

Ethiopian TVET-System



Basic Account Works Level-II

Based on August 2012GC Occupational standard

Module Title: Using Business Technology

TTLM Code: EIS BAW2 M03 TTLM 0919v

This module includes the following Learning Guides

LG10: Select and use technology

LG Code: EIS BAW2 M03 LO1-LG-10

LG11: Process and organize data

LG Code: EIS BAW2 M03 LO2-LG-11

LG12: Maintain technology

LG Code: EIS BAW2 M03 LO3-LG-12



This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Technology and software applications
- Workspace, furniture and equipment
- Use technology according to *organizational requirement*

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to:

- Select appropriate technology **and** software applications to achieve the requirements of the task
- Adjust workspace, furniture and equipment to suit user ergonomic requirements
- Use technology according to organizational requirements

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”.
4. Accomplish the “Self-check 1, Self-check 2, Self-check 3 and Self-check 4” in **page -6, 9, 12 and 14** respectively.
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work.



Information Sheet-1	Technology and software applications
---------------------	---

1.1 Business Technology

All office environments use a variety of technology to carry out their work. Business technology includes any hardware or software used to complete workplace tasks.

Technology includes:

- Computer technology, such as laptops and personal computers
- Printers
- Scanners
- Photocopiers

To select appropriate technology and software for your tasks, you need to understand the functions of the technology available to you.

You also need to understand the operational guidelines for using the equipment safely. If you are working at a computer for an extended period each day, you should make sure your workstation is comfortable and designed so you can carry out your tasks efficiently. You will need to organize your work so you aren't doing a repetitive task for a long time. You also need to take time to stand up and stretch.

You must learn how to use technology according to your organization's requirements; for example, you should know your organization's login procedures and how to name, open and close files. You must be aware of your workplace's work health and safety (WHS) policies and procedures.

Technology varies from organization to organization. All workers should receive training in the technology they need to use. Organizations should have training manuals specific to the equipment used. If you are unsure, ask your manager or work colleagues to tell you where manuals are stored.

Before you can select the appropriate technology for your work, you need to understand how each type of business technology functions. Computers will be examined first as they have become essential in workplaces. Here is a basic outline of personal computers and laptops, and the benefits of using both.

Personal computers

A computer is an electronic device for storing and processing information. A personal computer has a separate hard drive and monitor that are attached to other equipment such



as a keyboard and mouse. Personal computers are used in all organizations to carry out many different tasks. Organizational data is usually processed using a computer and different software applications.

Laptops

A laptop is a small, portable computer that has its hard drive, screen and keyboard within the same piece of equipment. Laptops are popular as they are portable, lightweight and don't solely rely on a plug-in power supply (they have rechargeable batteries). However, laptops have disadvantages. Their small size makes them easy to steal, and they are not adjustable and, therefore, not as comfortable to use unless a separate laptop stand is available.

1.2 Software applications

Software applications may include:

- Email
- internet
- Word processing
- Spreadsheet
- Database
- Accounting or presentation packages

The internet is an interconnecting network of computers from around the world that communicate with each other. It started with four interconnected computers developed by the US Department of Defense in 1969 and was known as ARPA net, the Advanced Research Projects Agency Network. The internet has a rich range of useful features, capabilities and functions. Knowing how to use and get the most out of the internet helps organizations communicate, research new products and services, advertise their own products and services, and gain a greater understanding of competitors. For a computer to gain access to the internet, it needs to have a web browser. Web browsers provide a way to look at all the information on the internet or World Wide Web. There are four leading web browser applications: Microsoft Internet Explorer, Safari, Mozilla Firefox, and Google Chrome. To search for information on the web, you need to use a search engine. A search engine receives a user's question, searches its database for documents most relevant to the question and returns a relevance-ranked list of documents back to the user. Search engines include Google, Bing and Yahoo Search.



Self-Check -1	Written Test
---------------	--------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define business technology (2 point)
2. List out at least three examples of business technology (2points)

Note: Satisfactory rating – 3 and above points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information Sheet-2	Ergonomic Requirements
----------------------------	-------------------------------

2.1 Concepts of Ergonomic

Ergonomics is about creating comfortable conditions to work in. It is concerned with fitting the job to the worker, rather than the worker to the job. This is done by adapting workstations, tools and equipment to suit each worker's individual needs.

Ergonomic Requirements

Workspace, furniture and equipment are adjusted to suit the ergonomic requirements of the user

Chair

- Chair height should be set so that feet are flat on the floor (where a footrest has not been provided) and thighs are horizontal.
- The backrest should provide firm lower back support so adjustment up or down, and/or backwards or forwards may need to be made until comfortable.
- Armrests should not interfere with performance of general tasks.

Desk

- The height of the desk or chair should be adjusted so that the surface of the desk is at elbow height (when sitting).
- There should be plenty of room for legs below the desk surface
- Personal and stationery items should be arranged for easy access, to minimize twisting and bending.

Computer

- The monitor should be positioned after adjustments have been made to the desk or chair. It is recommended that the top of the screen be level with the eyes and be positioned about 50cm away from the body when seated.
- The keyboard should be placed on the desk, as close to the user as possible. Allow room for it to be moved away when not in use. The angle of the keyboard can be adjusted by altering the supports underneath.
- The mouse should be positioned next to the keyboard on the preferred side. Wrist should be straight whilst using the mouse with the desk supporting the wrist and not the arm.



Telephone

- The telephone should be easily accessible, yet not in the way of the work area.
- The user should be able to talk on the phone without standing or having to stretch to reach it. A headset is a convenient alternative for constant phone users.

Document holder

- The document holder should be placed close to the screen to minimize the movement required to turn from one to the other.
- Depending upon personal preference, it may be preferable to swap the screen position with the document holder, if tending to look at the document more often.

Work Organization

Work organization meets organizational and occupational health and safety requirements for computer operation

Work area

- Work area should be kept uncluttered. Desks should only have on them what is really needed.
- Trays should be used for sorting documents, and any documents that are finished with or will not be needed for some time, should be filed away.

Rest periods

- It is important to have frequent breaks away from the workstation. The recommended interval is ten minutes for each hour worked in front of a computer.
- If unable to take this time out, work tasks should be varied. For example, phone calls could be made; filing or other work related tasks could be done for a few minutes.

Paper wastage

- Proofread and edit documents on screen before printing
- Don't print more pages than needed, use the "print range" function of software to only print those pages which have been edited
- Print on both sides of your paper where possible
- Use scrap paper from printed documents no longer needed. Write on the back for informal notes or memos
- Use the duplex facility of the photocopier.

Recycling

- Paper should be saved for recycling where possible - if the information is confidential, it can be shredded before disposal into a recycling container



- Use recycled paper products wherever possible
- Reuse office products such as folders, envelopes and packaging materials.

Energy and power use

- Use the "power save" feature of your printer, if available
- Switch off lights and equipment when not required.

Self check -2	written test
----------------------	---------------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is the meaning of ergonomic
2. Mention some Ergonomic requirements at workplace ?(3 point)

Note: Satisfactory rating – 3 and above points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Instruction Sheet	LG11: Process and organize data
--------------------------	--

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Managing files and records
- Operating input devices
- Data storage
- Manuals, and training booklets

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, **upon completion of this Learning Guide, you will be able to:**

- Identify, open, generate or amend files according to organizational requirement
- Open input devices according to organizational requirements
- Store data appropriately and exit applications without damage or loss of, data
- Use manuals, training booklets and/or online help or help-desks to overcome basic difficulties with applications

- **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”.
4. Accomplish the “Self-check 1, Self-check 2, Self-check 3 and Self-check 4” in **page -6, 9, 12 and 14** respectively.



Information Sheet-1	Managing files and records
----------------------------	-----------------------------------

1.1 Concepts of Records

1. Document that memorializes and provides objective evidence of activities performed, events occurred, results achieved, or statements made. Records are created/received by an organization in routine transaction of its business or in pursuance of its legal obligations. A record may consist of two or more documents.

2. All documented information, regardless of its characteristics, media, physical form, and the manner it is recorded or stored. Records include accounts, agreements, books, drawings, letters, magnetic/optical disks, memos, micrographics, etc. Generally speaking, records function as evidence of activities, whereas documents function as evidence of intentions.

1.2 Records Management

The [records life-cycle](#) consists of discrete phases covering the life span of a record from its creation to its final disposition. In the creation phase, records growth is expounded by modern electronic systems. Records will continue to be created and captured by the organization at an explosive rate as it conducts the business of the organization. Correspondence regarding a product failure is written for internal leadership, financial statements and reports are generated for public and regulatory scrutiny, the old corporate logo is retired, and a new one – including color scheme and approved corporate font – takes its place in the organization's history.

Examples of records phases include those for *creation* of a record, *modification* of a record, *movement* of a record through its different states while in existence, and *destruction* of a record.

Throughout the records life cycle, issues such as security, privacy, disaster recovery, emerging technologies, and mergers are addressed by the records and information management professional responsible for organizational programs. Records and information management professionals are instrumental in controlling and safeguarding the information assets of the entity. They understand how to manage the creation, access, distribution, storage, and disposition of records and information in an efficient and cost-effective manner using records and information management methodology, principles, and best practices in compliance with records and information laws and regulations.

1.3. Characteristics of records

There are four characteristics of records make them different from other types of information.

1. Records are evidence of actions and transactions;
2. Records should support accountability, which is tightly connected to evidence but which allows accountability to be traced;
3. Records are related to processes, i.e. "information that is generated by and linked to work processes"



4. Records must be preserved, some for very short time and some permanently.

Self-Check -1	Written Test
---------------	--------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is records management? (2point)
2. List out the characteristics of records make them different from other types of information.(3point)

Note: Satisfactory rating – above 3 points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____



Information Sheet-2	Operating Input Devices
---------------------	-------------------------

2.1 Concepts of inputs

What is input?

Input is a place where, or a device through which, energy or information enters a system.

- **Data**

Unprocessed facts, figures, and symbols

- **Instructions**

– Programs

– Commands

– User response

What is an input device?

An **input device** is any hardware **device** that sends data to a **computer**, allowing you to interact with and control it. ... The most commonly used or primary **input devices** on a **computer** are the keyboard and mouse. However, there are dozens of other **devices** that can also be used to **input** data into the computer.

The Keyboard

How is the keyboard divided?

- Typing area
- Numeric keypad
- Function keys

What is an ergonomic keyboard?

- Designed to minimize strain on hands and wrists. Ergonomics incorporates comfort, efficiency, and safety into design of items in workplace.

Mouse

What is a mouse?

- Pointing device that fits under palm of hand
- Controls movement of pointer, also called mouse pointer, on screen
- Pointer on screen takes several shapes

What are common mouse operations?

- Point
- Click
 - Right-click
- Double-click
- Drag
- Right-drag

Basic Account Works L-II	Author/Copyright: Federal TVET Agency	Version -1 Sept. 2019	Page 1 of 23
--------------------------	---------------------------------------	--------------------------	--------------



- Rotate wheel
- Press wheel

Self-Check -2	Written Test
----------------------	---------------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is input device? (2point)
2. List out at least three example of input devices.(3point)

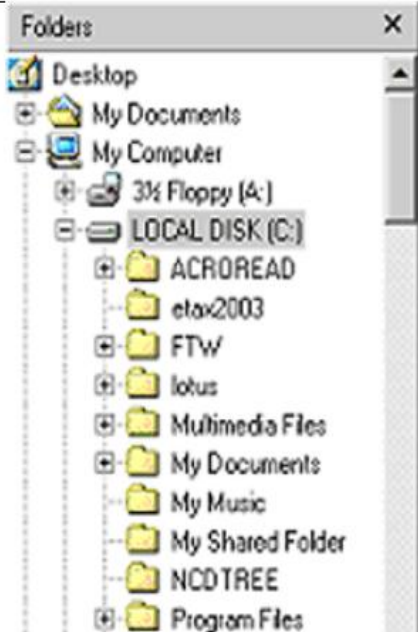
Note: Satisfactory rating – above 3 points Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

3.1 Concepts of storage of data

<p>Most data is stored on a computer's hard drive. It is important to understand a computer's file management system in order to save work in the right place. Data is stored in folders (or directories) and sub-folders (or sub-directories), similar to a paper-based filing cabinet.</p> <p>To the left are examples of how Microsoft Windows Explorer organises its directory:</p> <p>This is a section of Windows Explorer showing how the files are organised into a multi-level filing system.</p> <p>The "+" signs to the left of some folders indicates that there are further sub-folders located in these folders.</p>	 <p>The screenshot shows the 'Folders' pane in Windows Explorer. It displays a hierarchical tree view of the file system. At the top are 'Desktop', 'My Documents', and 'My Computer'. Under 'My Computer', there is a '3½ Floppy (A:)' and 'LOCAL DISK (C:)'. Under 'LOCAL DISK (C:)', several folders are listed: 'ACROREAD', 'etax2003', 'FTW', 'lotus', 'Multimedia Files', 'My Documents', 'My Music', 'My Shared Folder', 'NCDTREE', and 'Program Files'. Each folder has a yellow folder icon and a '+' sign to its left, indicating it contains sub-folders.</p>
--	---

Other than on the hard drive, data may also be stored on:

- floppy disks: remember that a limited amount of information can be stored here, so it is a good idea to compress the file to accommodate large amounts of data
- CD-ROMs: suitable for large amounts of data
- back-up system: particularly important in case of computer failure to safeguard large amounts of information
- External hard drives
- Thumb drives

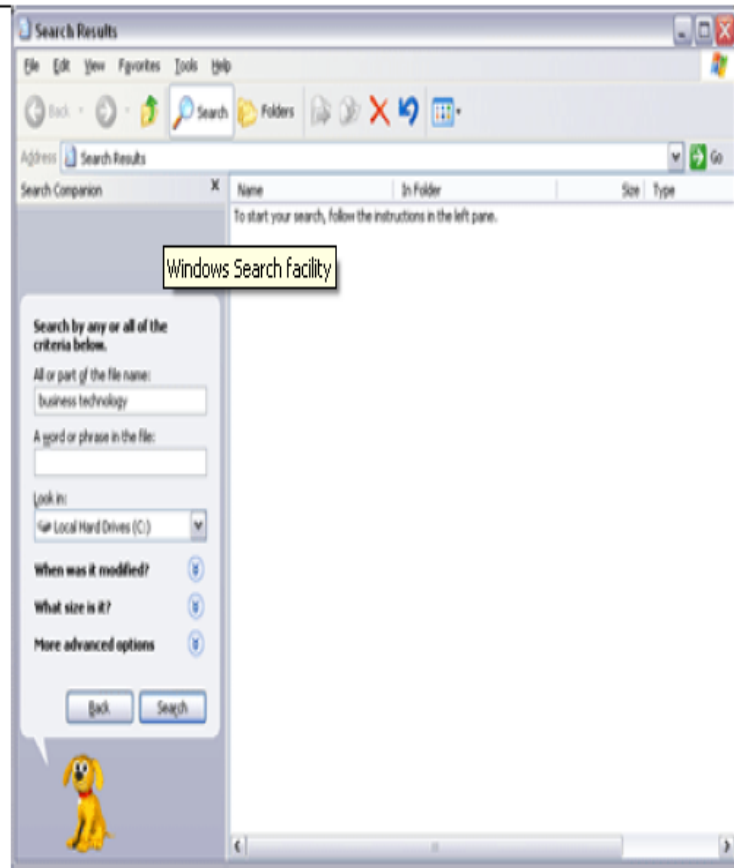


Retrieving Documents

Documents can be opened from:

- a software program (eg Word)
- a file management program (eg Windows Explorer)

If a document cannot be found, it is possible to do a search by clicking on “Start”, then “Search”, then “All files and folders”, and by filling in the information that is known, as shown below.



Self-Check -3

Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Where we store data?(3 point)
2. Technology consumables may include? (3points)

Note: Satisfactory rating – above 3 points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Name: _____

Date: _____



Basic Account Works

Level-II

Learning Guide-3

Unit of Competence: Use business technology

Module Title: Using business technology

LG Code: EIS BAW2 M03 LO3-LG-03

TTLM Code: EIS BAW2 M03 TTLM 0919v1

LG12: Maintain technology



Instruction Sheet	LG12: Maintain technology
--------------------------	----------------------------------

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics:

- Technology consumables
- Performing routine maintenance
- Equipment faults

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, **upon completion of this Learning Guide, you will be able to:**

- Identify and replace Used technology consumables in accordance with manufacturer's instructions and organizational requirements
- Carried out and/or arrange routine maintenance to ensure equipment is maintained in accordance with manufacturer's instructions and organizational requirements
- Identify Equipment faults and take action in accordance with manufacturer's instructions or report fault to designated person

- **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below 3 to 6.
3. Read the information written in the information “Sheet 1, Sheet 2, Sheet 3 and Sheet 4”.
4. Accomplish the “Self-check 1, Self-check t 2, Self-check 3 and Self-check 4” in **pag6, 9, 12 and 14** respectively.



Information Sheet- 1

Identify and replace Used technology consumables

1.1 Technology consumables

Consumables (also known as **consumable** goods, non-durable goods, or soft goods) are goods that are intended to be consumed. ... **Consumables** are products that consumers use recurrently, i.e., items which "get used up" or discarded.

Replacing Consumables

Purchasing Items

Take into account:

- Quality of products
- Quality of service
- Reliability of advice
- Promptness of delivery
- Reasonable return service when goods don't work

Purchasing Guidelines

- What employees are allowed to purchase
- Who can approve the purchase
- Declaration by purchaser of any dealings, connections/interests in chosen supplier → fairness

Technology consumables may include:

- ✍ Back-up tapes
- ✍ CD-ROM
- ✍ Floppy disks
- ✍ Print heads
- ✍ Printer ribbons and cartridges
- ✍ Toner cartridges
- ✍ Zip disks



Self-Check -1	Written Test
---------------	--------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Define technology consumables.(3 point)
2. Technology consumables may included (3points)

Note: Satisfactory rating - 3 and above points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



Information Sheet- 2	Performing routine maintenance
-----------------------------	--------------------------------

2.1 Concepts of routine maintenance

Routine Maintenance

- 'Preventive maintenance' – reduces the chance of something going wrong
- Equipment works more often and workers become more productive

Non-Routine Maintenance

- Fixing something after it is broken or not working properly
- The more you carry out *routine* maintenance the less likely you will have to carry out non-routine

It is important that routine maintenance of business technology is carried out on a regular basis to ensure minimal breakdowns. Equipment should be cleaned regularly by using a damp cloth or other approved cleaning materials. Consumables should be checked to monitor their rate of use, and replaced when needed. Regular servicing by qualified or manufacturer-approved technicians will ensure that all equipment is in the best condition possible to minimize breakdowns.

All employees should receive training to solve common faults, like paper jams, system failures and low ink or toner cartridges. However, more complex problems should be reported immediately to the person in charge of maintenance, to the manufacturer or to the service company. A logbook of service visits must be kept. It is a good idea to have all equipment checked regularly as part of the Occupational Health and Safety inspections.

Routine maintenance may include:

- ✍ In-house cleaning and servicing of equipment according to manufacturer's guidelines
- ✍ Periodic servicing by qualified or manufacturer approved, technician
- ✍ Regular checking of equipment
- ✍ Replacing consumables



Self-Check -2	Written Test
---------------	--------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

- 3. Define routine maintenance.(3 point)
- 4. What are the items to be included in routine maintenance?(3points)

Note: Satisfactory rating - 3 and above points

Unsatisfactory - below 3 points

You can ask you teacher for the copy of the correct answers.

Answer Sheet

Score = _____
Rating: _____

Name: _____

Date: _____



1.2 concepts of equipment faults

Equipment failure refers to any event in which any equipment can not accomplish its intended purpose or task, it may also mean that the equipment stopped working, is not performing as desired, or is not meeting target expectations.

Faults

- When an equipment fault is detected, read the manufacturer's manual to identify the type of fault and the steps required to fix it.
- Do not try to fix any fault where the manual specifies that the manufacturer must be contacted. This may void the warranty or the service agreement.
- For **minor faults**, follow the manufacturer's instructions closely to minimise further damage to the equipment. If you cannot fix a minor fault, follow the procedure for major faults.
- For major faults, complete an Equipment Fault Report. Submit the Equipment Fault Report to the Administration Officer who will notify the relevant equipment supplier.
- The Administration Officer will place an 'Out of Order' sign on the equipment item, showing when the fault will be rectified. The Administration Officer retains all Equipment Fault Reports as a record of an item's reliability.

Identifying equipment faults may include:

- ✍ Checking repairs have been carried out
- ✍ Encouraging feedback from work colleagues
- ✍ Keeping a log book of detected faults
- ✍ Preparing a maintenance program
- ✍ Regular back-ups of data
- ✍ Regular OHS inspections
- ✍ Routine checking of equipment



Self-Check -2	Written Test
---------------	--------------

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is equipment Fault.(3 point)
2. Identifying equipment faults may include?(3points)

Note: Satisfactory rating - 3 and above points

Unsatisfactory - below 3 points

Answer Sheet

Score = _____
Rating: _____