REPUBLIC OF KENYA

NATIONAL OCCUPATIONAL STANDARDS

FOR

AIRPORT OPERATIONS MANAGER

KNQF LEVEL 6

ISCED   PROGRAMME CODE: 1015 554 A

TVET CDACC
P.O. BOX 15745-00100
NAIROBI

APPLY DIGITAL LITERACY

TVET CDACC UNIT CODE: LOG/OS/AO/BC/01/6/MA

UNIT DESCRIPTION:

This unit covers the competencies required to demonstrate digital literacy. It involves operating computer devices, solving tasks using the Office suite, accessing online/offline data and information, performing online communication and collaboration, applying cybersecurity skills and performing jobs online. It also involves applying job entry techniques.

ELEMENTS AND PERFORMANCE CRITERIA

ELEMENT These describe the key outcomes that make up workplace functions	PERFORMANCE CRITERIA These are assessable statements which specify the required level of performance for each of the elements *(Bold and italicized terms are elaborated in the range)*
1. Operate computer devices	1.1 C*omputer device* usage is determined as per workplace requirements. 1.2 ***Computer hardware*** is identified according to job requirements. 1.3 ***Computer software*** is identified according to workplace requirements. 1.4 Computer devices are turned on or off as per the correct workplace procedure. 1.5 ***Mouse techniques*** are applied in solving tasks as per workplace requirements. 1.6 Keyboard techniques are applied in solving tasks as per workplace requirements. 1.7 Computer files and folders are created and managed as per workplace requirements. 1.8 ***Internet connection option***s are identified and applied in connecting computer devices to the Internet. 1.9 ***External devices*** are identified and connected to the computer devices as per the job requirement.
2. Solve tasks using Office suite	2.1 ***Word processing concepts*** are applied in solving workplace tasks as per job requirements. 2.2 Worksheet data is entered and prepared in accordance

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	with work procedures. 2.3 Worksheet data is built and edited in accordance with workplace procedures. 2.4 **Data manipulation** on a worksheet is undertaken in accordance with work requirements. 2.5 Worksheets are saved and printed in accordance with job requirements. 2.6 **Electronic presentation concepts** are applied in solving workplace tasks as per job requirements.
3. Manage data and information	3.1 Office **internet services** are identified and applied in accordance with office procedures. 3.2 **Internet access applications** are determined in accordance with office operation procedures. 3.3 Internet search is performed as per job requirements. 3.4 Online digital content is downloaded in accordance with workplace requirements. 3.5 Digital content is identified and backed up in accordance with workplace procedures.
4. Perform online communication and collaborations	4.1 Netiquette principles are observed as per work requirements. 4.2 Electronic mail communication is executed in accordance with workplace policy. 4.3 Digital content copyright and licenses are identified and applied according to workplace policies and regulatory requirements. 4.4 **Online collaboration tools** are applied in accordance with workplace policies and regulatory requirements.
5. Apply cybersecurity skills	5.1 **Data protection** and **privacy** is classified in accordance with workplace policies and regulatory requirements. 5.2 **Internet security threats** are identified as per workplace policies and regulatory requirements. 5.3 Computer threats and crimes are detected in accordance to Information Management security guidelines 5.4 **Cybersecurity control measures** are applied in accordance with workplace policies and regulatory requirements.
6. Perform online jobs	6.1 **Online job platforms** are identified as per the job requirements. 6.2 Online accounts and profiles are created in accordance with the work requirements.

ELEMENT	PERFORMANCE CRITERIA
These describe the key outcomes that make up workplace functions	These are assessable statements which specify the required level of performance for each of the elements *(Bold and italicized terms are elaborated in the range)*
	6.3 Online jobs are identified according to the bidder's skillset. 6.4 Online digital identity is managed according to industry best practices. 6.5 Online job bidding is done as per the specific job requirements. 6.6 Online tasks are executed according to the job requirements. 6.7 Personal online payment account is managed in accordance with financial regulations.
7. Apply job entry techniques	7.1 *Job opportunities* are sought based on competencies. 7.2 A winning resume/CV is developed as per job advertisement. 7.3 An application/cover letter is developed based on the job advertisement. 7.4 *certificates and testimonials* are organized as per resume. 7.5 *Interview skills* are demonstrated as per job advertisement.

RANGE

This section provides a work environment and conditions to which the performance criteria apply. It allows for a different work environment and situations that will affect performance.

Variable	Range
1. Computer devices may include but are not limited to:	● Desktops ● Laptops ● Smartphones ● Tablets ● Smartwatches

Variable	Range
2. Computer hardware may include but are not limited to:	- The System Unit E.g. Motherboard, CPU, casing, - Input Devices e.g. Pointing, keying, scanning, voice/speech recognition, direct data capture devices. - Output Devices e.g. hardcopy output and softcopy output - Storage Devices e.g. main memory e.g. RAM, secondary storage (Solid state devices, Hard Drives, CDs & DVDs, Memory cards, Flash drives - Computer Ports e.g. HDMI, DVI, VGA, USB type C etc.
3. Computer software may include but are not limited to:	- System software e.g. Operating System (Windows, Macintosh, Linux, Android, iOS) - Application Software e.g. Word Processors, Spreadsheets, Presentations etc. - Utility Software e.g. Antivirus programs
4. External devices may include but are not limited to:	- Printers - Projectors - Smart Boards - Speakers - External storage drives - Digital/Smart TVs
5. Word processing concepts may include but are not limited to:	- Creating word documents - Editing word documents - Formatting word documents - Saving word documents - Printing word documents
6. Mouse techniques may include but are not limited to:	- Clicking - Double-clicking - Right-clicking - Drag and drop
7. Internet connection options may include but are not limited to:	- Mobile Networks/Data Plans - Wireless Hotspots - Cabled (Ethernet/Fiber) - Dial-Up - Satellite - ISDN (Integrated Services Digital Network)
8. Data manipulation may include but are not limited to:	- Use of formulae - Use of functions - Sorting

Variable	Range
	● Filtering ● Visual representation using charts
9. Electronic presentation concepts may include but are not limited to:	● Creating slides ● Editing slides ● Formatting slides ● Applying slide effects and transitions ● Creating and playing slideshows ● Saving presentations ● Printing slides and handouts
10. Internet services may include but are not limited to:	● Communication Services ● Information Retrieval Services ● File Transfer ● World Wide Web Services ● Web Services ● Directory Services ● Automatic Network Address Configuration ● NewsGroup ● Ecommerce
11. Internet access applications/software may include but are not limited to:	● Browsers ● Email Apps ● eCommerce Apps
12. Online collaboration tools may include but are not limited to:	● Online Storage ● Online productivity applications ● Online meetings, ● Online learning environments, ● Online calendars ● Social networks
13. Data protection and privacy may include but not limited to:	● Confidentiality of data/information ● Integrity of data/information ● Availability of data/information
14. Internet security threats may include but not limited to:	● Malware attacks ● Social engineering attacks ● Software supply chain attacks ● Advanced persistent threats (APT) ● Distributed denial of service (DDoS) ● Man-in-the-middle attack (MitM) ● Password attacks ● IoT Attacks ● Phishing Attacks ● Ransomware

Variable	Range
15. Security threats control measures may include but not limited to:	- Counter measures against cyber terrorism - Physical Controls - Technical/Logical Controls - Operational Controls
16. Online job platforms may include but are not limited to:	- Remotask - Data annotation.tech - Cloudworker - Upwork - Oneforma - Appen
17. Job opportunities may include but not limited to:	- Self employment - Service provision - product development - salaried employment
18. Certificates and testimonials may include but not limited to:	- Academic credentials - Letters of previous employments/ services rendered - Letters of commendation - Certifications of participation - Awards
19. Interview skills may include but not limited to:	- Listening skills - Grooming - Language command - Articulation of issues - Body language - Time management - Honesty - Generally knowledgeable in current affairs and technical area

REQUIRED KNOWLEDGE AND SKILLS

This section describes the knowledge and skills required for this unit of competency.

Required knowledge

The individual needs to demonstrate knowledge of:

- Computer Hardware and Software Concepts
- Computer Security Concepts (Data security and privacy)
- Cyber security threats and control measures
- Understanding Computer Crimes

- Detection and protection against computer crimes
- Laws governing protection of ICT in Kenya
- Digital Identity Management
- Netiquette Principles
- Fundamentals of Copyright and Licenses
- Word processing;

  Functions and concepts of word processing;

  Documents and tables creation and manipulations;

  Document editing;

  Document formatting;

  Word processing utilities
- Spreadsheets;

  Meaning, types and importance of spreadsheets;

  Components of spreadsheets;

  Functions, formulae, and charts, uses and layout;

  Data formulation, manipulation and application to cells;

  Editing & formatting spreadsheets;
- Presentation Packages;

  Types of presentation Packages.

  Creating, formulating, running, editing, printing and presenting slides and handouts
- Networking and Internet;

  Internet connectivity.

  Browser and digital content management;

  Managing data, information, and digital content

  Electronic mail and World Wide Web
- Fundamentals of Online Working;

  Online Profile Management;

  e-Portfolio Management;

  Online Jobs Bidding;

  Online Payment Systems;
- Job entry techniques

  Job searching sites

Interview preparation skills

Interview handling

Required skills

The individual needs to demonstrate the following skills:

- Active listening
- Keyboard Skills
- Mouse Skills
- Analytical skills
- Creativity
- Interpretation Skills
- Communication
- Spreadsheet operations (applying fundamental operations such as addition, subtraction, division and multiplication)
- Computer Use Safety Skills
- Document Editing Skills
- Document Formatting Skills
- Document Printing Skills
- Netiquette Skills
- Internet Browsing Skills
- Problem Solving Skills
- Online Collaboration Skills
- Cybersecurity Skills
- CV writing
- grooming

EVIDENCE GUIDE

This provides advice on assessment and must be read in conjunction with the performance criteria, required knowledge, and skills range.

1. Critical aspects of competency	*Assessment requires evidence that the candidate:*
	1.1. Operated computer devices as per workplace policies and regulations.
	1.2. Solved tasks using the office suite as per workplace policies and regulations.
	1.3. Manage data and information as per workplace policies and regulations.
	1.4. Performed online communication and collaboration as per workplace policies and regulations.
	1.5. Applied cybersecurity skills in accordance with workplace policies and regulations.
	1.6. Executed online tasks according to the job requirements.
	1.7. Searched for job opportunity based on competencies.
	1.8. Prepared job requirement documentations based on job opportunity.
	1.9. Demonstrated interview skills based on the job opportunity.
2. Resource implications	The following resources should be provided:
	2.1 Appropriately simulated environment where assessment can take place.
	2.2 Access to relevant work environments where assessment can take place.
	2.3 Resources relevant to the proposed activities or task.
3. Methods of assessment	Competency in this unit may be assessed through:
	3.1 Observation
	3.2 Oral assessment
	3.3 Portfolio of evidence
	3.4 Interviews
	3.5 Third party report
	3.6 Written assessment
	3.7 Practical assessment
	3.8 Projects
4. Context of assessment	Competency may be assessed:
	4.1 On the job
	4.2 In a simulated work environment.
5. Guidance information for assessment	5.1 Holistic assessment with other units relevant to the industry sector and workplace job role is recommended.