Units of Competency for the relevant occupation, trade or job including the Unit Codes and the Unit of Competency titles and corresponding Elements
 - the Competency Standard that includes the Unit of Competency, Unit Descriptor, Elements and Performance Criteria, Range of Variables, Curricular Content Guide and Assessment Evidence Guide.

Competency Standards for National Skills Certificate – Level-3 in Computer Operation in ICT Sector

Level Descriptors of NSQF (BNQF 1-6)

Level & Job Classification	Knowledge Domain	Skills Domain	Responsibility Domain
6-Mid-Level Manager/ Sub Assistant Engineer	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyse, compare, relate and evaluate.	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower-level management. Diagnose and resolve problems within and among work groups.
5-Supervisor	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
4-Highly Skilled Worker	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.
3-Skilled Worker	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
2-Semi Skilled Worker	Basic understanding of underpinning knowledge in a specific work or study area, able to interpret and apply common occupational terms and instructions.	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.	Work or study under supervision in a structured context with limited scope of manipulation
1 –Basic Skilled Worker	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/under supervision.	Work under direct supervision in a structured context with limited range of responsibilities.

List of Abbreviations

General	General		
NSDA	National Skills Development Authority		
BMET	Bureau of Manpower Employment and Training		
ILO	International Labor Organization		
ISC	Industry Skills Council		
NPVC	National Pre-Vocation Certificate		
NSQF	National Skills Qualifications Framework		
PPP	Public Private Partnership		
SCVC	Standards and Curriculum Validation Committee		
SEIP	Skills for Employment Investment Program		
STP	Skills Training Provider		
UoC	Unit of Competency		
Occupation	Occupation Specific		
GUI	Graphical User Interface		
ESD	Electro-static Discharge		
ICT	Information Communication Technology (ICT)		
KPI	Key Performance Indicator		
LCD	Liquid Crystal Display		
OSH	Occupational safety and health		
PPE	Personal protective equipment		
RAM	Random Access Memory		
USB	Universal serial bus		

Approval of Competency Standard

Approved by 9th Executive Committee (EC) Meeting of NSDA Held on 16 June 2022

Deputy Director (Admin) and Officer of Secretarial Duties for EC Meeting National Skills Development Authority

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Competency Standards for National Skill Certificate – 3 in Computer Operation in ICT Sector

Course Structure

SL		Unit Code and Title Level			
Gei	Generic Units of Competencies				
1.	GU-14-L3-V1	Carryout Communication with Clients	3	20	
Sec	tor Specific Units of	Competencies		15	
2.	SU-ICT-03-L3-V1	Comply to Ethical Standards in the ICT Workplace	3	15	
Occupation Specific Units of Competencies				325	
3.	OU-ICT-CO-01-L3-V1	Operate a Personal Computer	3	20	
4.	OU-ICT-CO-02-L3-V1	Prepare a Document Using Word Processor	3	100	
5.	OU-ICT-CO-03-L3-V1	Prepare a Spreadsheet	3	90	
6.	OU-ICT-CO-04-L3-V1	Prepare a Presentation	3	60	
7.	OU-ICT-CO-05-L3-V1	Use Internet and Access Resources	3	30	
8.	OU-ICT-CO-06-L3-V1	Perform Basic Maintenance and Troubleshooting	3	25	
	Total Nominal Learning Hours 360				

Units & Elements at Glance

Generic Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
GU-14-L3- V1	Carryout Communication with Clients	 Interpret client-based communication and etiquette Prepare documents for endeavor/working environment/platform Conduct communication 	20

Sector Specific Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
SU-ICT-03-L3- V1	Comply to Ethical Standards in the ICT Workplace	 Uphold the requirements of clients Deliver quality products and services Maintain professionalism at workplace Maintain workplace code of conduct. 	15

Occupation Specific Units of Competencies

Code	Unit of Competency	Elements of Competency	Duration (Hours)
OU-ICT-CO-01- L3-V1	Operate a Personal Computer	 Start computer and access system information and features Navigate and manipulate desktop environment Manage user accounts Organize files and folders Follow good practice 	20
OU-ICT-CO-02- L3-V1	Prepare a Document Using Word Processor	 Prepare for the Job Create Document Format Document Review and Protect Document Print & Transfer Document 	100
OU-ICT-CO-03- L3-V1	Prepare a Spreadsheet	 Prepare for the Job Create Spreadsheet Apply formulas and functions Perform data manipulation and presentation Review and Protect Workbook Print & Transfer Document 	90
OU-ICT-CO-04- L3-V1	Prepare a Presentation	 Prepare for the Job Create Presentation Furnish presentation Apply slide master Print & Transfer presentation 	60
OU-ICT-CO-05- L3-V1	Use Internet and Access Resources	 Prepare resources for sharing Access Resource using internet Use and manage e-mail Use Virtual Platform 	30
OU-ICT-CO-06- L3-V1	Perform Basic Maintenance and Troubleshooting	 Identify the problem Diagnose and fix Peripheral device faults Fix printing error Fix application error Troubleshoot network connectivity 	25

Generic Units of Competencies

Unit Code and Title	GU-14-L3-V1: Carryout Communication with Clients
Unit Descriptor	This unit covers the knowledge, skills and attitudes required carryout communication with clients. It specifically includes the task of interpreting client-based communication and etiquette, preparing documents for endeavor/working environment/platform and conducting communication
Nominal Hours	20 Hours
	Performance Criteria
Elements of Competency	<u>Bold & Underlined</u> terms are elaborated in the Range of
	Variables Training Components
Interpret client-based communication and etiquette	 1.1 Code of conduct of communication are interpreted as per working environment/platform 1.2 Manners and etiquette of communication is interpreted as 1.3 Questions about routine working environment/platform procedures and matters are explained as required
	2.1 Relevant documents are prepared for effective
2. Prepare documents for endeavor/working environment/platform	communication with work environment 2.2 <u>Validated sources</u> are identified as per client's requirements 2.3 Documents are validated by the authentic sources as per client's requirements 2.4 Documents are submitted as per standard procedure
3. Conduct communication	 3.1 Appropriate means/ method/ way of communication are maintained as per working environment/ platform 3.2 Channels of communication are identified and followed 3.3 Communication is conducted in a courteous manner to gather and convey information 3.4 Appropriate non-verbal communication is used as required
Range of Variables	
Variable	Range (may include but not limited to):
Procedures and Matters	 1.1 Notes 1.2 Agenda 1.3 Simple reports such as progress and incident reports 1.4 Job sheets 1.5 Operational manuals 1.6 Brochures and promotional material 1.7 Visual and graphic materials 1.8 Standards 1.9 OSH information

1.10 Signs	
2.1 Personnel identification document	
2.2 Portfolio	
2. Documents 2.3 Financial document	
2.4 Task proposal	
3.1 Chamber of commerce	
3.2 Related association	
3. Validated sources 3.3 High commission	
3. Validated sources 3.4 Related Bank	
3.5 Local authority	
3.6 Related legal entities	
4. Way of	
Communication 4.2 Written	
4.3 Online communication	
5.1 Marketplace messenger	
5.2 Zoom	
5.3 Google meet	
5. Channels of 5.4 Microsoft team	
communication 5.5 Go meeting 5.6 Boithok	
5.7 Webex	
5.8 Skype	
5.9 Whatsapp	
6.1 Effective questioning	
6. Courteous Manner 6.2 Active listening	
6.3 Speaking skills	
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent a	ind meet the
requirements of the current version of the Unit of Competency	
Assessment required evidence that the candidate:	
1. Critical Aspects of 1.1 interpreted client-based communication and	etiquette
Competency 1.2 prepared documents for	
endeavour/working/environment/platform	
1.3 conducted communication	
2.1. Working platform	
2.2. Terms and condition in platform	
2. Underpinning 2.3. Documents for communication	
Knowledge 2.4. Validated sources	
2.5. Way of communication	
2.6. Channel of communication	

		3.1	Handling personal computer/laptop
		3.2	Interpreting communication needs
3.	Underpinning Skills	3.3	Using channels of communication
		3.4	Logging with online platform
		3.5	Interpreting terms and condition
		4.1	Commitment to occupational health and safety
		4.2	Promptness in carrying out activities
		4.3	Sincere and honest to duties
4.	Underpinning	4.4	Environmental concerns
	Attitudes	4.5	Eagerness to learn
		4.6	Tidiness and timeliness
		4.7	Respect for rights of peers and seniors in workplace
		4.8	Communication with peers and seniors in workplace
		The	following resources must be provided:
5	Resource		
	Implications	5.1	Relevant tools, Equipment, software and facilities
	mpneutions	5.2	needed to perform the activities.
		5.2	Required learning materials.
		Meth	nods of assessment may include but not limited to:
6.	Methods of	6.1	Written Test
	Assessment	6.2	Demonstration
		6.3	Oral Questioning
		7.1	Competency assessment must be done in a NSDA
7.	Context of		accredited assessment centre
	Assessment	7.2	Assessment should be done by an NSDA certified/
			nominated assessor

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under National Skills Qualification (NSQF). Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Sector Specific Units of Competencies

Unit Code and Title	SU-ICT-04-L3-V1: Comply to Ethical Standards in the ICT Workplace			
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to comply to ethical standards in the ICT workplace. It specifically includes the task of upholding the requirements of clients, delivering quality products and services, maintaining professionalism at workplace, and maintaining workplace code of conduct.			
Nominal Hours	15 Hours			
Elements of Competency	Performance Criteria Bold and Underlined terms are elaborated in the Range of Variables			
Uphold the requirements of clients	 1.1 Clients' requirements are identified. 1.2 Confidentiality of information is maintained in accordance with workplace policies / organizational policies/ national legislation. 1.3 Potential conflicts of interest are identified and involved parties of potential conflicts are notified. 1.4 Proprietary rights of client/customer is asserted. 			
2. Deliver quality products and services	 2.1. Products and services are provided according to the clients' requirements. 2.2. Work is completed as per standards. 2.3. Quality processes are implemented when developing products and services. 			
3. Maintain professionalism at workplace	 3.1 Work processes are delivered as per standards. 3.2 Skills, knowledge and qualifications are presented in a professional manner. 3.3 Services and products developed by self and others are delivered as per workplace standard. 3.4 Unbiased and objective information are provided to clients. 3.5 Realistic estimates for time, cost and delivery of outputs are presented during negotiation. 			
Maintain workplace code of conduct.	4.1 Workplace code of conduct are interpreted4.2 Workplace code of conduct is followed.			
Range of variables				
Variables	Range (may include but not limited to):			
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency				

requirements of the current version of the Unit of Competency

Critical aspects of competency	Assessment required evidence that the candidate: 1.1 asserted proprietary rights of client/customer. 1.2 completed work to industry and international standards. 1.3 implemented quality processes when developing products and services. 1.4 delivered services and products developed by self and others. 1.5 provided unbiased and objective information to clients. 1.6 followed workplace code of conduct.
2. Underpinning knowledge	 2.1. Corporate code of confidentiality of information 2.2. organizational policies, national legislation and workplace policies in relation to IT sector 2.3. Law and regulations pertaining to proprietary rights 2.4. Quality processes for products and services 2.5. Procedure of provided to client information 2.6. Method of estimating for time, cost and delivery products and services 2.7. Workplace code of conduct in IT sector
3. Underpinning Skills	 3.1. Upholding confidentiality of information in accordance with organizational policies, national legislation and workplace policies 3.2. Asserting proprietary rights of client/customer 3.3. Completing work in accordance with industry and international standards 3.4. Implementing quality processes when developing products and services 3.5. Delivering correctly services and products developed by self and others 3.6. Providing unbiased and objective information are to clients. 3.7. Presenting realistic estimates for time, cost and delivery of outputs during negotiation 3.8. Following workplace code of conduct
4. Underpinning Attitudes	 4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers and seniors in workplace.
5. Resource Implications	The following resources must be provided: 5.1 Relevant tools, Equipment, software and facilities needed to perform the activities. 5.2 Required learning materials.

	6.1	Written Test
6. Methods of Assessment	6.2	Demonstration
	6.3	Oral Questioning
7. Contant of Assessment	7.1.	Competency assessment must be done in NSDA accredited center.
7. Context of Assessment	7.2.	Assessment should be done by NSDA certified/nominated assessor

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Occupation Sp	ecific Units o	f Competenci	es

Unit Code and Title	OU-ICT-CO-01-L3-V1: Operate a Personal	
Unit Descriptor	Computer This unit covers the knowledge, skills and attitude required to operate a personal computer. It specifically includes the requirements of starting computer and access system information and features, navigating and manipulating desktop environment, managing user accounts, organizing files and folders and following good practice	
Nominal Hours	20 hours	
Elements of Competency	Performance Criteria Bold and underlined terms are elaborated in the range of variables	
Start computer and	1.1 Workspace, furniture and equipment are adjusted to suit	
access system	user ergonomic requirements.	
information and features	1.2 Work arrangements are ensured to meet organizational	
	and Occupational Safety and Health (OSH)	
	requirements for computer operation. 1.3 Personal Computer and all the Peripherals are checked and ensured operational as per job requirement.	
	1.4 Computer is started or logged on according to user	
	procedures. 1.5 Basic functions and features are identified using system information.	
	1.6 <u>Common applications</u> of OS are accessed.	
	1.7 Help functions are used as required.	
2. Navigate and manipulate desktop	2.1 Correct desktop icons are selected, opened, closed and accessed features.	
environment	2.2 Multiple windows are opened, resized and closed	
	2.3 Desktop personalization is performed.	
	2.4 Start menu and taskbar are customized	
3. Manage user accounts	3.1 Existing <u>user account</u> is manipulated.	
	3.2 New user account is created and managed.	
4. Organize files and	4.1 Folders are created with appropriate name	
folders	4.2 Files are organized in appropriate folders	
	4.3 Rename and move folders and files as required	
	4.4 Identify folder and <u>file attributes</u>	
	 4.5 Move folders and files using cut and paste, and drag and drop techniques 4.6 Save folders and files to <u>appropriate media</u> where necessary 	
	4.7 Folders and files are searched	
	4.8 Deleted folder and files are restored as necessary	
5. Follow good practice	5.1 Naming convention is followed for files and folders.5.2 Documents are saved in regular intervals	
	5.3 Backup is performed for documents in a regular interval.	

	7 4 A11 1: 4: 1 1 1 0 1 4 1
	5.4 All open applications are closed before shutdown or
	leaving workstation.
	5.5 Shut down the Personal Computer and associated
	peripherals according to Standard Operating Procedure (SOP).
Range of Variables	
Variable	Range (May include but not limited to:)
1. Ergonomic	1.1 Avoiding radiation from computer screens
requirements	1.2 Screen position
	1.3 Chair height, seat and back adjustment
	1.4 Workstation height and layout
	1.5 Document holder
	1.6 Keyboard and mouse position
	1.7 Lighting
	1.8 Noise minimization
	1.9 Posture
	1.10 Footrest
2. Work arrangements	2.1. Exercise breaks
	2.2. Mix of repetitive and other activities
	2.3. Rest periods
	2.4. Visual display unit (VDU) eye testing
3. Occupational safety	3.1. OSH guidelines related to the:
and health	3.1.1. Use of the screen equipment,
requirements	3.1.2. Computing equipment and peripherals
_	3.1.3. Ergonomic work stations,
	3.1.4. Security procedures,
	3.1.5. Customization requirements
	3.2. Statutory requirements
4. Common applications	4.1 Word pad
	4.2 Note pad
	4.3 Paint
	4.4 Media player
	4.5 Calculator
	4.6 Sticky Notes
	4.7 Snipping Tool
5. User account	5.1 Local user account
	5.2 Microsoft account
6. File attributes	6.1 Dates
o. The attributes	6.2 Size
7 4 1	
7. Appropriate media	7.1 CDs/DVD
	7.2 External hard drive
	7.3 Locations on a network/ on Cloud
	7.4 USB/ Flash/Thumb drives
E :1 C :1	7.5 Zip disks
Evidence Guide	. 11 00 1 4 1111 11 11 11 11 11 11 11 11 11 11
	ntic, valid, sufficient, reliable, consistent and recent and meet the
	version of the unit of competency.
1. Critical aspects of	Assessment required evidence that the candidate:
competency	

	T	
	1.1	started computer and accessed system information and features
	1.2	navigated and manipulated desktop environment
		organized files and folders
2. Underpinning	2.1	Occupational Health & Safety.
knowledge	2.2	Hazard in IT workplace.
	2.3	Use of appropriate PPEs.
	2.4	Naming convention for files/folders
	2.5	Desktop items
	2.6	Different type of software and application packages
	2.7	Access privilege of user account
	2.8	Procedure to Keep a clean workplace and equipment
		orderly.
3. Underpinning skill	3.1	Starting computer
	3.2	Running application software
	3.3	Managing desktop item
	3.4	Manipulating files and folders
4. Required attitude	4.1	Commitment to occupational safety and health.
	4.2	Promptness in carrying out activities.
	4.3	Sincere and honest to duties.
	4.4	Eagerness to learn the document preparation process.
	4.5	Tidiness and timeliness.
	4.6	Environmental concerns.
	4.7	Respect for the rights of peers, subordinates and seniors
		at the workplace.
	4.8	Communication with peers, subordinates and seniors in
		the workplace.
	4.9	Keeps a clean and orderly workplace and equipment.
5. Resource implication	5.1	Relevant tools, Equipment, software and facilities needed
		to perform the activities.
	5.2	Required learning materials.
6. Methods of assessment	6.1	Written test
	6.2	Demonstration
	6.3	Oral questioning
7. Context of assessment	7.1	Competency assessment must be done in NSDA
		accredited center.
	7.2	Assessment should be done by NSDA certified/
		nominated assessor

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code Title	OU-ICT-CO-02-L3-V1: Prepare a Document Using Word Processor			
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to prepare a document using word processing software. This specifically includes preparing for the job, creating document, formatting document, reviewing and protecting document, and printing and transferring document.			
Nominal Hours	100 Hours			
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables)			
1. Prepare for the Job	 Safe work practices according to workplace procedures are observed and followed. Necessary Software is checked and ensured operational as per job requirement. Availability of required fonts for typing of Bangla and English are Ensured. Type of Documents are identified to be prepared. 			
2. Create Document	 New document is created from blank/ library as per requirement. Word options and ribbon display options are set as required. Error-free typing in Bangla and English is performed as per typing technique and keyboard layout. Page layout are set as per job requirements. Contents are inserted as per specification. Breaks Options are applied as per requirement. Spell check (for English) is performed. 			
3. Format Document	 3.1 Formatting is used as per instructions. 3.2 References are applied to make document with professional look. 3.3 Document is saved in a specific directory/ destination with appropriate file format. 			
4. Review and Protect Document	 4.1 Document is reviewed against job specification in track change mode. 4.2 Comments are inserted as required 4.3 Document is Protected using Password 4.4 Document is saved after finalization. 			

5. Print & Transfer Document	 5.1 Printer is selected and <u>settings</u> are confirmed 5.2 Appropriate size of paper is ensured as required 5.3 Print preview is checked 5.4 Document is Printed 5.5 Document is transferred using <u>Storage Media.</u>
Range of Variables	
Variable	Range (may include but not limited to):
1. Necessary Software's	1.1 Word Processing Application Software 1.1.1. Microsoft Word 1.1.2. LibreOffice Writer 1.1.3. WPS Office Free Writer 1.1.4. Google Doc 1.2 Bangla typing Software 1.2.1. Bijoy 1.2.2. Avro 1.3 Converter 1.3.1 Unicode to ASCII code (Bijoy) 1.3.2 ASCII code (Bijoy) to Unicode
2. Type of documents	2.1 Application 2.2 CV 2.3 Cover letter 2.4 Report 2.5 Project Proposal 2.6 Mail merge 2.6.1. Letter 2.6.2. Email 2.6.3. Envelopes 2.6.4. Label
3. Page layout	3.1. Page Orientations 3.2. Page Size 3.3. Margin 3.3.1 Top 3.3.2 Bottom 3.3.3 Left 3.3.4 Right 3.4. Header and Footer 3.5. Page Number 3.6. Columns

4. Contents	4.1 Text 4.1.1 Drop Cap
	4.1.2 Signature Line
	4.2 Table
	4.2.1. Row
	4.2.2. Column
	4.2.3. Fit option
	4.2.4. Merge & Split
	4.2.5. Alignment
	4.2.6. Repeat Header Row
	4.3 Illustrations
	4.3.1 Picture
	4.3.2 Shapes
	4.3.3 Text Box
	4.3.4 SmartArt
	4.3.5 Chart
	4.3.6 Screenshot
	4.4 Symbols
	4.5 Equation
	4.6 Links
	4.6.1 Hyperlink
	4.6.2 Bookmark
	4.7 Table of Contents
	4.7 Table of Contents
	5.1 Page Break
5. Breaks Options	5.2 Column Break
	5.3 Section Break
	6.1 Font
6. Formatting	6.2 Paragraph
	6.3 Image size
	6.4 Alignment
	7.1 Footnote
7. References	7.2 Endnote
	7.3 Bibliography
	7.4 Index
9 File Formest	8.1doc
8. File Format	8.2docx
	8.3pdf
	8.4rtf
	8.5txt
	8.6dot
	8.7dotx
	8.8dotm
1	

9. Settings	 9.1 Printing Page 9.2 Single/Both side Print. 9.3 Odd/Even Page print 9.4 Collated 9.5 Page Orientation 9.6 Paper Size 9.7 Margins 9.8 Page Per sheet
10. Storage Media	10.1 USB Pen drive10.2 Portable Hard drive10.3 Optical Disk

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

	Asse	ssment required evidence that the candidate:
1. Critical aspects of	1.1	created document
competency	1.2	formatted document
	1.3	reviewed and protected document
	1.4	printed and transferred document
	2.1	Occupational Health & Safety.
2. Underpinning	2.1	Hazard in IT workplace.
knowledge	2.3	Use of appropriate PPEs.
	2.4	Desktop items
	2.5	Software and application packages
	2.6	keyboard layout.
	2.7	Use of word processing application software.
	2.8	Margin and page layout.
	2.9	Understand the different types of documents.
	2.10	Spelling and grammar
	2.11	File format/extension.
	2.12	Save and Save As
	2.13	Printing process
	2.14	Shut down procedure
	2.15	Procedure to Keep a clean workplace and equipment
		orderly.
	3.1	Operating a personal computer
3. Underpinning skills	3.2	Typing in English and Bangla
	3.3	Operate Printer

4. Required attitudes	 4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace. 4.9 Keeps a clean and orderly workplace and equipment.
5. Resource implication	 The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning
7. Context of assessment	 7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/nominated assessor

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	OU-ICT-CO-03-L3-V1: Prepare a spreadsheet
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to prepare a spreadsheet. This specifically includes the task of preparing for the Job, creating spreadsheet, applying formulas and functions, performing data manipulation and presentation, reviewing and protecting workbook, and printing and transferring document.
Nominal Hours	90 Hours
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables
1. Prepare for the Job	 1.1 Safe work practices according to workplace procedures are observed and followed. 1.2 Necessary Software is checked and ensured operational as per job requirement. 1.3 Types of documents are identified to be prepared.
2. Create Spreadsheet	 Workbook is created from blank/ library as per requirement. Components of spreadsheet interface are identified Gell formatting is performed as per data type Page layout are set as per job requirements. Data Contents is inserted as per specification. Paste Special options are used if required. Freeze pane is used if required Spell check (for English) is performed. Workbook is saved in a specific directory/ destination as instructed with appropriate File format.
3. Apply formulas and functions	 3.1. Formulas are applied using <u>operators</u> 3.2. <u>Functions</u> are applied as per requirement 3.3. <u>Data validation</u> is performed as per requirement
4. Perform data manipulation and presentation	 4.1 Data is sorted with different criteria. 4.2 Data is filtered with different conditions. 4.3 Conditional Formatting is applied 4.4 <u>Data manipulation tools</u> are applied 4.5 Data is presented using <u>Charts</u> as required
5. Review and Protect Workbook	 5.1 Workbook is reviewed against job specification in track change mode. 5.2 Comments are inserted as required 5.3 Workbook is saved after finalization. 5.4 Workbook is Protected using Password

6. Print and Transfer Document	 6.1 Page layout is set using <u>print titles</u> options 6.2 Printer is selected and <u>printer settings</u> are confirmed 6.3 Appropriate size of paper is ensured as required 6.4 Print preview is checked. 6.5 Workbook is Printed 6.6 Document is transferred using <u>Storage Media</u>. 6.7 <u>Page layout Elements</u> are set as per instructions.
Range of Variables	
Variable	Range (may include but not limited to):
1. Necessary Software	 1.1 Spreadsheet Application Software 1.2 Excel 1.3 LibreOffice Calc 1.4 OpenOfficeOrg 1.5 Google sheet 1.6 Numbers (MacOS)
2. Type of documents	2.1 Calendar 2.2 Monthly budget 2.3 Salary sheet 2.4 Work schedule 2.5 Loan calculator 2.6 Organizational chart 2.7 Invoice 2.8 Inventory list 2.9 Result sheet 2.10 Data summery report
3. Components of spreadsheet	3.1. Title bar 3.2. TAB 3.3. Ribbon 3.4. Formula Bar 3.5. Workbook views 3.6. Zoom Option
4. Cell formatting	4.1 Alignment 4.2 Font 4.3 Border 4.4 Fill 4.5 Protection
5. Data type	 5.1. Text 5.2. Number 5.3. Currency 5.4. Accounting 5.5. Date 5.6. Time 5.7. Percentage 5.8. Text

	5.9. Special 5.10. Custom
6. Contents	6.1 Text 6.1.1 Wrap text 6.1.2 Merge 6.2 Table 6.2.1. Row 6.2.2. Column 6.2.3. Merge & Split 6.2.4. Alignment 6.3 Illustrations 6.4 Symbols 6.5 Links 6.5.1 Hyperlink 6.5.2 Cell 6.5.3 Sheet
7. Paste Special	7.1 Formulas 7.2 Values 7.3 Formats 7.4 Transpose 7.5 Paste Link
8. File format	8.1 .xls 8.2 .xlsx 8.3 .csv 8.4 .xml
9. Operator	9.1 Arithmetic 9.1.1. + (Addition) 9.1.2 (Subtraction) 9.1.3. * (Multiplication) 9.1.4. / (Division) 9.2 Logical 9.2.1. AND 9.2.2. OR 9.2.3. NOT
	9.3 Relation 9.3.1. = (Equal) 9.3.2. < (Less Than) 9.3.3. > (Greater Than) 9.3.4. <= (Less Than Equal) 9.3.5. >= (Greater Than Equal) 9.3.6. <> (Not Equal)

10. Function	10.1. SUM 10.2. SUMIF 10.3. SUMIFS 10.4. MAX 10.5. MIN 10.6. AVERAGE 10.7. AVERAGEA 10.8. RANK 10.9. IF (Nested If) 10.10. Count 10.11. CountA 10.12. CountIF 10.13. VLookup 10.14. Concatenate
11. Data Validation	11.1. List 11.2. Text Length 11.3. Date 11.4. Time 11.5. Custom 11.6. Number
12. Data manipulation Tools	12.1. Text to Column 12.2. Remove Duplicate 12.3. Consolidate 12.4. Group / Ungroup 12.5. Table 12.6. Pivot Table 12.7. Hyperlink
13. Chart	13.1. Column 13.2. Line 13.3. Pie 13.4. Bar
14. Print titles	14.1. Set Print Area14.2. Rows to repeat at Top14.3. Columns to repeat to Left14.4. Page Order
15. Printer settings	 15.1. Printing Page 15.2. Single/Both side Print. 15.3. Odd/Even Page print 15.4. Collated 15.5. Page Orientation 15.6. Paper Size 15.7. Margins 15.8. Page Per sheet

16. Storage Media	16.1. USB Pen drive16.2. Portable Hard drive16.3. Optical Disk
17. Page layout Elements	17.1. Page Orientations 17.2. Page Size 17.3. Margin 17.3.1. Top 17.3.2. Bottom 17.3.3. Left 17.3.4. Right 17.4. Header and Footer 17.5. Page Number 17.6. Columns

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of current version of the Unit of Competency.

1. Critical aspects of	Assessment required evidence that the candidate: 1.1 applied formulas and functions
competency	11
	1.2 performed data manipulation and presentation
	1.3 reviewed and protected workbook
	2.1 Use of spreadsheet application software.
2. Underpinning	2.2 Different type of Excel documents.
knowledge	2.3 File format/extension.
	2.4 Type of charts, importance of chart
	2.5 Different type of math and logical functions.
	2.6 Different type of operator
	3.1 Performing demonstration of
3. Underpinning	3.2 Using logical functions
skills	3.3 Creating table
	3.4 Using Operators
	4.1 Commitment to occupational safety and health.
4. Required attitudes	4.2 Promptness in carrying out activities.
	4.3 Sincere and honest to duties.
	4.4 Eagerness to learn the document preparation process.
	4.5 Tidiness and timeliness.
	4.6 Environmental concerns.
	4.7 Respect for the rights of peers, subordinates and seniors at the workplace.
	4.8 Communication with peers, subordinates and seniors in the workplace.

	4.9 Keeps a clean and orderly workplace and equipment.
5. Resource implication	 The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning
7. Context of assessment	 7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor

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Unit Code and Title	OU-ICT-CO-04-L3-V1: Prepare a Presentation
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to prepare a presentation. This specifically includes preparing for the job, creating and furnishing presentation, applying slide master, and printing and transferring presentation.
Nominal Hours	60 Hours
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables
1. Prepare for the Job	 1.1 Safe work practices according to workplace procedures are observed and followed. 1.2 Necessary software is checked and ensured operational as per job requirement. 1.3 Types of presentation are identified to be prepared.
2. Create Presentation	 New presentation file is created from blank/ library as per requirement. Components of presentation interface are identified Slide size is selected as per requirement. Slides are inserted with appropriate layout as required. Contents are inserted as per presentation requirement. Presentation is saved in a specific directory/ destination as instructed with appropriate file format. Slides are checked with the presentation views.
3. Furnish presentation	3.1 Slides background customization are performed 3.2 Animations are applied 3.3 Transitions are applied 3.4 Presentation is checked
4. Apply slide master	 4.1 Slide layout is selected from Slide Master 4.2 Slide layout is customized as per requirements. 4.3 <u>Slide master options</u> are applied as required 4.4 Master view is closed
5. Print and Transfer presentation	 5.1 Printer is selected and <u>settings</u> are confirmed 5.2 Presentation slides are Printed 5.3 Presentation is transferred using <u>storage media</u>. 5.4 Appropriate print format is selected for presentation. 5.5 Presentation is exported with <u>expected format</u>
Range of Variables	
Variable	Range (may include but not limited to):

1. Necessary Software's	1.1 Presentation Application Software 1.1.1 Microsoft PowerPoint 1.1.2 LibreOffice impress 1.1.3 Prezi 1.1.4 Google Slide 1.2 Bangla typing Software 1.2.1 Bijoy 1.2.2 Avro
2. Types of presentation	2.1 Business Presentation2.2 Personal Portfolio2.3 Infographic Resume2.4 Education Materials
3. Components of presentation interface	3.1 Tab 3.2 Ribbon 3.3 Bar
4. Contents	4.1 Text 4.2 Table 4.3 Illustrations 4.3.1 Picture 4.3.2 Shapes 4.3.3 Customize Shape 4.3.4 Text Box 4.3.5 SmartArt 4.3.6 Chart 4.3.7 Screenshot 4.3.8 Icon 4.3.9 3D Model 4.4 Symbols 4.5 Equation 4.6 Hyperlink 4.7 Media 4.7.1 Audio 4.7.2 Video 4.7.3 Screen Recording 4.8 Infographic 4.9 Object 4.10 Countdown Timer 4.11 Action Button

5. File format.	5.1 .pptx 5.2 .pptm 5.3 .ppt 5.4 .pdf 5.5 .xps 5.6 .mp4 5.7 .wmv 5.8 .jpg 5.9 .gif 5.10 .png 5.11 .tiff
6. Presentation views.	6.1. From beginning6.2. From Current slide6.3. Custom Slide show6.4. Slide sorter
7. Animations	 7.1 Entrance 7.2 Emphasis 7.3 Exit 7.4 Motion Paths 7.5 More Effect 7.6 Timing 7.7 Animation Pane
8. Transition	8.1 Subtle 8.2 Exciting 8.3 Dynamic Content
9. Slide master options	9.1. Master layout 9.2. Title 9.3. Placeholder 9.4. Background style 9.5. Slide Size
10. Settings	10.1 Collated 10.2 Print layout 10.3 Handouts 10.4 Page Orientation 10.5 Paper Size 10.6 Margins 10.7 Page Per sheet 10.8 Color 10.9 Header & footer
11. Storage Media	11.1 USB Pen drive 11.2 Portable Hard drive 11.3 Optical Disk

12.1 Pdf 12.2 Video 12.3 Handouts 12.4 Package for CD
12.4 Fackage for CD

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of the current version of the Unit of Competency.

Critical aspects of competency	Assessment required evidence that the candidate: 1.1 created presentation 1.2 furnished presentation 1.3 applied slide master 1.4 printed and transferred presentation
2. Underpinning knowledge	 2.1 Different types of presentation. 2.2 File format/extension. 2.3 Save and Save As 2.4 Slide printing process 2.5 Use of Slide transition, animation and motion path 2.6 Procedure to Keep a clean workplace and equipment orderly.
3. Underpinning skills	3.1 Creating presentation3.2 Designing slides3.3 Applying slide transition and animation3.4 Presenting slides
4. Required attitudes	 4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace. 4.9 Keeps a clean and orderly workplace and equipment.
5. Resource implication	 The following resources must be provided: 5.1 Workplace (actual or simulated). 5.2 Tools, equipment and physical facilities appropriate to perform activities. 5.3 Materials consumable to perform activities.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test 6.2 Demonstration 6.3 Oral questioning

7. Context of assessment	 7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor
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Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Unit Code and Title	OU-ICT-CO-05-L3-V1: Use Internet and Access Resources
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to use internet and access resources. It specifically includes the task of preparing resources for sharing, accessing resource using internet, using and managing e-mail and using virtual platform.
Nominal Hours	30 Hours
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables
1.Prepare resources for sharing	 1.1 <u>Documents</u> is Scanned with required <u>file format</u> 1.2 File is converted using <u>file conversion tools</u> 1.3 File <u>compression tools</u> are used for compression and extraction. 1.4 Multiple PDF document is joined (if required)
2.Access Resource using internet	 2.1. Internet <u>browser</u> is selected and installed. 2.2. <u>Browser setting</u> is carried out for smooth operation. 2.3. Resources are accessed using <u>Search engines.</u> 2.4. Resources are preserved in local storage.
3.Use and manage e- mail	3.1 E-mail account is created with a selected email service provider. 3.2 E-mail operations are performed as required E-mail message is printed.
4.Use Virtual Platform	 4.1 <u>Virtual Platform</u> is selected and logged in with user credentials. 4.2 Virtual meeting is performed using <u>platform facilities</u>. 4.3 Resources are shared through <u>cloud storage</u>. 4.4 Data is collected using <u>online form</u>
Range of Variables	
Variable	Range (may include but not limited to):
1. Documents	 1.1 Single Page documents 1.2 Multiple page document 1.3 Picture 1.4 Signature
2. File format	2.1jpeg 2.2png 2.3pdf 2.4bmp 2.5tiff

3. File conversion tools	3.1 Offline Tools (Default application) 3.1.1doc/.docx to .pdf, 3.1.2xls/.xlsx to .pdf, 3.1.3ppt/.pptx to .pdf, 3.1.4jpg to .pdf 3.2 Offline Tools (PDF to Others) 3.2.1. PDF converter 3.2.2. PDF Editor 3.2.3. Foxit PDF Editor 3.2.4. Adobe PDF Editor 3.3.1. www.ilovepdf.com 3.3.2. www.pdf2go.com 3.3.3. https://pdf2doc.com/
4. Compression tools	4.1. WinZip 4.2. WinRAR 4.3. 7zip
5. Browsers	 5.1. Microsoft Edge 5.2. Google Chrome 5.3. Mozilla Firefox 5.4. Opera 5.5. Safari 5.6. Duronto browser 5.7. Brave 5.8. Yandex 5.9. Netscape Navigator 5.10. Tor Browser
6. Browser setting	 6.1 Synchronization 6.2 Privacy and security 6.3 Autofill 6.4 Appearance 6.5 Language 6.6 Download 6.7 Accessibility 6.8 Cookies 6.9 History
7. Search engines	7.1 Google 7.2 Yahoo 7.3 Ask 7.4 MSN 7.5 Bing 7.6 Pipilika 7.7 Duckduckgo 7.8 AltaVista

8. E-mail services Provider	8.1. Free mail services 8.1.1. Gmail 8.1.2. Yahoo 8.1.3. Outlook 8.2. Web mail services
9. Email Operations	9.1. Compose 9.2. Send 9.2.1. Attachment 9.2.2. Single Recipient 9.2.3. Multiple Recipient 9.2.4. CC 9.2.5. BCC 9.3. Receive 9.4. Reply 9.5. Forward 9.6. Delete
10. Virtual Platform	10.1. Zoom 10.2. Bip 10.3. Meet 10.4. WhatsApps 10.5. WeChat 10.6. Remote Desktop Application 10.6.1. TeamViewer 10.6.2. AnyDesk 10.6.3. RemotePC
11. Platform facilities.	11.1. Meeting Schedule 11.2. Guest management 11.3. Session Recording 11.4. Screen Sharing 11.5. Messaging 11.6. File sharing
12. Cloud Storage.	12.1. Dropbox 12.2. MEGA 12.3. OneDrive 12.4. Google drive
13. Online form	13.1. Google form 13.2. Microsoft form 13.3. Type form 13.4. Paper form 13.5. Wufoo

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent, recent and meet all requirements of the current version of the Unit of Competency.

1.Critical Aspects of	Assessment required evidence that the candidate: 1.1 prepared resources for sharing			
Competency				
	1.2 accessed resource using internet			
	1.3 used and managed e-mail			
	1.4 used virtual platform			
2.Underpinning	2.1 Trends of using the internet.			
knowledge	2.2 Common internet terms and its utilization.			
	2.3 Know-how on the internet, www.			
	2.4 Utilization process of website			
	2.5 Relevant web address.			
	2.6 Know-how on URL.			
	2.7 Types of web browsers and its use.			
	2.8 History cleaning process.			
	2.9 Usages of Email.			
	2.10 Email account creation process.			
	2.11 Features of email and their usages.			
	_			
	j			
	2.12.4. default browser			
	2.12.5. reset and clean-up			
	2.12.6. addons			
	2.13 Utilization process of search engines.			
	2.14 Function of google services.			
	2.15 Procedure of using this google services.			
	2.16 Use of social media.			
	2.17 Web based services process.			
	2.18 Folder manipulation process.			
	2.19 Netiquette			
	2.20 Email Etiquettes			
	2.21 Email Security			
3.Underpinning	3.1 Accessing and sharing resources from the internet.			
skills	3.2 Downloading / uploading file, documents and video from /			
22	to websites.			
	3.3 Sending and receiving mail through e-mail service.			
4.Required attitudes	4.1 Commitment to occupational safety and health.			
cquirea utilitudes	4.2 Promptness in carrying out activities.			
	4.3 Sincere and honest to duties.			
	4.4 Eagerness to learn the document preparation process.			
	4.5 Tidiness and timeliness.			
	4.6 Environmental concerns.			
	4.7 Respect for the rights of peers, subordinates and seniors at the			
	workplace.			
	4.8 Communication with peers, subordinates and seniors in the			
	workplace.			
	4.9 Keeps a clean and orderly workplace and equipment			

5.Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated); 5.2 Relevant tools, equipment, software and facilities needed to perform the activities; and 5.3 Required learning materials.
6.Methods of assessment	Methods of assessment may include but not limited to: 6.1 Written test; 6.2 Demonstration; 6.3 Oral questioning;
7.Context of assessment	 7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor

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Unit Code and Title	OU-ICT-CO-06-L3-V1: Perform Basic Maintenance and Troubleshooting		
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to perform basic maintenance and troubleshooting. It specifically includes identifying the problem, diagnosing and fixing peripheral device faults, fixing printing error, fixing application error and troubleshooting network connectivity.		
Nominal Hours	25 Hours		
Elements of Competency	Performance Criteria Bold & Underlined terms are elaborated in the Range of Variables		
1. Identify the problem	 1.1 Occupational Safety and Health (OSH) procedures are followed. 1.2 Hardware & Software are checked for non-functionalities 1.3 <u>Problems</u> are Identified, recorded and reported to authority. 		
2. Diagnose and fix Peripheral device faults	 2.1 Faulty Peripheral devices or connections are checked and identified. 2.2 The problems are diagnosed, recorded and reported to authority. 2.3 Faults are fixed within scope of jobs. 		
3. Fix printing error	3.1 Printing error is detected 3.2 Possible solutions for error selected and applied		
4. Fix application error	 4.1 Faulty Software or fonts are identified. 4.2 Application <u>Software and fonts</u> are installed/ Uninstalled 4.3 Updates for software's are checked and updated 4.4 <u>Device drivers</u> are checked and installed/ Uninstalled as required. 		
5. Troubleshoot network connectivity	 5.1 Network devices are checked for connectivity. 5.2 Network connection are diagnosed 5.3 Network devices are Connected and disconnected for fixing network connection. 5.4 Unsolved issues are reported to the designated persons. 		
Range of Variables			
Variable	Range (may include but not limited to):		
1. Problems	Hardware 1.1 Device Power Issue 1.2 Data cable issue 1.3 Device Date & Time mismatch 1.4 Boot Device fault Software:		

	1.5 OS Failure1.6 Application software errorNetwork:1.7 Network connection
2. Printing error	 2.1 Print spooling 2.2 Paper jam 2.3 Poor print quality 2.4 Printer status Offline
3. Software and fonts	3.1 Office Application Software
	 3.2 Bangla Typing Software 3.2.1. Bijoy 3.2.2. Avro 3.3 Fonts 3.4 ASCII (sutonnymj, ananda) 3.5 Unicode (nikosh, solaimanlipi, kalpurush, mukti, vrinda, Sonar Bangla) 3.6 Antivirus Software (Sophos, Kaspersky, McAfee, Norton, Bitdefender, Avira, Eset)
4. Device drivers	4.1 Printer Driver4.2 Scanner Driver4.3 Webcam Driver
5. Network devices	 5.1 Switch 5.2 Router 5.3 Ethernet Cable 5.4 Ethernet Port 5.5 RJ45 Connector 5.6 Wireless Adapter 5.7 Access Point
	authentic, valid, sufficient, reliable, consistent, recent and meet all rent version of the Unit of Competency.
Critical Aspects of Competency	Assessment required evidence that the candidate: 1.1 identified the problem 1.2 diagnosed and fixed peripheral device faults 1.3 diagnosed and fixed software faults 1.4 diagnosed and fixed network faults
2. Underpinning knowledge	 2.1 Type of software and hardware faults 2.2 Faults diagnosis procedure 2.3 Types of printing error 2.4 Fixing procedure of printing error 2.5 Network connectivity error

3. Underpinning skills	 3.1 Identifying problems 3.2 Diagnosing peripherals devices 3.3 Fixing application error 3.4 Troubleshooting networking connectivity
4. Required attitudes	 4.1 Commitment to occupational safety and health. 4.2 Promptness in carrying out activities. 4.3 Sincere and honest to duties. 4.4 Eagerness to learn the document preparation process. 4.5 Tidiness and timeliness. 4.6 Environmental concerns. 4.7 Respect for the rights of peers, subordinates and seniors at the workplace. 4.8 Communication with peers, subordinates and seniors in the workplace. 4.9 Keeps a clean and orderly workplace and equipment
5. Resource implications	The following resources must be provided: 5.1 Workplace (actual or simulated); 5.2 Relevant tools, equipment, software and facilities needed to perform the activities; and required learning materials.
6. Methods of assessment	Methods of assessment may include but not limited to: 6.1. Written test; 6.2. Demonstration; 6.3. Oral questioning
7. Context of assessment	 7.1 Competency assessment must be done in NSDA accredited center. 7.2 Assessment should be done by NSDA certified/ nominated assessor

Training Providers must be accredited by National Skills Development Authority (NSDA), the National Quality Assurance Body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award qualification under NSQF. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by NSDA.

Development of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is developed by NSDA on 4-7 April 2022.

List of Members

S/N	Name and Address	Position in the committee	Signature and Date
1.	Alif Rudaba, Member (Planning & Skills Standard) Joint Secretary, National Skills Development Authority (NSDA)	Chairperson	
2.	Md. Abdul Hye Siddiqui, Senior Instructor (Computer), BMET, Email: siddiqui.ttc@gmail.com , Mobile: 01819725610.	Member	Bailly
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Validation of Competency Standard

The Competency Standards for National Skills Certificate in Computer Operation, Level-3 is validated by NSDA on 23 May 2022.

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