



**TECHNICAL REPORT ON
STUDENTS' INDUSTRIAL WORKS EXPERIENCE SCHEME
(SIWES)**

**HELD AT
UNIVERSITY OF IBADAN, WORKS AND MAINTENANCE DEPARTMENT
Ibadan, Oyo State**

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DEDICATION

The student industrial work experience scheme is dedicated to Almighty Allah for making this opportunity a successful one in life and giving me the opportunity to complete the program.



ACKNOWLEDGEMENT

All praise and adoration is due to Almighty Allah, the uncreated creator of every creature, the first without beginning, the last without an end, He who will continue to exist when existence does no longer exist, for the protection and great privilege he offered me throughout the completion of the program.

My regards also goes to my lovely, wonderful and caring parent for their support morally, spiritually and financially throughout the program.

My appreciation also goes to our amiable H.O.D, also, my appreciation goes to my SIWES co-ordinator for his guidance during my Training.

My sincere appreciation goes to my brothers and sister, and also to my also to my friends, I wish you success in all your endeavors. (Amen).

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CHAPTER ONE

1.0 INTRODUCTION

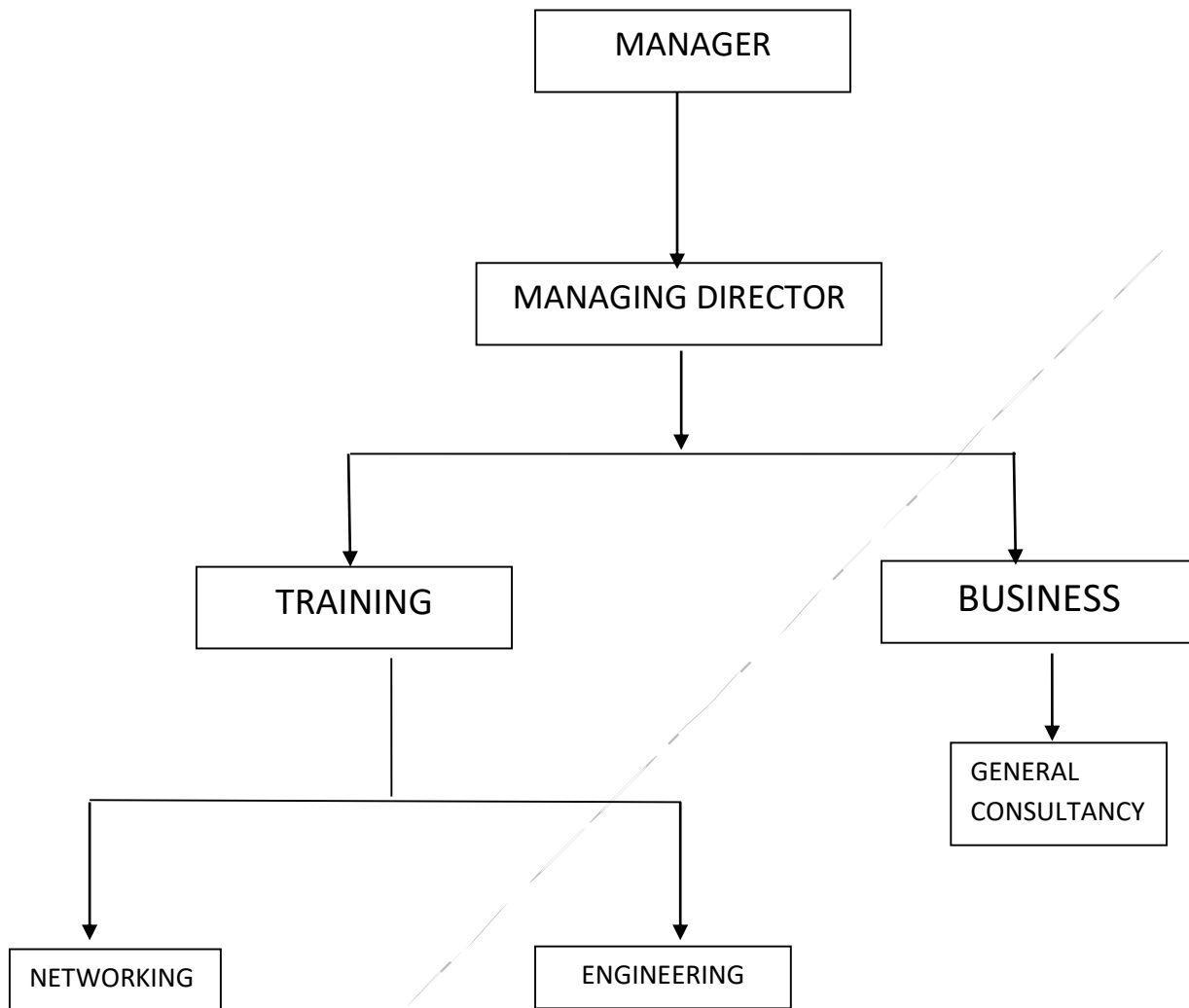
The Student Working Experience Scheme (SIWES) one of **NBTE** requirement of the Ordinary National Diploma in various science and engineering fields. It could either be three months or four months or otherwise base on school calendar.

The program is established to eradicate inequality and called discipline in all institution throughout the country. The program develop student in their field of specification. It focuses on how student can relate theoretical aspects in their courses and business environment as a whole.

1.1 AIM AND OBJECTIVES OF SIWES

- ❖ It orients student practically
- ❖ It helps student to acquire more skills in their field of specialization.
- ❖ It helps student to have self confidence
- ❖ It helps to be self employed
- ❖ To expose student to working methods and techniques in handily equipment and machinery that may not be available in the schools.

1.3 ORGANIZATION CHART



CHAPTER TWO

2.0 EXPERIENCED GAINED DURING SIWES

Below are some of experiences I gained during the Student Industrial Work Experience Scheme (SIWES).

Student Industrial Work Experience Scheme (SIWES) brought to me some knowledge on how to do some practical work on computer system; such as **Internet** and **Hardware Maintenance**.

2.1 INTRODUCTION TO INTERNET.

The earnest need for every effective and efficient ways of handling modern communication cannot be over emphasized, as a communication remains to be the major sustenance of world Existence. Invariably, without good communication the world would be a difficult place to live in.

2.2 DEFINITION OF INTERNET

The word internet simply stand for **INTERN**ational **NET**work and can be defined as the global information system that provides, uses or makes accessible, either publicly or privately high level services layered on the communications and related infrastructure.

2.3 BENEFITS OF THE INTERNET

1. **Browse the web:** browsing is an act of looking for information on the internet
2. **Expand reachable market:** with the presence of the internet, the companies gain access to previously unreachable local, regional and international markets
3. **Read news:** many communication media outlets ranging from major print magazines, radio stations and television station have their own websites in which breaking news are posted before they appear in conventional news media.

4. **Information Distribution:** it provide information to the public about a particular organization's product and services.
5. **Online shopping:** shopping online is the one of the fastest growing activities on the internet.
6. **Online Shopping:** Shopping online is one of the fastest growing activities on the internet. Right on the web, it is possible to browse an online catalog, choose the items type in a credit card number and shipping address.

2.4 WIRED DATA TRANSMISSION CHANNELS

- i. **TELEPHONE WIRE:** telephone wire is actually a pair of wire each wrapped in a protective coating twisted one around the other.
- ii. **COAXIAL CABLE:** it is much faster and can be used for underground and underwater line.
- iii. **FIBER OPTICS:** it consists of minute's glass fibers rather than wires which can carry over 1000 ordinary voices conversation simultaneously.

WIRELESS TRANSMISSION CHANNELS

- i. **Microwave:** microwave operates without any physical connection between transmitter and receiver.
- ii. **Satellites:** satellite involves data transmission over long distance even between continents, often involves orbiting satellite.

2.5 MODE OF TRANSMISSION

Data can be transmitted over a communication channels in either parallel mode or serial mode.

1. **Parallel mode:** in a parallel mode data transmission, more than one binary digit can be sent simultaneously (e.g. the printer port).

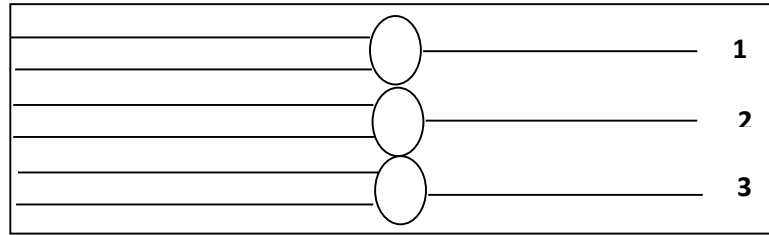


Fig. 1 parallel mode Transmission

2. **Serial Mode:** serial mode involves sending of one bit at a time over single wire from the source to the destination. It is an alternative and cheaper method of sending the binary digits and it is an idea method for long time distance transmission.

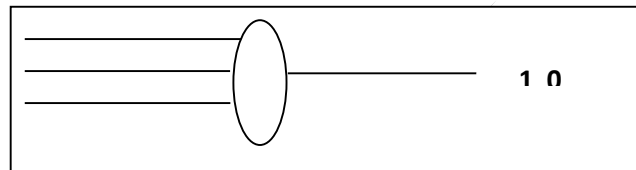


Fig2. Serial Mode Transmission

2.6 ELECTRONIC MAIL. (E-MAIL)

E-mail is a system in which a computer user can exchange messages with other computer users on the Internet. **E-mail** is the one of the numerous services provide by the internet.

STEPS TO OPEN AN E-MAIL ACCOUNT

1. Double click web browser from your computer (e.g. Opera mini, Firefox, Internet explorer).

2. Choose one of the web servers providing free services of your choice by just type the website address. (e.g. www.yahoo.com, www.msn.com).
3. Click on GO or press enter on your keyboard. The home page of the web service will be opened.
4. Click on the “mail” icon. This will open mail “sign-in” form page.
5. Scroll down and click the “*sign up now*” hypertext link.
6. After this, the sign up form will be displayed, follow the instruction to complete the form correctly, click on submit. If your registration is successful, your e-mail address and other relevant information will be displayed. You may print this if require.

2.7 INTRODUCTION TO HARDWARE MAINTENANCE

Hardware is the general term used to describe all the physical component of a computer system. These includes all the part of computer that can be seen, felt and touched.

2.8 TOOLS REQUIRED FOR PC ASSEMBLING:

- Screw-Driver set (precision sets)
- Curve plier
- Long nose plier
- Meter
- Operating system (cd package) e.g. vista/win7
- Soldering iron and lead
- Blower
- Liquid (methyalted spirit)
- Brush
- Cotton wool

2.9 Some of the computer components that I familiarized myself with includes:

1. MOTHERBOARD

The motherboard is the main circuit board inside your PC. Every component at some point communicate through the motherboard. Either by directly plugging into it or by communicating through one of the motherboards ports.

The main function is to connect all the hardware together like hard drives, memory modules, CPU, etc.

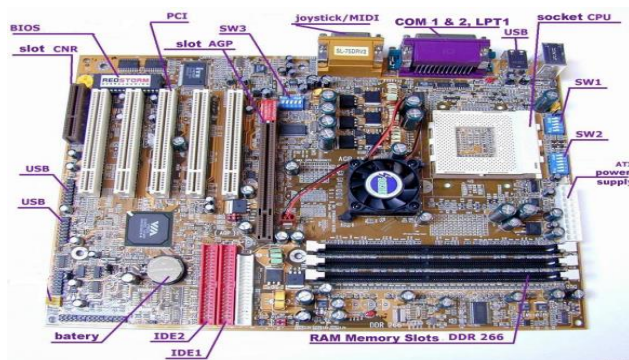


Fig. 1 Motherboard

2. COMPUTER FAN

Computer fan is any fan inside or attached to a computer case.

FUNCTIONS OF A COMPUTER FAN

The functions of a computer fan includes:

- It is used for cooling purposes
- It draw cooler air into the case from the outside
- It expel warm air from inside
- It move air across a heat sink to cool a particular component

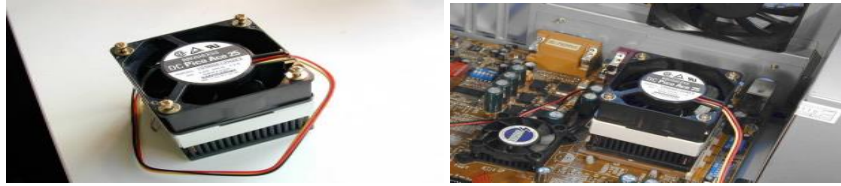


Fig. 2 Computer fan

3. PROCESSOR

Processor is the brain of the computer. The chip that performs the majority of calculations and instructions need to make your computer run. Without this chip, no other function of the PC is possible. The processor is attached to the motherboard (processor slot).

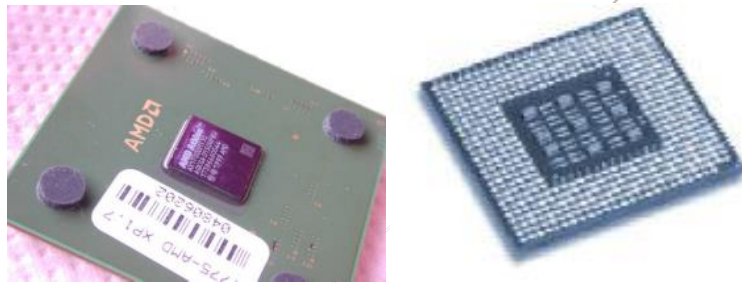


Fig. 3 Processor.

4. MEMORY

Memory is integral part of any computer. As the CPU perform computation of data but memory store all that information.



Fig. 4 Memory

5. HARD DISK

The hard disk or hard drive is the permanent storage area of a computer. It stores information whether the computer is on or off. The hard drive is mass storage device found in all **PCs** (with some exclusion) that is used to store permanent data such as the operating system, programs and user files.

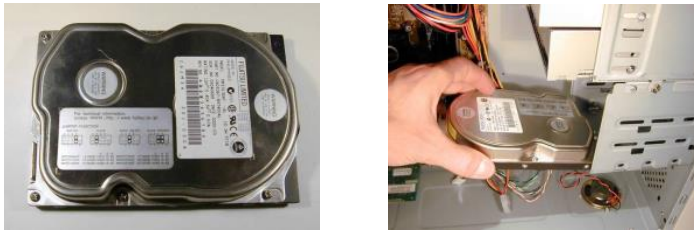


Fig. 5 hard disk

CHAPTER THREE

3.0 CHALLENGES AND PROBLEM ENCOUNTERED

- ❖ To get a place of attachment is not easy
- ❖ Operating of some big machine e.g. generator is not always easy
- ❖ The stressful in term of transportation (delay in traffic) is one of the problems.

CHAPTER FOUR

4.0 DISCUSSION

I gained a lot of things during my attachment in the organization. I was introduced to hardware maintenance.

4.1 RELEVANT OF EXPERIENCE GAINED TO STUDENT FIELD OF STUDY

- i. It enables me to practicalized the theoretical aspect of my course.
- ii. It enable me to know the important and usefulness of computer to man.
- iii. It enables me to expose to the activity involved in the system.

4.2 INTERPERSONAL RELATIONSHIP WITH THE ORGANIZATION.

University of Ibadan is a nice organization where I was able to interact with the director, instructor and students of the organization. Even when I was about to round up my program, I felt like extending it but I have no option other than to leave.

CHAPTER FIVE

5.0 CONCLUSION

I appreciate the effort of the federal Government of Nigeria for introducing such program Student Industrial Work Experience Scheme (SIWES) to enhance students practical knowledge in their various field of study.

5.1 PERSONAL IMPRESSION ABOUT THE ORGANIZATION

It is an organization where unity exist within the director, instructors, secretary and student and this has really contributed to the grow of the organization.

The organization where I did my SIWES training can be recommended to any individual who is ready to acquire computer knowledge.

5.2 SUGGESTION AND RECOMMENDATION TO THE ORGANIZATION

I am appealing to the organization to give SIWES applicant a helping hand because they can both learn from each other.

5.3 TO THE POLYTECHNIC

I am appealing to all polytechnics that they should get all their students engaged in the SIWES program because I believe it is a program that can boost student in practical knowledge about the theoretical aspect the have been taught in school. It also makes the student to learn more on how to interact with people and how to work.