

# **Terms of Reference for Manager Monitoring & Evaluation**

## **Evaluation Background**

The Government of the Punjab developed the Education Sector Plan in 2019 and for the implementation of this plan, a grant was provided by the Global Partnership for Education (GPE). This grant is being implemented under the 'Transformation in Access, Learning, Equity and Education Management (TALEEM)' Programme with the assistance of UNICEF as Grant Agent. The Taleem Programme will focus on key thematic areas across the education sector. Under the programme, PMIU-PESRP is the project Secretariat and a Taleem Cell is established at PMIU-PESRP to implement the activities. Given the diverse areas of implementation of the programme, a robust Monitoring & Evaluation framework is required to ensure quality of service delivery and to maintain the timelines and enable smooth implementation of the programme. For this, a Manager for Monitoring and Evaluation is required to develop and implement the framework for M&E under the Taleem Programme.

## **TERMS OF REFERENCE**

He/She will work in close coordination with the component managers under the TALEEM Cell and will report to Manager- Strategic Planning and Coordination. Responsibilities will include developing a monitoring framework for the Taleem Programme, creating monitoring linkages between components and departments. The Manager M&E will be working in close coordination with other component managers to ensure a cohesive reporting system for data collected using the monitoring framework. He/She will assist the other managers in gauging the impact of individual interventions and to ensure that the targets set in the Taleem Programme are being actively achieved. The Manager M&E will identify gaps in data collection in a timely manner and provide solutions. He/She will also analyze the data sets to identify trends and anomalies in order to robustly inform decisions of key stakeholders.

## **Scope of Functions**

1. Develop the Monitoring and Evaluation Framework for the interventions under the Taleem Programme.
2. Oversee the development of Log-frames, Monitoring Plans and relevant data-collection processes, for tracking and monitoring of activities for Taleem Programme and provide recommendations to managers.
3. Identify key performance indicators in line with the objectives of the Taleem Programme and use those for developing monitoring tools and a systematic M&E dashboard/reporting mechanism.
4. Conceptualize the collection and use of data for project activities e.g. teacher training databases, identification of OOSC, linkages between SED, SpEd and LNFBE etc.
5. Develop mechanism to effectively communicate data to delivery teams and provide remedial strategies in case of challenges
6. Manage regular monitoring visits to project districts to monitor the progress of the project, as and when required.
7. Track progress of the Components under Taleem Programme as per work plans, identify lags and issues, and advise management on corrective actions needed to ensure timely achievement of milestones and deliverables.
8. Conduct primary and secondary data analysis and develop high quality reports to inform project leads in timely manner on project delivery and progress

9. Responsible for the identification and documentation of lessons learnt from monitoring, routine data collection, short-term assessments and share those with the management and project team for accommodating necessary changes in the design of future interventions. Responsible for the proposal design and project reporting related to research and monitoring and evaluation reporting requirements.
10. Oversee and supervise the development and execution of an M&E capacity building plan for the key staff at all supervisory and reporting levels.
11. Oversee the development of ToRs for procurement of consultancy services for surveys, assessments including Mid/End-Term evaluations, operations review (spot checks and process evaluation) as required.
12. Liaise effectively with other sub departments and entities within PMIU and SED to effectively meet timelines for project deadlines.
13. Participate in technical evaluation of bids including pre-bid and negotiations meetings for various procurement activities related to M&E functions.
14. Provide support to the wider Monitoring and Evaluation Team at PMIU (such as designing a robust monitoring mechanism, etc.) related to School Education in Punjab Province, as per need.
15. Set-up a collaboration and coordination mechanism with M&E wings of Implementing partners for Taleem Programme
16. Work in close coordination with all involved departments and sub-departments to ensure alignment, timely availability, and accuracy of data on all related indicators.
17. Perform any other task required for the successful implementation of the Taleem Programme, as assigned by the competent authority.

## **Terms of Reference for Software Engineer (.NET)**

### **1. BACKGROUND INFORMATION**

#### **1.1. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.2. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/.Net Developer will provide support in existing web based and desktop applications. Also involved in development of new .Net applications using C# and VB.net MVC. Assist in existing Systems/applications and data migration from PITB.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

- i. Proven experience as a .NET Developer or Application Developer
- ii. Familiarity with the ASP.NET framework, SQL Server and design/architectural patterns (e.g. Model-View-Controller (MVC))
- iii. Knowledge of at least one of the .NET languages (e.g. C#, Visual Basic .NET) and HTML5/CSS3
- iv. Strong expertise in development of scalable SOAP (XML) or RESTful API services for mobile application integration.
- v. Strong understanding of object-oriented programming
- vi. Skill for writing reusable libraries
- vii. Familiar with various design and architectural patterns
- viii. Knowledge of concurrency patterns
- ix. Understanding of fundamental design principles for building a scalable application
- x. Experience creating database schemas that represent and support business processes
- xi. Basic understanding of Common Language Runtime (CLR), its limitations, weaknesses, and workarounds
- xii. Experience implementing automated testing platforms and unit tests
- xiii. Proficient understanding of code versioning tools Git, DevOps etc.
- xiv. Experience with multi-tier architecture and distributed applications.
- xv. At least worked on 3 large scale applications having large data source and user base, also available for a demonstration.
- xvi. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

### **Key Deliverables:**

- 1) Write clean, scalable code using .NET programming languages
- 2) Translate application storyboards and use cases into functional applications
- 3) Remain up to date with the terminology, concepts and best practices for coding responsive web applications
- 4) Develop technical interfaces, specifications, and architecture
- 5) Use and adapt existing web applications for application landscape improvement and upgradation.
- 6) Liaison with mobile application team for development and implementation of associate API requests.

- 7) Solve complex performance problems and architectural challenges
- 8) Integration of data storage solutions may include databases, key-value stores, blob stores, etc.
- 9) Create unit testcases and execute them on development completion of any module/requirement. Perform deployments using standard deployment procedures.
- 10) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
- 11) Coordination with team members and project manager on new modules development and enhancements.
- 12) Use code repositories and branches for code backup and versioning.
- 13) Keep the project management tool updated so that a clear picture on work progress is always available for managerial review.
- 14) Keep the development related communication streamlines on project management tool for future reference and record.
- 15) Perform deployments using standard deployment procedures.
- 16) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

# **Terms of Reference for Process Engineer (DevOps)**

## **1. BACKGROUND INFORMATION**

### **1.3. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

### **1.4. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. DevOps engineer will ensure a smooth deployment process along with hardening the Linux environment with up to date security patching and upgrades. DevOps engineer will help in installation of software patches and server configuration for optimal performance. Assist in existing data migration from PITB Data Center.

### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the DevOps Engineer are as follows:

- i. Strong proficiency in LAMP (Linux, Apache, MySQL and PHP) environment
- ii. Experience is web and email server configurations and setup.
- iii. Experience maintaining and deploying highly-available, fault-tolerant systems at scale.
- iv. Experience in automation script (e.g. scripting via Bash etc.)
- v. Practical experience with Docker containerization and clustering (Kubernetes/ECS)
- vi. Version control system experience (e.g. Git)
- vii. Experience implementing CI/CD (e.g. Jenkins etc.)
- viii. The DevOps Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

#### **Key Deliverables:**

- 1) Deploy and maintain critical applications on multitier architecture.
- 2) Implement automation, effective monitoring, and infrastructure-as-code
- 3) Deploy and maintain CI/CD pipelines across multiple environments
- 4) Support and work alongside a cross-functional engineering team on the latest technologies
- 5) Iterate on best practices to increase the quality & velocity of deployments
- 6) Own the delivery, scalability, and reliability of the backend platform serving hundreds of thousands of concurrent users.
- 7) Writes specifications and documentation for the server-side features
- 8) Analyzes the technology currently in use and develops plans and processes for improvement and expansion. The DevOps engineer provides support for urgent analytical needs.
- 9) Builds, installs, configures, and maintains IT solutions.
- 10) Participates in project planning meetings to share their knowledge of system options, risk, impact, and costs vs. benefits. In addition, communicate operational requirements and development forecasts.
- 11) Tests code, processes, and deployments to identify ways to streamline and minimize errors.
- 12) Uses configuration management software to automatically deploy updates and fixes into the production environment.
- 13) Performs routine application maintenance to ensure the production environment runs smoothly. Develops maintenance requirements and procedures.

14) Any other deliverable based on the task assigned to the DevOps Engineer by the Competent Authority.

## **Terms of Reference for Quality Assurance Engineer**

### **1. BACKGROUND INFORMATION**

#### **1.5. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.6. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Quality Assurance Officer is responsible in various projects, assessing software quality by designing and implementing software testing processes. Will take ownership of code quality through exploratory and automated tests. Hunt bugs, identify issues, report them, and see that they're dealt with. This resource will also assist in existing data and software migration from PITB Data Center including creation of inhouse Data Center.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the QA Engineers are as follows:

- i. Proven work experience in software quality assurance
- ii. Quality inspection, auditing and testing experience
- iii. Experience with implementation of corrective action programs
- iv. Strong computer skills including Microsoft Office, QA applications and databases
- v. Solid experience in effective usage of data analysis tools and statistical analysis
- vi. Strong knowledge of software QA methodologies, tools and processes
- vii. Experience in writing clear, concise and comprehensive test plans and test cases
- viii. Hands-on experience with both white box and black box testing
- ix. Hands-on experience with automated testing tools
- x. Solid knowledge of SQL and scripting
- xi. Experience working in an Agile/Scrum development process
- xii. Experience with performance and/or security testing is a plus
- xiii. Proficiency with scripting languages
- xiv. Strong interpersonal skills to assist non-technical individuals with complex technical issues
- xv. The Quality Assurance Officer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

### **Key Deliverables:**

- 1) Review and analyze requirements, specifications, and technical design documents, providing timely feedback
- 2) Develop detailed, comprehensive, and well-structured test plans and test cases
- 3) Prioritize and plan testing activities
- 4) Play the role of test engineer: Design, develop, and execute automated tests
- 5) Identify and report issues found, then verify that issues are resolved
- 6) Perform regression testing.
- 7) Perform automation testing by creating automation scripts.
- 8) Test releases to minimize user impact and ensure compatibility.
- 9) Collaborate with development team and help them in creating unit testcases.
- 10) Prepare testing plan and related testcases for functional testing.
- 11) Use project management tools to maintain and execute testcases and record results for future reference and for developers to understand the issue cause.
- 12) Perform complete QA cycle from planning to production testing for a specific module/change request/issue.

- 13) Maintain the project management tools and schedule UAT sessions with associated testcases.
- 14) Coordinate with stakeholder during UAT and take signoff for a Go – No Go decision.
- 15) Coordinate with DevOps team for deployment schedule and post deployment testing.
- 16) Any other deliverable based on the task assigned to the Quality Assurance Officer by the Competent Authority.

## **Terms of Reference of Associate for Afternoon Schools**

### **Program Background**

The Government of the Punjab developed the Education Sector Plan in 2019 and for the implementation of this plan, a grant was provided by the Global Partnership for Education (GPE). This grant is being implemented under the 'Transformation in Access, Learning, Equity and Education Management (TALEEM)' Programme with the assistance of UNICEF as Grant Agent. The Taleem Programme will focus on key thematic areas across the education sector. Under the programme, PMIU-PESRP is the project Secretariat and a Taleem Cell is established at PMIU-PESRP to implement the activities. Given the diverse areas of implementation of the programme, a robust Monitoring & Evaluation framework is required to ensure quality of service delivery and to maintain the timelines and enable smooth implementation of the programme. In this regard, an Associate Officer is required to assist the Programme Officer Afternoon Schools Program in planning, executing and subsequent monitoring of activities as per the programme document.

### **TERMS OF REFERENCE**

He/She will work in close coordination with the relevant teams under the Taleem Cell and will report to Programme Officer Afternoon Schools Program. The key activities will be to assist the Programme Officer Afternoon Schools Program in designing the framework for the activity and the subsequent implementation, monitoring and evaluation plans for the successful conduction of tasks related to Afternoon School component. He/She will be working in close coordination with the M&E teams in the field to establish reporting protocols for progress on the Afternoon Schools Programme component. He/She will assist the Programme Officer in developing quarterly budget requests, target reporting lines and field monitoring reports. Additionally, the Associate ASP will carry a strong engagement with district field formations and the Taleem Cell communications team.

### **Scope of functions**

1. Provide assistance to the Programme Officer Afternoon Schools Program in the execution of the component activities prescribed in the Programme Document.

2. Assist in data analyzation to identify the target schools in 14 districts under the program.
3. Prepare a field mobilization plan for the data validation of schools identified.
4. Work in close coordination with M & E team to develop a progress reporting framework for on-ground data collection.
5. Work in close coordination with M & E team to conduct field visits to prescribed schools for the validation of data collected by M & E team.
6. Assist relevant team from QAED in the conduction of trainings planned under the ASP Component.
7. Prepare quarterly budget requests as per the ICE/FACE Documents under UNICEF's HACT Financial Guidelines, as required.
8. Identify roadblocks to execution in a timely manner as per the on-ground situation in light of periodic field visits.
9. Assist the Programme Officer ASP in proactively resolving any identified issues in component execution.
10. Record and maintain any documentation with regards to ASP Component in the Taleem Cell.
11. Work in close coordination with other components to identify and create linkages between programs
12. Assist the communications team in community mobilization to raise awareness of the Taleem Programme.
13. Any other task as required by the lead.

## **Skills**

- ☑ Ability to work in a team, develop synergies and establish effective working relations with various stakeholders.
- ☑ Strong interpersonal and communications skills, resourcefulness, initiative, tact and ability to cope with challenging situations.
- ☑ Written and oral fluency in the English language,
- ☑ Proficient in using MS Office (Word, Excel, & Power Point).

- Proficiency in statistical software packages (SPSS/Stata, etc.) shall be accorded due weightage.

### **Terms of Reference for Manager Development / Software Team Lead**

## **1. BACKGROUND INFORMATION**

### **1.1. Beneficiary Country and Province**

## **Islamic Republic of Pakistan, Punjab Province**

### **1.2. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority

As Manager Development/Software Team lead, manages all the activities of the software development life cycle.

Sets attainable goals to team members in order for the project to be finished on time.

Provides guidance to team members to encourage work productivity and makes sure the timeline is followed by the software development group.

Manages multiple projects at once, ensures appropriate project management procedures and processes are followed when it comes to software development.

Represents the software department in meetin

Ensure proper communication concerning changes in established milestones or challenges that may affect the outcome of a project's completion date.

Participates in design control activities, monitors, evaluates and ensures the completion of tasks and projects as per schedule.

Analyzes software requirements and implements design plans, reviews unit tests, documents software development, monitors status of developing software, writes, reviews and revises product requirements and specifications

Participate in multiple projects by completing and updating project documentation; managing project scope; adjusting schedules when necessary; determining daily priorities; ensuring efficient and on-time delivery of project tasks and milestones; following proper escalation paths; and managing customer and supplier relationships

Participates in other areas of the software development process and provides technical support to other department personnel.

Hold regular meetings with all departments to ensure open communication and expectations throughout a project.

Create and maintain detailed project plan and project schedule for migration of all existing and new software solutions and applications.

Create and maintain list of software requirements, hardware requirements and licensing for all existing and new applications.

Prepare weekly status reports and monthly steering committee reports.

Document all required artifacts for project life cycle i.e. project plan, project schedule, risk management plan, QA plan,

Deployment plan, communication plan and other functional and technical documentation.

Maintain the risk register and risk mitigation steps.

Maintain resource burndown sheet and effective utilization.

Publish meeting notes for departmental meetings and steering committee meetings

Document with HR requirements and their TORs for the IT staff

Any other deliverable based on the task assigned to the Manager Development / Software Team Lead by the Competent Authority.

## **Terms of Reference for Data Analyst**

### **1. BACKGROUND INFORMATION**

#### **1.3. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.4. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Data Analyst are as follows:

- 1) Interpret data, analyze results using statistical techniques and provide ongoing reports
- 2) Develop and implement databases, data collection systems, data analytics and other strategies that optimize statistical efficiency and quality
- 3) Acquire data from primary or secondary data sources and maintain databases/data systems
- 4) Identify, analyze, and interpret trends or patterns in complex data sets

- 5) Filter and “clean” data by reviewing computer reports, printouts, and performance indicators to locate and correct code problems
- 6) Work with management to prioritize business and information needs
- 7) Locate and define new process improvement opportunities

**Key Deliverables:**

- 1) Using automated tools to extract data from primary and secondary sources
- 2) Removing corrupted data and fixing coding errors and related problems
- 3) Developing and maintaining databases, data systems – reorganizing data in a readable format
- 4) Performing analysis to assess quality and meaning of data
- 5) Filter Data by reviewing reports and performance indicators to identify and correct code problems
- 6) Using statistical tools to identify, analyze, and interpret patterns and trends in complex data sets that could be helpful for the diagnosis and prediction
- 7) Assigning numerical value to essential business functions so that business performance can be assessed and compared over periods of time.
- 8) Analyzing local, national, and global trends that impact both the organization and the industry
- 9) Preparing reports for the management stating trends, patterns, and predictions using relevant data
- 10) Working with programmers, engineers, and management heads to identify process improvement opportunities, propose system modifications, and devise data governance strategies.
- 11) Preparing final analysis reports for the stakeholders to understand the data-analysis steps, enabling them to take important decisions based on various facts and trends.

Any other deliverable based on the task assigned to the Data Analyst by the Competent Authority.

**Terms of Reference for System Administrator**

**1. BACKGROUND INFORMATION**

**1.5. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

## **1.6. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

## **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The System Administrator will be responsible for the management of Linux/Virtualization Server infrastructure. You will design and configure Linux systems and will handle all upgrades and security patches to application and OS based on agreed-upon maintenance windows. This resource will assist in existing data and software migration from PITB Data Center including creation of inhouse Data Center.

## **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the System Administrator are as follows:

- i. Hands on application integration, architecture, engineering, and support of the in house and client remote servers and storage systems.
- ii. Experience working within a dynamic R&D environment
- iii. Experience researching, evaluating, and supporting new technologies
- iv. Experience supporting enterprise-class applications and databases
- v. Experience deploying Linux on x86 rack-mount server and blade platforms

- vi. Experience connecting Linux systems to enterprise storage, and understanding of appropriate use cases for SAN and NAS
- vii. Experience connecting Linux systems to TCP/IP networks, configuring, troubleshooting, tuning, etc.
- viii. Excellent Expertise mandatory with server virtualization technologies
- ix. Strong scripting skills with experience in Perl, Python, PHP, Bash, or other scripting languages
- x. Implemented automatic configuration system (Ansible, Puppet, Chef, CFEngine, etc.)
- xi. Strong Linux security skills/experience
- xii. Experience setting up and deploying systems with Red Hat Satellite
- xiii. The System Administrator will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

### **Key Deliverables:**

- 1) Design, implement, and support the computing systems, including both physical and virtual systems, and perform configuration, maintenance, support, and engineering tasks
- 2) 24x7 support of Production appliances and related /associated supporting systems
- 3) Coordinate with Security, Operations/Engineering, and other functional teams to ensure standards are maintained when systems are customized to support SED development efforts
- 4) Production support of new engineering solutions and initiatives.
- 5) Standardization, Optimization, and automation of systems
- 6) Recommend, design, and implement systems management and automation solutions
- 7) Design, configure and tune highly-available Linux systems
- 8) Assist in implementing, executing, maintaining, and documenting proper DR and BC as well as high availability procedures
- 9) Support application development, including determining required patches, packages, permissions, software configuration, etc.
- 10) Perform routine systems admin functions to maintain all Linux /Virtualization servers
- 11) Participate in deployments, upgrades, and maintenance
- 12) Maintain the patch levels of all OS and application patches on all systems using automated systems Profile server resource usage, optimize and tweak as necessary
- 13) Collaborate with other team members and stakeholders
- 14) Create, plan and implement detailed deployment designs
- 15) Deploy new infrastructure and changes with minimum disruption for the end users

- 16) Write and maintain technical implementation documentation on services and infrastructure
- 17) Ensure that new deployments are handed over to the Network Operations Centre with appropriate documentation and training
- 18) Perform Project Management roles for internal technical projects as needed, ensuring work is delivered on-time and to a high quality
- 19) Provide escalation support for deployed infrastructure as needed (Generally only required in working hours, but in exceptional circumstances support may be required out of hours)
- 20) Contribute to the development of new platforms, products and infrastructure in conjunction with the design teams
- 21) Any other deliverable based on the task assigned to the System Administrator by the Competent Authority.

**Terms of Reference for Android Developer**

## **1. BACKGROUND INFORMATION**

### **1.7. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

### **1.8. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/Mobile Application Developer will provide support in existing Android based native applications and also involved in development of new Android applications using Java and Kotlin native kits (NDK). Assist in existing Systems/Applications and Data migration from PITB.

### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

- xvii. Strong knowledge of Android SDK, different versions of Android, and how to deal with different screen sizes
- xviii. Familiarity with RESTful APIs to connect Android applications to back-end services

- xix. Strong knowledge of design patterns like MVVM, MVP and MVC.
- xx. Strong knowledge of frameworks like Dagger and component libraries like Jetpack components, RX Android, RX Java, RX Kotlin
- xxi. Strong knowledge of Android UI design principles, patterns, and best practices
- xxii. Experience with offline storage, threading, and performance tuning
- xxiii. Ability to design applications around natural user interfaces, such as “touch”
- xxiv. Familiarity with cloud message APIs and push notifications
- xxv. Understanding of Google’s Android design principles and interface guidelines
- xxvi. Proficient understanding of code versioning tools, such as Git
- xxvii. Familiarity with continuous integration
- xxviii. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP).

### **Key Deliverables:**

- 1) Translate designs and wireframes into high quality code that can maintain high performance, quality, responsive, reusable, and reliable native code using Java language for Android and associated liberties and frameworks like RX Android, RX Java and RX Kotlin.
- 2) Solve complex performance problems and architectural challenges
- 3) Integration of data storage solutions may include databases, key-value stores, blob stores, etc.
- 4) Perform unit testing and conduct peer code reviews before QA testing.
- 5) Perform deployments using standard deployment procedures.
- 6) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
- 7) Coordination with team members and project manager on new modules development and enhancements.
- 8) Up-gradation, configuration and debugging existing systems
- 9) Revise, update, refactor and debug existing code
- 10) Liaison with back office development team for development and implementation of associate API requests.
- 11) Use code repositories and branches for code backup and versioning.
- 12) Create unit test case and execute them on development completion of any module/requirement.
- 13) Keep the project management tool updated so that a clear picture on work progress is always available for managerial review.
- 14) Keep the development related communication streamlines on project management tool for future reference and record.

15) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

## **Terms of Reference for Software Engineer (.NET)**

### **1. BACKGROUND INFORMATION**

#### **1.9. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.10. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/.Net Developer will provide support in existing web based and desktop applications. Also involved in development of new .Net applications using C# and VB.net MVC. Assist in existing Systems/applications and data migration from PITB.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

- xxix. Proven experience as a .NET Developer or Application Developer
- xxx. Familiarity with the ASP.NET framework, SQL Server and design/architectural patterns (e.g. Model-View-Controller (MVC))
- xxxi. Knowledge of at least one of the .NET languages (e.g. C#, Visual Basic .NET) and HTML5/CSS3
- xxxii. Strong expertise in development of scalable SOAP (XML) or RESTful API services for mobile application integration.
- xxxiii. Strong understanding of object-oriented programming
- xxxiv. Skill for writing reusable libraries
- xxxv. Familiar with various design and architectural patterns
- xxxvi. Knowledge of concurrency patterns
- xxxvii. Understanding of fundamental design principles for building a scalable application
- xxxviii. Experience creating database schemas that represent and support business processes
- xxxix. Basic understanding of Common Language Runtime (CLR), its limitations, weaknesses, and workarounds
- xl. Experience implementing automated testing platforms and unit tests
- xli. Proficient understanding of code versioning tools Git, DevOps etc.
- xlii. Experience with multi-tier architecture and distributed applications.
- xliii. At least worked on 3 large scale applications having large data source and user base, also available for a demonstration.
- xliv. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

#### **Key Deliverables:**

- 17) Write clean, scalable code using .NET programming languages
- 18) Translate application storyboards and use cases into functional applications
- 19) Remain up to date with the terminology, concepts and best practices for coding responsive web applications
- 20) Develop technical interfaces, specifications, and architecture
- 21) Use and adapt existing web applications for application landscape improvement and upgradation.
- 22) Liaison with mobile application team for development and implementation of associate API requests.
- 23) Solve complex performance problems and architectural challenges
- 24) Integration of data storage solutions may include databases, key-value stores, blob stores, etc.
- 25) Create unit test case and execute them on development completion of any module/requirement. Perform deployments using standard deployment procedures.
- 26) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
- 27) Coordination with team members and project manager on new modules development and enhancements.
- 28) Use code repositories and branches for code backup and versioning.
- 29) Keep the project management tool updated so that a clear picture on work progress is always available for managerial review.
- 30) Keep the development related communication streamlines on project management tool for future reference and record.
- 31) Perform deployments using standard deployment procedures.
- 32) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

## **Terms of Reference for Web Developer (Software Engineer - PHP)**

### **1. BACKGROUND INFORMATION**

#### **1.11. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.12. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/Web Developer will provide support in existing PHP/MySQL based web applications and APIs for mobile applications. Also involved in development of new web applications using PHP frameworks like Laravel or any other equivalent. Assist in existing systems/applications and data migration from PITB.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

- xlvi. Strong knowledge of custom PHP/MySQL web application development.
- xlvi. Strong knowledge of PHP web frameworks such as Laravel or equivalent
- xlvi. Strong expertise in development of scalable SOAP (XML) or RESTful API services for mobile application integration.
- xlvi. Understanding the fully synchronous behavior of PHP
- xlvi. Understanding of MVC design patterns
- l. Basic understanding of front-end technologies, such as JavaScript, HTML5, and CSS3
- li. Knowledge of object-oriented PHP programming
- lii. Understanding accessibility and security compliance
- liii. Strong knowledge of the common PHP or web server exploits and their solutions
- liv. Understanding fundamental design principles behind a scalable application
- lv. User authentication and authorization between multiple systems, servers, and environments
- lvi. Integration of multiple data sources and databases into one system
- lvii. Familiarity with limitations of PHP as a platform and its workarounds
- lviii. Creating database schemas that represent and support business processes
- lix. Familiarity with MySQL/SQL/NoSQL databases and their declarative query languages
- lx. Proficient understanding of code versioning tools, such as Git and deployment automation, such as Jenkins.
- lxi. At least worked on 3 large scale web applications having large user/consumer/customer base and available online for a demonstration.
- lxii. Familiarity with multi-tier architecture and distributed applications.
- lxiii. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

**Key Deliverables:**

- 1) Integration of user-facing elements developed by front-end developers
- 2) Build efficient, testable, and reusable PHP modules using custom PHP or PHP frameworks.
- 3) Liaison with mobile application team for development and implementation of associate API requests.
- 4) Solve complex performance problems and architectural challenges
- 5) Integration of data storage solutions may include databases, key-value stores, blob stores, etc.
- 6) Perform unit testing and conduct peer code review before QA testing.
- 7) Perform deployments using standard deployment procedures.
- 8) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
- 9) Coordination with team members and project manager on new modules development and enhancements.
- 10) Providing technical support for web, desktop or mobile applications
- 11) Create unit testcase and execute them on development completion of any module/requirement.
- 12) Use code repositories and branches for code backup and versioning.
- 13) Keep the project management tool updated so that a clear picture on work progress is always available for managerial review.
- 14) Keep the development related communication streamlines on project management tool for future reference and record.
- 15) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

## **Terms of Reference for Frontend Developer**

### **1. BACKGROUND INFORMATION**

#### **1.13. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.14. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School

Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Senior Software Engineer/User Interface Developer will provide support in existing web applications and mobile applications. Also involved in frontend user interface creation of new responsive web applications. Assist in existing systems/applications and data migration from PITB.

### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Senior Software Engineer are as follows:

- lxiv. Proficient understanding of web markup, including HTML5, CSS3
- lxv. Basic understanding of server-side CSS pre-processing platforms, such as LESS and SASS
- lxvi. Proficient understanding of client-side scripting and JavaScript frameworks, including jQuery
- lxvii. Good understanding of advanced JavaScript libraries and frameworks, such as AngularJS, ReactJS etc.
- lxviii. Good understanding of asynchronous request handling, partial page updates, and AJAX
- lxix. Basic knowledge of user interface creation using Photoshop or Coral. Can work with image authoring tools, to be able to crop, resize, or perform small adjustments on an image.
- lxx. Proficient understanding of cross-browser compatibility issues and ways to work around them.

- lxxi. Good understanding of SEO principles and ensuring that application will adhere to them.
- lxxii. Good understanding of responsive design aesthetics on different viewports and should understand well the usage of media queries.
- lxxiii. Proficient understanding of code versioning tools, such as Git.
- lxxiv. At least worked on 3 large scale web applications having large user/consumer/customer base and available online for a demonstration.
- lxxv. The Senior Software Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

**Key Deliverables:**

- 1) Develop reusable and responsive frontend components using UI and JS libraries for creating rich user experience which is optimized for different screen sizes and browsers.
- 2) Collaborate with back-end developers and web designers to improve usability
- 3) Use cutting edge technologies for frontend development and design i.e. React JS or any other headless solution.
- 4) Optimize application for maximum speed and scalability and ensure frontend data validation before back office submission.
- 5) Perform unit testing and conduct peer review before QA testing to ensure the UI implementation is up to the mark.
- 6) Create an understanding with existing applications and perform code revamp to achieve performance benchmarks.
- 7) Coordination with team members and project manager on new modules development and enhancements.
- 8) Revise, update, refactor and debug code
- 9) Use code repositories and branches for code backup and versioning.
- 10) Keep the project management tool updated so that a clear picture on current progress is always available for management review.
- 11) Keep the development related communication streamlines on project management tool for future reference and record.
- 12) Any other deliverable based on the task assigned to the Senior Software Engineer by the Competent Authority.

**Terms of Reference for Process Engineer (DevOps)**

## **1. BACKGROUND INFORMATION**

### **1.15. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

### **1.16. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. DevOps engineer will ensure a smooth deployment process along with hardening the Linux environment with up to date security patching and upgrades. DevOps engineer will help in installation of software patches and server configuration for optimal performance. Assist in existing data migration from PITB Data Center.

### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the DevOps Engineer are as follows:

- lxxvi. Strong proficiency in LAMP (Linux, Apache, MySQL and PHP) environment
- lxxvii. Experience is web and email server configurations and setup.
- lxxviii. Experience maintaining and deploying highly-available, fault-tolerant systems at scale.
- lxxix. Experience in automation script (e.g. scripting via Bash etc.)
- lxxx. Practical experience with Docker containerization and clustering (Kubernetes/ECS)
- lxxxii. Version control system experience (e.g. Git)
- lxxxiii. Experience implementing CI/CD (e.g. Jenkins etc.)
- lxxxiii. The DevOps Engineer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

### **Key Deliverables:**

- 15) Deploy and maintain critical applications on multitier architecture.
- 16) Implement automation, effective monitoring, and infrastructure-as-code
- 17) Deploy and maintain CI/CD pipelines across multiple environments
- 18) Support and work alongside a cross-functional engineering team on the latest technologies
- 19) Iterate on best practices to increase the quality & velocity of deployments
- 20) Own the delivery, scalability, and reliability of the backend platform serving hundreds of thousands of concurrent users.
- 21) Writes specifications and documentation for the server-side features
- 22) Analyzes the technology currently in use and develops plans and processes for improvement and expansion. The DevOps engineer provides support for urgent analytical needs.
- 23) Builds, installs, configures, and maintains IT solutions.
- 24) Participates in project planning meetings to share their knowledge of system options, risk, impact, and costs vs. benefits. In addition, communicate operational requirements and development forecasts.
- 25) Tests code, processes, and deployments to identify ways to streamline and minimize errors.
- 26) Uses configuration management software to automatically deploy updates and fixes into the production environment.
- 27) Performs routine application maintenance to ensure the production environment runs smoothly. Develops maintenance requirements and procedures.
- 28) Any other deliverable based on the task assigned to the DevOps Engineer by the Competent Authority.

## **Terms of Reference for Quality Assurance Engineer**

### **1. BACKGROUND INFORMATION**

#### **1.17. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

#### **1.18. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

#### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Quality Assurance Officer is responsible in various projects, assessing software quality by designing and implementing software testing processes. Will take ownership of code quality through exploratory and automated tests. Hunt bugs, identify issues, report them, and see that they're dealt with. This resource will also assist in existing data and software migration from PITB Data Center including creation of inhouse Data Center.

## **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the QA Engineers are as follows:

- lxxxiv. Proven work experience in software quality assurance
- lxxxv. Quality inspection, auditing and testing experience
- lxxxvi. Experience with implementation of corrective action programs
- lxxxvii. Strong computer skills including Microsoft Office, QA applications and databases
- lxxxviii. Solid experience in effective usage of data analysis tools and statistical analysis
- lxxxix. Strong knowledge of software QA methodologies, tools and processes
- xc. Experience in writing clear, concise and comprehensive test plans and test cases
- xc. Hands-on experience with both white box and black box testing
- xcii. Hands-on experience with automated testing tools
- xciii. Solid knowledge of SQL and scripting
- xciv. Experience working in an Agile/Scrum development process
- xcv. Experience with performance and/or security testing is a plus
- xcvi. Proficiency with scripting languages
- xcvii. Strong interpersonal skills to assist non-technical individuals with complex technical issues
- xcviii. The Quality Assurance Officer will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

### **Key Deliverables:**

- 17) Review and analyze requirements, specifications, and technical design documents, providing timely feedback
- 18) Develop detailed, comprehensive, and well-structured test plans and test cases
- 19) Prioritize and plan testing activities
- 20) Play the role of test engineer: Design, develop, and execute automated tests
- 21) Identify and report issues found, then verify that issues are resolved
- 22) Perform regression testing.
- 23) Perform automation testing by creating automation scripts.
- 24) Test releases to minimize user impact and ensure compatibility.
- 25) Collaborate with development team and help them in creating unit testcases.
- 26) Prepare testing plan and related testcases for functional testing.
- 27) Use project management tools to maintain and execute testcases and record results for future reference and for developers to understand the issue cause.

- 28) Perform complete QA cycle from planning to production testing for a specific module/change request/issue.
- 29) Maintain the project management tools and schedule UAT sessions with associated testcases.
- 30) Coordinate with stakeholder during UAT and take signoff for a Go – No Go decision.
- 31) Coordinate with DevOps team for deployment schedule and post deployment testing.
- 32) Any other deliverable based on the task assigned to the Quality Assurance Officer by the Competent Authority.

### **Terms of Reference for Support Technician**

## **1. BACKGROUND INFORMATION**

### **1.19. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

### **1.20. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme (PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Support Technician is responsible for maintaining computer networks and solving any problems that may occur with them. This resource will also assist in existing data and software migration from PITB Data Center including creation of inhouse Data Center.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Support Technician are as follows:

- xcix. Ability to conduct network engineering and network operations with network performance analysis skills
- c. Hands-on technical troubleshooting capabilities
- ci. Knowledge of computing infrastructures
- cii. Logging and record keeping experience for employee queries
- ciii. Ability to work independently under minimal supervision
- civ. Should carry the ability to Test and fix faulty equipment
- cv. Familiarity with server management and monitoring tools
- cvi. Proficiency with scripting languages
- cvii. Strong interpersonal skills to assist non-technical individuals with complex technical issues
- cviii. The Support Technician will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

#### **1.5 Key Deliverables:**

- 33) Installing and configuring computer networks and systems
- 34) Identifying and solving any problems that arise with computer networks and systems
- 35) Talk with staff or end users through a series of actions, either face-to-face or over the phone, to help set up systems or resolve issues pertinent to PMIU / PESRP data and systems
- 36) Consulting with user to specify system requirements and design solutions
- 37) Assembling new systems
- 38) Support the roll-out of new applications
- 39) Maintaining existing software and hardware and upgrading any that have become obsolete without tempering the warranty
- 40) Monitoring computer networks and systems to identify how performance can be improved
- 41) Providing network administration and support with variety of operating systems.

- 42) Maintain network connectivity of all computer workstations.
- 43) Maintain servers and associated hardware, applications, services, and settings.
- 44) Follow diagrams and written instructions to repair a fault or set up a system.
- 45) Monitor computer systems and network to ensure optimal performance.
- 46) Test release of products to minimize user impact and ensure compatibility and also setup new users' account and profiles and deal with the password issues
- 47) Any other deliverable based on the task assigned to the Support Technician by the Competent Authority.
- 48) Prioritize and manage more than one open cases at one time
- 49) respond within agreed time limits to call-outs
- 50) conduct electrical safety checks on computer equipment
- 51) work continuously on a task until completion

### **Terms of Reference for Call Center Officers**

## **1. BACKGROUND INFORMATION**

### **1.21. Beneficiary Country and Province**

**Islamic Republic of Pakistan, Punjab Province**

### **1.22. Contracting Authority**

Under the TALEEM Programme and in agreement with Global Partnership for Education (GPE), the Programme Monitoring and Implementation Unit (PMIU), School Education Department (SED), Government of the Punjab is the contracting authority.

### **1.3 Objective**

One of the core objective of the PMIU is to provide leading research and analytical services and value-added information, studies, and solutions to the School Education Department (SED) in Punjab and other users such as donor/grant organizations, NGOs etc. in a manner that broadens and strengthens the knowledge base on school education in Punjab and maximizes the effectiveness of the Punjab Education Sector Reform Programme

(PESRP).

The position is created as part of the Software Migration and Data Centre creation that is to be developed by PMIU/SED. The Call Center Officer is responsible to liaison between SED and its current and potential users. The successful candidate will be able to accept ownership for effectively solving users issues, complaints and inquiries; keeping user satisfaction at the core of every decision and behavior.

#### **1.4 Scope of work:**

The key tasks and responsibilities to be accomplished by the Call Center Agent are as follows:

- cix. Previous experience in a customer support role
- cx. Track record of over-achieving quota
- cxii. Strong phone and verbal communication skills along with active listening
- cxiii. Familiarity with CRM systems and practices
- cxiiii. Customer focus and adaptability to different personality types
- cxv. Ability to multi-task, set priorities and manage time effectively
- cxvi. The Call Center Agent will be responsible to perform any other tasks assigned and entrusted by the PD-PMIU (PESRP)

#### **Key Deliverables:**

- 1) Manage large amounts of inbound and outbound calls in a timely manner
- 2) Follow communication “scripts” when handling different topics
- 3) Identify users’ needs, clarify information, research every issue and provide solutions and/or alternatives
- 4) Build sustainable relationships and engage user by taking the extra mile
- 5) Keep records of all conversations in our call center database in a comprehensible way
- 6) Frequently attend educational seminars to improve knowledge and performance level
- 7) Meet personal/team qualitative and quantitative targets
- 8) Maintains a very good Average Handle Time (AHT) as per the SLA. The call length from start to finish, including hold and talk time the agent adheres to the SED/PMIU

of the policy, attends the call in polite manner and solve the problem professionally and respectfully.

- 9) Handles the pressure calls (disgruntled caller) and is able to exhibit his good understanding and knowledge about the issue.
- 10) Exhibit Effective Communication Skills. The nature of the work demands good communication skills.
- 11) Has the ability to retain knowledge, information and recall. Agents need a good memory in the fast pace of a call center environment.
- 12) Must be resourceful and creative in solving problems
- 13) Must have emotional stability and consistency
- 14) Should be available and attentive as per the duty roaster.
- 15) Any other deliverable based on the task assigned to the Call Center Agent by the Competent Authority.