# TECHNICAL REPORT ON STUDENTS' INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES)

## UNDERTAKEN AT DOVE DIAGNOTIC CENTRE, IRE AKARI MOWE OGUN STATE

*PRESENTED BY*


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# BRIEF HISTORY OF SIWES

SIWES was established by Industrial Training Fund (ITF) in 1973 to solve the problem of lack of adequate practical skills preparatory for employment in industries by Nigerian graduates of tertiary institutions.

The scheme familiarizes and expose tertiary institution students with the needed experience in machinery and equipment handling which are usually not available in the educational institutions.

The hands-on experience that students receive via initiatives like the Students Industrial Work Experience Scheme (SIWES) is a crucial component of their education. SIWES is an organized curriculum created to introduce students to practical geoscience applications and business settings. Many geoscience programs at universities and technical institution require it.

# DESCRIPTION OF THE ORGANIZATION

Dove Diagnostic Centre was established as a response to the growing need for high-quality, accessible, and reliable diagnostic services in the healthcare sector. It was founded with the vision of providing state-of-the-art medical diagnostic solutions to individuals, healthcare institutions, and corporate organizations. The centre was created to bridge the gap in medical diagnostics by offering a wide range of laboratory, imaging, and nutritional assessment services that ensure early detection, effective treatment, and proper management of various health conditions. From its inception, the centre aimed to redefine diagnostic excellence by integrating modern technology, skilled professionals, and patient-centered services. It was built on a strong foundation of medical expertise, innovation, and dedication to quality healthcare. The founders envisioned a facility where patients could receive comprehensive diagnostic services with a high level of accuracy, speed, and efficiency. This vision led to the development of an institution that continues to set standards in the medical diagnostics field.

The centre’s establishment was driven by the increasing demand for specialized diagnostic services that go beyond routine medical tests. In many healthcare settings, the absence of advanced diagnostic tools had long been a major challenge, leading to delays in diagnosis and treatment. Recognizing this gap, the founders sought to create a facility that would leverage cutting-edge technology to provide precise and timely diagnostic results. During its early years, the centre focused on setting up a robust infrastructure that could support a wide range of diagnostic procedures. Investments were made in acquiring modern laboratory equipment, high-resolution imaging devices, and advanced medical software to streamline operations. The recruitment of highly trained professionals, including medical laboratory scientists, radiologists, nutritionists, and administrative staff, played a crucial role in establishing a strong foundation for the facility.

As the centre expanded, it continuously upgraded its services to meet the changing needs of the healthcare industry.

As part of its long-term vision, the centre continues to explore opportunities for expansion and diversification. Plans are underway to introduce new diagnostic specialties, expand facilities, and enhance service offerings. By staying ahead of emerging trends in medical diagnostics, the centre aims to maintain its position as a leader in healthcare innovation. Throughout its history, the centre has remained committed to its core values of integrity, accuracy, efficiency, and patient care. These values guide every aspect of its operations, ensuring that patients receive the highest standard of diagnostic services. The dedication of its staff, the trust of its clients, and the support of the healthcare community have all contributed to its growth and success. Looking to the future, the centre is poised to make even greater contributions to the healthcare industry. Advancements in artificial intelligence, molecular diagnostics, and personalized medicine are expected to play a significant role in shaping the future of diagnostics. By embracing these innovations, the centre will continue to enhance its capabilities and provide even more precise and effective healthcare solutions.

# WORK DONE & EXPERIENCE GAINED

## 1. Immunization Department

In the Immunization Department, I was involved in:

- Assisting in the administration of routine childhood vaccines such as BCG, OPV, DPT, Measles, and Hepatitis B.
- Educating mothers and caregivers on the importance of immunization and vaccine schedules.
- Recording vaccine administration details and maintaining immunization registers.

## 2. Nutrition Department

In the Nutrition Department, my responsibilities included:

- Assisting in the assessment of children's nutritional status using weight and height measurements.
- Educating parents and caregivers on proper child nutrition, including breastfeeding and complementary feeding.

## 3. Triage Department

In the Triage Department, I was responsible for:

- Assisting in the initial assessment of incoming patients.
- Measuring vital signs such as temperature, pulse, and blood pressure.
- Helping to prioritize emergency cases based on severity.

## 4. Record Department

In the Record Department, my duties included:

- Organizing and updating patient files for easy retrieval.
- Registering new patients and documenting their medical histories.
- Assisting in data entry and hospital record management

# PICTORIAL REPRESENTATION OF SOME LABORATORY EQUIPMENT USED IN NUTRITION UNIT, IMMUNIZATION UNIT, RECORD UNIT AND TRIAGE UNIT AND THEIR USES


**Fig 4 – VACCINE BOTTLE**

**Uses**

i. **It contain the vaccine doses required for immunizing individuals against diseases such as polio, measles, hepatitis, and tuberculosis. Healthcare workers extract the vaccine from the bottle using syringes.**
ii. **It is labeled with batch numbers and expiry dates, allowing immunization staff to track vaccine quality and ensure expired doses are not used.**

**Fig 1 – Weighing Scale**

**Uses**

i. **Used to measure patients' weight, which is crucial for determining their nutritional status.**

ii. **Weight measurements are used alongside height to determine BMI, which helps assess whether a person is underweight, normal weight, overweight, or obese.**

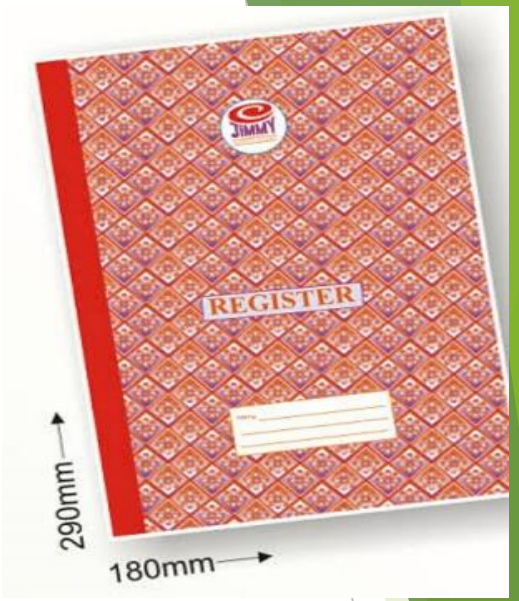


**Fig 5 – Register**

**Uses**

i. **It helps healthcare workers monitor and follow up on patients who need additional doses, such as booster shots for polio, measles, or hepatitis.**

ii. **It provide statistical data on the number of people immunized, helping in assessing vaccine coverage within a community or healthcare facility**

**Fig 6 – GIOSTYLE**

**Uses**

i. **It helps keep vaccines at the recommended temperature (usually between +2°C to +8°C) during transport, preventing spoilage.**
ii. **It is used to carry vaccines safely from storage facilities to remote vaccination sites, ensuring they remain potent.**

**Fig 7 – Folder**

**Uses**

i. **It used to store individual patient records, including personal details, medical history, and treatment information.**
ii. **It help organize documents systematically, making it easier for healthcare workers to access patient records when needed.**

**Fig 8 –** Pulse Oximeter

**Uses**

i. Helps healthcare workers decide whether a patient needs oxygen therapy, ventilation, or immediate medical attention.

ii. It is used for trauma patients, unconscious individuals, or those suspected of cardiac or respiratory failure to monitor their oxygen levels in real time.

**Fig 9 –** Sphygmomanometer

**Uses**

i. It use for Measures systolic and diastolic blood pressure to determine if a patient has normal, high (hypertension), or low (hypotension) blood pressure.

ii. It helps identify patients at risk of conditions such as stroke, heart attack, or shock due to abnormal blood pressure levels.

**Fig 2 – MUAC TAP**

**Uses**

**i. MUAC is used to quickly asses malnutrition, especially in children under five, pregnant women, and lactating mothers. It helps identify individuals who are undernourished or at risk of malnutrition.**

**ii. The tape has color-coded indicators (green, yellow, and red) that classify individuals as well-nourished (green), at risk of malnutrition (yellow), or severely malnourished (red)..**

**Fig 3 – Lenosometer**

**Uses**

i. **Is used to measure the length of infants and young children to monitor their growth patterns and ensure they are developing appropriately.**
ii. **Is used for Length measurements, combined with weight data, help in determining Weight-for-Length (WFL) or Height-for-Age (HFA) indices, which are used to assess undernutrition, stunting, or wasting.**

## Problem Encountered

- ✓ Limited Practical Experience: Some tasks required expert knowledge, and I was only allowed to observe rather than actively participate.
- ✓ Workload Pressure: The hospital had a high patient turnout, making it challenging to keep up with the demands of different departments.
- ✓ Communication Barriers: Some caregivers spoke only local dialects, making patient education difficult at times.
- ✓ Data Management Issues: Manual record-keeping sometimes led to delays in retrieving patient files.

Despite these challenges, I was able to adapt and learn valuable problem-solving skills.

# CONCLUSION

My SIWES experience at Children Specialist Hospital, Ilorin was highly educational and practical. I gained valuable insights into child healthcare, including nutrition, immunization, medical record-keeping, and emergency triage. The training provided me with hands-on experience and enhanced my understanding of hospital operations. Despite the challenges faced, the experience has greatly contributed to my professional development, equipping me with skills that will be beneficial in my future career.

## RECOMMENDATION

- I recommend More Hands-on Training: SIWES students should be given more opportunities for practical involvement.
- I recommend Improved Record-Keeping System: The hospital should transition to digital records for faster and more efficient patient management.
- I recommend Better Public Awareness on Nutrition: More outreach programs should be conducted to educate parents on child nutrition.
- I recommend Enhanced Language Support: Medical staff should be equipped with basic knowledge of local dialects for better communication.