Prometheus Certified Associate (PCA)

Course outline –

Observability Concepts
- Metrics
- Understand logs and events
- Tracing and Spans
- Push vs Pull
- Service Discovery
- Basics of SLOs, SLAs, and SLIs

Prometheus Fundamentals
- System Architecture
- Configuration and Scraping
- Understanding Prometheus Limitations
- Data Model and Labels
- Exposition Format

PromQL
- Selecting Data
- Rates and Derivatives
- Aggregating over time
- Aggregating over dimensions
- Binary operators
- Histograms
- Timestamp Metrics

Instrumentation and Exporters
- Client Libraries
- Instrumentation
- Exporters
- Structuring and naming metrics

Alerting & Dashboarding
- Dashboarding basics
- Configuring Alerting rules
- Understand and Use Alertmanager
- Alerting basics (when, what, and why)