

## **Study guide line for grade 7th**

• Written exam (20 marks):

Kind of questions: **All the types.** True or false or multiple choice or fill the blank from box, or writing.

- They will cover these topics:
- 1. E-commerce, Teleworking, E-banking and E-learning.
- 2. Computer operations and Fundamentals:

Hardware and Software.

Internal hardware (motherboard and its connected parts).

# 1.6.1 E-Commerce (Business)

**Electronic commerce** means the buying and selling of goods and services using the internet.

**Exercise 4:** Observe the table below which shows two ways to buy a product.





#### How are the products displayed?

TRADITIONAL COMMERCE	E-COMMERCE

#### How are the products delivered?

TRADITIONAL COMMERCE	E-COMMERCE

#### What is the mode of payment?

TRADITIONAL COMMERCE	E-COMMERCE

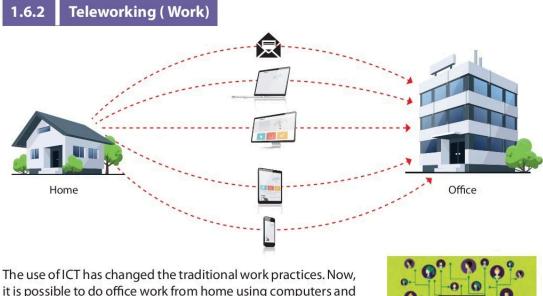


#### **Tools required**

When doing an e-commerce transaction the following are needed.

- A computer, a tablet PC or a smart phone.
- Internet connection.





it is possible to do office work from home using computers and telecommunications facilities.



#### **Tools required**

Personal Computer or Laptop and Internet connection.

## **Benefits of Teleworking**

Benefits to Employees
They work in a relaxed environment.
No travel costs
Better work/family life balance.
Handicapped persons may also work

## **Drawbacks of Teleworking**

Benefits to Employers	Benefits to Employees
Employers do not have direct control over teleworkers.	<ul> <li>They do not meet other workers.</li> <li>They may be tempted to spend time on personal work.</li> </ul>

Quick Test 1.6.2

#### Fill in the blanks with the following words:

Iravei	Family	Costs	leleworking	Handicapped	
Working from	n home is calle	d	Many people p	orefer to work this way because	
they can look	k after their		at the same time	persons can	
also work. Th	ere is no need	to	to the office. M	Moreover, employers are happy	
because they	save on office	running			

## **Traditional banking**

In Traditional banking, a person goes to a bank to do the following transactions:

- Open/close account
- Deposit/withdraw money
- Check balance
- Exchange of foreign currency
- Money Transfer
- Apply for loan





Accompany your parents next time they go to the bank and note down your observations.





To perform transactions, you need to call in person and bring along your ID Card to prove your identity.



Usually you have to queue up and wait for your turn.

Observation Notes

## 1.6.3 E-banking

E-banking also known as online banking (or Internet banking) refers to the use of internet to perform bank transaction such as:

- · Transfer money from one account to another.
- Online payments (of bills or purchases through e-commerce).
- · Check account balance.

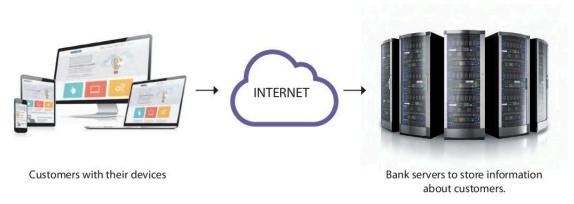




The bank provides an E-banking web-site. Users must have User ID and password.

Password is used to avoid unauthorized access to the account. E-banking allows cashless transactions.

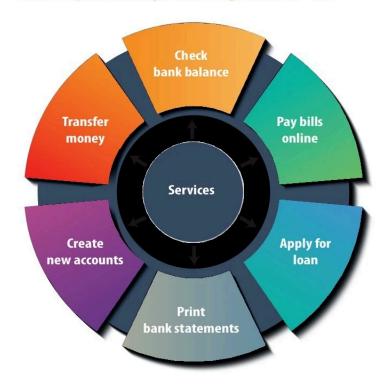
#### **Tools needed**





Observation Notes		

## Services provided by E-banking to customers



## **Benefits of E-banking**

Benefits to Customers	Benefits to Bank
Transactions can be done from home	Banks can attract new customers
Transactions can be done at any time (24/7)	Bank can operate 24 hours a day
No need to stand in queues	No need to employ many staff
Can request for bank statement instantly	Save costs on rent and salary
Can apply for loan	

<b>Drawbacks to Customers</b>	Drawbacks to Bank	
Need to have internet facilities to access web site	Need to buy expensive computers and specialist workers to develop web site	
<ul> <li>Fear of hacking and fraud</li> <li>Need to be aware of fake E-mail that can steal personal information</li> </ul>	If web site is not working , customers will not have access to their account	

Quick Test	1.6.3
Quien iese	1.0.0

1. Unscramble the letters below to make seven words related to E-BANKING. Then use the letters in the boxes in the new words to solve the E-BANKING RIDDLE!

CUNAO	CT
OLIN	N E
SAEC	CS _
SORPWD	A S
NETTRI	N E
MAELI	M L

An identification used by a person to access a computer system.

2. State whether the following statements are related to traditional banking or E-banking or both.

Put a tick ( $\sqrt{\ }$ ) in the appropriate column(s).

	Traditional Banking	E-Banking
Pay bills		
Open/close account		
Use of ID card		
Deposit/withdraw money		
Apply for loan		
Check balance		
Use of Login (e.g. UserID)		
Money Transfer		

#### 1.6.4

## ATM (Banking)





Instead of going to a bank to perform some transactions, you can use an ATM (Automatic teller machine). It is a machine located outside the bank or at another location.

#### An example of an ATM



#### Services offered by an ATM

A customer needs his/her bank card with a **P**ersonal **I**dentification **N**umber (**PIN**) to perform the following operations:

- withdraw cash
- · transfer funds between accounts
- · view account balances
- · deposit cash and cheques
- refill prepaid mobile phone
- pay bills



Visit this web site in your computer laboratory or at home.

https://handsonbanking.org/htdocs/en/k/#/en/k/sa/8.html







## **Quick Test**

1.6.4

ATM has also its limitations. Tick ( $\sqrt{}$ ) the services **not** offered at an ATM.

To top up your mobile phone account	
To open and close customer accounts	
To use coins	
To pay CWA monthly bills	
To view the last five transactions done in your account	
To apply for a loan	

1.6.5 E-learning (Education)

E-Learning (Electronic learning), means using a digital device and electronic resources to learn.

#### Tools needed for e-learning

To be able to correctly carry on with e-learning a student need to have:

- A computer / laptop/ tablet PC/ smart phone
- Speakers or headphones
- A microphone
- · Any specific software or website



E.g. Khanacademy.com



Tick  $(\sqrt{})$  what you have observed after visiting the website.

Statements	True	False
1. To top up your mobile phone account		
2. To open and close customer accounts		
3. To use coins		
4. To pay CWA monthly bills		
5. To view the last five transactions done in your account		

Quick Test 1.6.5

Circle the tools required to perform E-learning.

Computer Book Headphone Scanner

## 1.6.6 Video conferencing (communication)



#### Components of a video conferencing



**Videoconferencing** allows people from different locations to see and talk to each other using computer and Internet facilities.

#### **Tools required**

PC or Laptop, microphone, webcam, speakers, and Internet connection.

Benefits to Videoconferencing	Drawbacks to Videoconferencing
Large savings in travelling.	Some problems like poor sound and images or network failure may arise.
No time wasted in travelling to other cities/ countries.	It is less personal than face-to-face meetings.
Meetings can be organised at short notice.	Important documents cannot be signed.
Disabled people are not disadvantaged.	Time zones are different in different parts of the world.
It is safer (from terrorist attacks/ accidents).	Language barrier.



Which other devices, apart from your computer, can be used for videoconferencing?



#### **Devices**

1.	
2.	
3.	
1	



#### Match Column A with Column B

### Column A

Videoconferencing
Benefit of videoconferencing
Drawback of videoconferencing
Videoconferencing tools

#### Column B

PC, microphone, webcam, speakers, In	ternet.
Network failure.	
People from different locations see and talk to each other.	
No travel expenses.	

# **END OF UNIT QUESTIONS**

e)	State 2 benefits and 2 drawbacks of e-banking to the bank.		
BEN	IEFITS:		
DRA	AWBACKS:		
Exe	ercise 8		
Fill	in the blanks with the words given in the box below		
T.L	washing Formulas ATM Video Conferencing Floring Floring		
reie	eworking E-commerce ATM Video Conferencing E-banking E-Learning		
1.	is when a person or a business, buy or sell over the Internet .		
2.	To work from home or a location close to home using computers and telecommunications		
	facilities is called		
3.	refers to the use of internet to perform bank transactions.		
4.	means to use a computer and ICT tools to learn from home.		
5.	Anis a machine located outside the bank or at another location.		
6.	allows people from different locations to see and talk to each other		
	using computer and Internet facilities.		

Unit 2 | Computer Operations and Fundamentals

# Computer Operations and Fundamentals



## **Learning Objectives**

#### By the end of Unit 2, learners should be able to:

- · Distinguish between hardware and software.
- Describe the components of a computer system.
- State the use of various computer peripherals.
- Distinguish between application and system software
- Describe various types of computers
- Demonstrate an understanding of the unit of measurement of CPU speed
- · Demonstrate an understanding of binary data

## 2.1 Hardware and Software

A computer system needs both **hardware** (physical parts) and **software** (computer programs). **Hardware** is the name given to the physical parts of the computer system.

The parts can be: Internal (found inside the system unit) or External (connected to the system unit).

## 2.2 Internal Hardware

#### Motherboard

The motherboard is the central circuit board. All components plug into the motherboard.



#### Other hardware connected to the motherboard

#### Processor (Central Processing Unit)

The **CPU** is the brain of the computer and is responsible for all data processing.



#### Internal Memory (RAM and ROM)

Random Access Memory (RAM) and Read Only Memory (ROM) are two types of internal memory used to store computer data that can be directly accessed by the CPU.



#### Power supply

Sends power through cables to the motherboard and other components.



#### Graphics Card

A device that plugs into the motherboard and enables the computer to display images on the monitor.



#### Fan

It keeps the CPU cool and stops it from overheating.



#### Sound Card

A sound card allows the computer to produce sound as well as allows users to connect microphones to the system.

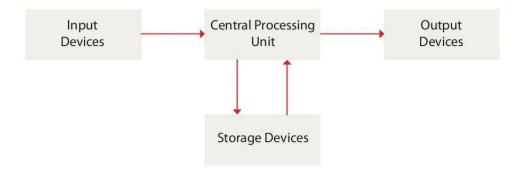


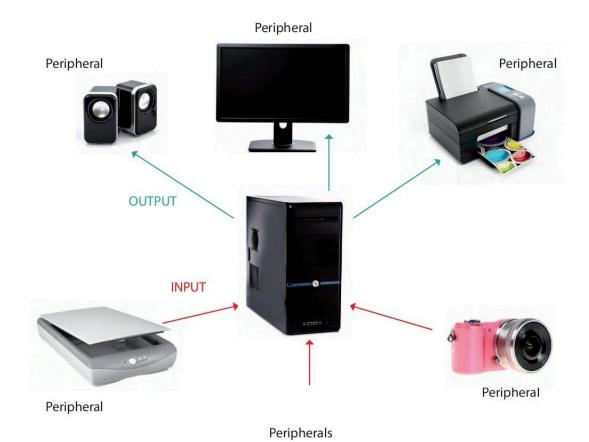
Unit 2 | Computer Operations and Fundamentals

## 2.3 External Hardware components

External hardware components are called peripheral devices. **Computer peripherals** are devices that are connected to a computer system to expand its abilities.

They may be input devices, output devices or storage devices.





## 2.3.1 Input/output an storage Devices

External hardware components are called peripheral devices. **Computer peripherals** are devices that are connected to a computer system to expand its abilities.

They may be input devices, output devices or storage devices.

#### **Input Devices**

Devices used to enter data and instructions into the computer. Some examples are keyboard, mouse, barcode reader, scanner, joystick, touch pad, digital camera and microphone.



#### **Output Devices**

Devices used by the computer to show us information in a suitable form. Some examples of output devices are monitor, printer, speakers and headphones.



#### **Storage Devices**

Devices used to store data for later use. Some examples of storage devices are hard disks, optical discs, USB Flash drives and memory cards.



Unit 2 | Computer Operations and Fundamentals



# Quick Test 2.1.3

#### 1. State whether the following statements are True or False:

- (a) The computer can work with hardware only.
  - (b) The fan keeps the CPU cool.
  - (c) All components plug into the motherboard.
  - (d) A printer is an example of a storage device.
  - (e) A peripheral device may be an input device.

#### 2. Match Column A with Column B. An example has been given.

Column A	 Column B
Computer peripherals	Allows the computer to produce sound.
Sound card	Enables the computer to display images.
ROM	Physical parts of a computer system.
Hardware	Input/Output/Storage devices.
Graphics card	The main circuit board.
Motherboard	Internal memory.