

# A TECHNICAL REPORT ON

STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

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# **DEDICATION**

This report is dedicated to Almighty God, the Supreme Being and also to my loving parents, Mr. & Mrs. Adeoti

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# **ACKNOWLEDGEMENT**

Firstly, with every sense of humility, I give my sincere appreciation to Almighty God from whom all knowledge, wisdom and intelligence are given to humanity for making it possible for me to accomplish my SIWES programme.

Education is an instrument of change, for human emancipation from ignorance, superstition and enslavement. My parents made sure they planted this in me. I am grateful to my parents, **Mr**. and **Mrs**. **Abayomi** for their love, care, encouragement and financial support. I pray that Almighty God will grant them long life and hearty health to reap the fruit of their labour.

Words alone cannot express my enthusiasm to my SIWES supervisor and departmental lecturers for their parental advice and tutelage. May God almighty continue to bless you all?

#### **FOREWORD**

This report contains all the work done and the experience gained during my four months of industrial programme which I had at **MINISTRY OF HOUSING AND URBAN DEVELOPMENT** in Ilorin Kwara State and it is written in chapters according to how the training goes.

The five chapters report is arranged as follow. Chapter one unveils a brief background of the advent of **SIWES** programme into Nigeria tertiary institution academic calendar. Chapter two reveals the major sections and units in the host organization and student's specific involvement in the organization during training. Chapter four elucidates on work done by the intern in the organization, the relevance of the experience gained in the Ministry of Housing and Urban development

The last chapter of the report elucidates on conclusion, recommendation and suggestion for institution and organization.

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#### **CHAPTER ONE**

# 1.0 INTRODUCTION

This chapter gives a brief history of SIWES, its aims and objectives, as well as a short narrative on my application and posting. It also introduces intelligent solution providers (ISP) of Computer, where I had my SIWES training.

#### 1.1 ABOUT STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME

The student work experience scheme (SIWES) is a worldwide program practiced in countries like Japan, Australia, USA, Europe, and in African countries too. It is popularly known as co-operative education and referred to as sandwich in Europe. It is a six (6) months students industrial work experience scheme (SIWES) taken in the third year of the degree program, where the students go to various establishments related to their course of study.

The program was initially introduced in Nigeria by the Industrial Training Fund (I.T.F.) which was established under Decree 47 of 1972 by the Supreme Military Council, headed by General Yakubu Gowon. The Decree was billed to take effect from 31<sup>st</sup> March, 1974 and had as its core objective, the gradual reduction of the percentage of foreign participation in most of Nigeria's economic activities, accompanied by a systematic cooperation of locally oriented skilled manpower into the vast economic sector.

One of the key functions of the ITF is to work as cooperative body with industry and commerce where students in institutions of higher learning can undertake mid-career work experience attachment in industries which are compatible with student's area of study. The students Industrial Work Experience Scheme (SIWES) is a skill Training program designed to expose and prepare students for the Industrial work situation which they are likely to meet after graduation. Participation in SIWES has become a necessary pre-condition for the award of diploma and degree certificate in specific disciplines in most institutions of higher learning in the country in accordance with the education policy of government.

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## 1.2 BRIEF HISTORY OF SIWES

The word SIWES (Student Industrial Work Experience Scheme) was introduce by the federal government in the year 1973 to develop the technological, physical and social skill of our nation, through this, adequate and intelligent student are provide the department involved the actual challenge various discipline before they can be awarded as am National Diploma (ND) graduate.

# 1.3 AIMS AND OBJECTIVES OF SIWES

- Provide an avenue for students in institutions of higher learning to acquire industrial skills
  and experience in their approved course of study and also by interacting with people with
  more experience in the field under consideration.
- Prepare students for the industrial work situation which they are likely to meet after graduation.
- Expose students to work methods and techniques in handling equipment and machinery that are mostly not available in their various institutions.
- Provide students with an opportunity to apply their knowledge in real world situation thereby reducing the gap between theoretical knowledge and practical work.
- Enlist and strengthen employers' involvement in the entire educational process and prepare students for employment in Industry and Commerce.

# 1.4 ROLES OF STUDENT

- Attend SIWES orientation programme before going on attachment.
- Comply with the establishment's rule and regulation.
- Arrange living accommodation during the period of attachment.
- Record all training activity done and other assignment in the log book.
- Complete SPEI from ITF, FORM 8 and get it endorsed by the employer for submission to the ITF.

# 1.5 OBJECTIVES OF THE REPORT

The objectives of the SIWES report are;

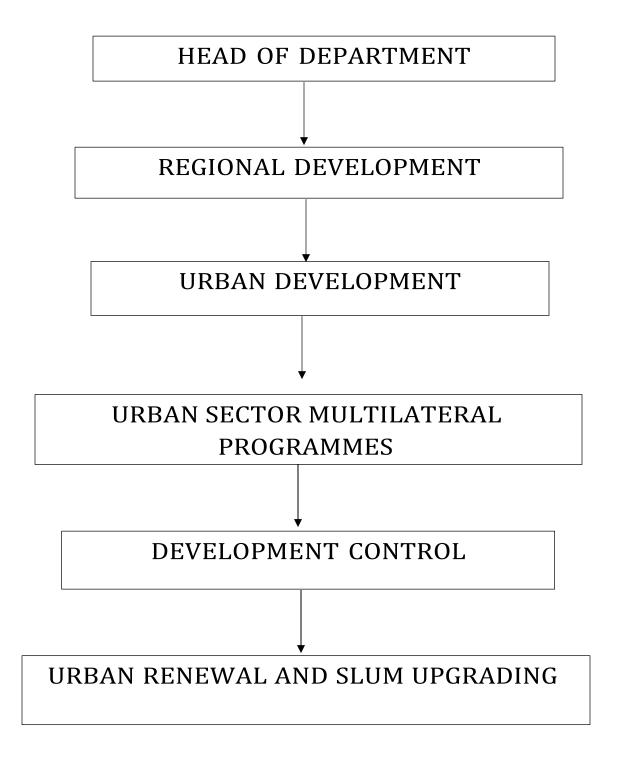
- To make through explanation of the work done during my four month industrial training.
- To fulfill the requirement for national diploma in computer science.
- To contribute to the body of knowledge and to enhance the understanding of the writer about a similar or same job.

#### 1.6 THE LOGBOOK

The logbook issued to student on attachment by the institution was used to record all daily activities that took place during the period of attachment, and it was checked and endorse by the industry based/institution based supervisors and ITF during supervision.

# **CHAPTER TWO**

# 2.0 ORGANIZATIONS CHART OF MINISTRY OF HOUSING AND URBAN DEVELOPMENT



#### **CHAPTER THREE**

# 3.0 INTRODUCTION TO BUILDING

### Week 1

Resumption and orientation on SIWES training modality

Introduction to the Ministry Organization Structure (Department and Unit)

Introduction to the on-going renovation work of ministry of housing and urban development

Installation of irony span roof covering assist in the arrangement of office document and furniture.

Assist in the arrangement of office document and furniture

#### Week 2

Renovation of offices: laying of 400x400mm ceramic floor tiles with skirting

Laying of floor tiles continues, replacement of bad PVC ceiling

Tools used: tiles, cutter, rubber, mallet hand towel

Laying of floor tiles, replacement of bas PVC ceiling and serving/repair of existing air conditioner.

Floor tilling veranda entrance steps serving and installation of Air conditioner

Mending of wall cracks and preparation of wall surface for painting.

#### Week 3

Repair of leakage flat roof at offices

Internal paint of office with emulsion paint adopting roller method

Repairing of existing electrical installation replacement of electrical fittings

Repairing of existing air condition and installation of new one

# Week 4

External paint of office with tex coat paint using roller method for application

Visitation to Governor's office along with staff for on-the spot assessment of office facilities and carrying out of physical measurement.

External painting continues in the offices with tex coat paint using roller method

Assist in carrying out official assignment and rearrangement of office

Packing of files and rearranging it into the cabinet

# Week 5:

Learn about setting out on how to do conversion of dimension such as; mm, meter, inches and formular use in setting, builder square method and 3,4,5 method.

Visitation to Kwara State Christian pilgrim board for condition assessment of the office.

Visitation to Kwara State Stadium indoor sport complex where on-going renovation works is in progress; wall finishing, fitting, changing of door to swing door, scaffolding

Explanation on excavation and method of escalating (manual and mechanical) hyndai jack hammer.

Explanation on leveling and compacting and different type of machine used: hammer roller machine.

#### Week 6

Explanation on factors to be considered before setting out of a building.

1] Access road, set back of the road, orientation of the building, consider a joining building

Visitation to kwara television for condition assessment and measurement for fence

Explanation on bond in wall and type of bond: stretcher bond, English bond.

Stretcher bond is the common

Explanation on different type of load in a building: dead load, live load, and super imposed load.

#### Week 7

Explanation on factor to be considered in the choice of foundation for building

Visitation to fire service along with for physical measurement and assessment of condition of building

There was an explanation on tendering procedure for project and types of tender documents

Visitation to high court Ilorin for physical measurement and assessment or condition of building

Visitation to Ilorin international conference centre [IICC] for taking inventory of material left on site after renovation of the contract [IICC]

#### Week 8

Visitation to government house to inspect on- going gate house construction along with staff

Visitation to government house to inspect the on- going gate house construction along staff: laying of block wall and screeding of the peers/ columns

At the government house gate wall: plastering and base plate for steel structure

Visitation to the site in company of staff to handover hospital renovation to contractor to commence work

#### Week 9

Visitation to kwara state university teaching hospital along with staff on assessment of condition of the building

Visitation to Adewole cottage hospital along with staff to inspect the on-going renovation works: replacing of bad roof trusses

At Adewole cottage hospital: demolition works of window and door was on- going

Adewole cottage hospital: construction of form work for column to strengthen the car park laying of Krebs was also in progress

At Adewole cottage hospital: hacking and removing floor finishes to receive new finishes

#### Week 10

Visitation to Stella Obasanjo along with staff for physical measurement and condition assessment of the facilities

Visitation to Kwara state water cooperation for physical measurement and condition on assessment of the offices in order to prepare [BOQ]

Adewole cottage hospital renovation works on- going: laying of interlock blocks at the extension area

Adewole cottage hospital: fixing of long span aluminum roofing sheet

Visitation to Agba dam for physical measurement of the proposed perimeter fence with use of google map

# Week 11

Visitation to Asa- dam for physical measurement of the proposed perimeter fence with the use of google map

Visitation to water co- operation for condition assessment of the office

Visitation to new secretariat complex in company of staff to inspect the on- going perimeter fence construction

Assisting in the office for official assignment

# Week 12

Kwara state stadium indoor complex installation of suspended ceiling and repair of cracking wall

Installation of aluminum doors at the toilet main entrance

Setting up hand washing basins within the toilet area

Mounting aluminum glass panels at the entrance of the sport complex

Preparing and sealing cut sections for pipe installation followed by surface screeding

### Week 13

At Kwara state stadium indoor complex: field work, metal work and tiling works

Installation of 600×300mm ceramic wall tiles for toilet wall

Arrangement of the suspended ceiling [sypsum ceiling] in the interior part of the building

Tilling of the toilet wall of the office with selected 600×300mm ceramic wall tiles

Plastering of the edge of the aluminum window frame fitting to provide smooth finishes and edges

# Week 14

Kwara state stadium indoor complex site clean ups and removal of construction debris

Installation of door frames and handles in office area

Electrical wiring check and replacing of new outlets

Painting of interior walls in the reception area

Assembling and installing of office furniture

# Week 15

At Kwara state stadium indoor complex metal work, glasswork, furniture work and welding

Introduction to welding and its safety measures, welding of irons together to make up for the stair case railing

Wall paneling with the use of ports boxes to make an entrance into the basketball court area

Fitting of led light into the suspended ceiling for illumination of the part of the building

Fitting of glasses [transparent] into the aluminum frame at entrance and windows

#### **CHAPTER FOUR**

# 4.0 RELEVANCE OF THE EXPERIENCE GAINED BY STUDENT DURING THE PROGRAMME

Without mincing fact, Student Industrial Work Experience Scheme (SIWES) sustains a great relevance for tertiary institution students during internship. Besides exposure to the technical Know-how of things are been done in industrial setting which far differs from what is being taught within the four walls of classroom. This will undoubtedly unravel completely or at least lessen the demarcation and prevailing contrast in terms of work force and output between industrial staff and newly employed graduates.

Unlike an intern, I was given a warm welcome on my first day at Ministry of Housing and Urban Development This was followed by my introduction to other staff and orientation on the activities/ functions of the organization.

In sequel to that, I was also introduced to other departments' i.e Urban development, Regional Development, human resources department, and so on.

During my internship, I functioned relatively in some of the departments/units in the organization such that I was able to gather several Building technology related experiences which will abet my academic career and pursuit

# CHALLENGES ENCOUNTERED

- 1. Financial scar
- 2. Starkness of industrial staff
- 3. Proximity of industrial location
- 4. Limited internship period

#### **CHAPTER FIVE**

#### 5.0 CONCLUSION

The SIWES program expected to be undergone by all students in the school of applied science in all tertiary institution in Nigeria.

I therefore deeply appreciate the industrial training of my school (Kwara State Polytechnic, Ilorin) for involving themselves in such a worldwide program. The importance of this training cannot be over emphasized industrial training by some operations carried out during the program.

#### 5.1 RECOMMENDATION

I like to use this medium to explore the federal Government at all stage to take this SIWES program more seriously seen by the students of applied science as a virtual improvement in future of technology in our nature.

Government should also ensure a proper supervision of SIWES student so that the purpose of the programme will be achieved.

The federal Government should make adequate provision in the annual budget for proper funding of SIWES in view of the potential of the scheme to contribute to enhancing the quality of the pool to technical skill available to the economy.

A comprehensive and detail directory of employer who accept students for SIWES is urgently required to facilitate placement of student in industry.

In order to guarantee quality assurance of institution and the ITF. The ITF should ensure that the backlog in payment of students allowance is cleared urgently to remove the negative image being created for SIWES.