



**STANDARD OPERATING PROCEDURE (SOP)**  
**BIOMETRIC ATTENDANCE SYSTEM**

**Purpose**

This SOP outlines the process for installing and configuring, the Biometric Attendance System. It ensures accuracy and reliability in attendance tracking and helps in maintaining discipline and punctuality among employees.

**Scope**

This SOP applies to all employees and subordinate offices required to use the biometric attendance system.

**Definitions**

- **Biometric System:** A technology that uses employees' unique physical characteristics, such as fingerprints, to verify identity and record attendance.
- **Employee:** Any person employed by the department on a regular or contract basis.

**Responsibilities**

S#	Task	Responsibility
1	Overall management of the biometric attendance system, including setup, maintenance, and report generation.	Focal Person of PMRU/Admin Section

- **Focal Person of PMRU/Admin Section:** Responsible for the overall management of the biometric attendance system, including setup, maintenance, and report generation.
- **Focal Person of PMRU:** Responsible for the technical aspects of the biometric system, including installation, troubleshooting, and software updates.
- **Employees:** Responsible for accurately recording their attendance using the biometric system as per the defined procedure.
- **Focal Person of PMRU:** Responsible for marking leaves in the MIS system.

**Procedure**

**1. System Setup and Installation**

**1.1. Prerequisites:**

- Ensure that all necessary software packages and services have been downloaded from the provided [Google Drive link](#).
- The biometric device and the computer system or laptop should be on the same network.
- The biometric device and PC are connected to single router and device has been assigned appropriate IP (Same Gateway)

### **1.2. Install ZKTeco Software:**

- Download the ZKTeco software from the provided [Google Drive link](#).
- Install the ZKTeco software on the designated computer system or laptop.
- Follow the installation instructions provided in the software package.

### **1.3. Device Configuration:**

- Connect the ZKTeco biometric device and the computer system or laptop to the network (connect both to a single router through ethernet cable).
- Configure the device settings as per the instructions in the ZKTeco manual.

### **1.4. Software Configuration:**

- Open the ZKTeco software on the computer.
- Add the biometric device to the software and ensure it is correctly synchronized. (Follow the video tutorial instructions)
- Test the connection to confirm the device is communicating with the software.

## **2. Employee Enrolment and Data Sync**

### **2.1. Employee Enrolment:**

- Register each employee's fingerprint on the biometric device.
- Ensure to assign the MISID (MIS Portal Generates a unique Id for every employee, use that Id) of each employee during thumb registration in the device.
- The Focal Person can obtain the MIS IDs of individual employees from the PMRU HRMIS.
- Only the unique MIS ID of the employee should be entered in the Biometric Device during registration, otherwise the employee record will not be matched with his/her profile on the portal
- Make sure to download all data on the ZKTeco software installed on the system
- Connect the device every time a new employee is registered. Otherwise, the live data of newly registered employees will not sync with the MIS Portal.

### **2.2. Data Sync:**

- Regularly download and sync all attendance data through the ZKTeco Software. Ensure the data is accurate and complete.

### **2.3. Integration with Online MIS:**

- Download and install the windows service provided to integrate data with the online MIS from the [Google Drive link](#).
- Run the service to ensure the data from the ZKTeco system is synchronized with the online MIS.
- Verify that the data is correctly uploaded to the online MIS.

## **3. Recording Attendance**

### **3.1. Clock-In Procedure:**

- Employees must use the ZKTeco biometric system to clock in at the beginning of their work shift.
- Place the finger on the fingerprint scanner.
- Wait for the system to confirm successful recording of attendance.

### **3.2. Clock-Out Procedure:**

- Employees must use the ZKTeco biometric system to clock out at the end of their work shift.
- Follow the same procedure as clocking in.

### **3.3. Breaks and Lunch:**

- Employees are not required to clock in/out for breaks and lunch unless specified by the HR policy.

## **4. Attendance Management**

### **4.1. Monitoring Attendance:**

- Admin Section will monitor attendance records daily to identify any discrepancies or issues.
- In case of system failure, manual attendance logs will be maintained temporarily.

### **4.2. Handling Discrepancies:**

- Employees must report any issues with their attendance records to Focal Persons within 24 hours.
- Focal Persons will investigate and resolve the issue promptly.

### **4.3. Leave and Absence Management:**

- Leaves should be marked by the Focal Person of PMRU from the MIS system.
- If a leave is not marked on the MIS, the employee will be considered absent.

### **4.4. Report Generation:**

- Focal Persons/Admin Section will generate attendance reports on a weekly and monthly basis.
- Reports will be reviewed for accuracy and used for payroll processing.

## **5. Compliance and Security**

### **5.1. Data Privacy:**

- Employee biometric data will be stored securely and used only for attendance purposes.
- Access to biometric data will be restricted to authorized personnel only.

### **5.2. Compliance:**

- Ensure compliance with relevant E&D rules and data protection regulations.
- Regular audits will be conducted to ensure the system's integrity and compliance.

## **6. System Maintenance**

### **6.1. Biometric Service:**

Ensure the Biometric Service is running in the background by checking from the Windows Services section.

## **Training**

- All employees will be trained on the proper use of the biometric attendance system during their orientation.
- Refresher training sessions will be conducted periodically to address any issues and update employees on new procedures.

## **Review and Updates**

This SOP will be reviewed annually and updated as necessary to reflect changes in technology or company policies.

## **Additional Resources**

All screenshots, video tutorials on how to install and configure the system, and all necessary files/packages and software are available on this [Google Drive link](#).

URL: [www.bas.pmrugb.gov.pk](http://www.bas.pmrugb.gov.pk)

**This SOP has been issued with approval of the competent authority.  
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