EXIN EPI Certified Data Centre Professional (CDCP®)

Day 1: Introduction and Data Centre Standards

Morning Session:
- Introduction to Data Centres:
  - Importance of data centres in modern enterprises.
  - Common causes of downtime and their impact on business operations.

Afternoon Session:
- Data Centre Standards and Best Practices:
  - Overview of industry standards such as ANSI/TIA-942 and ISO requirements.
  - Understanding data centre tier classifications and their implications on design and operations.

Day 2: Site Selection and Infrastructure

Morning Session:
- Data Centre Location, Building, and Construction:
  - Criteria for selecting an optimal site for mission-critical data centres.
  - Building requirements and design considerations to ensure high availability.

Afternoon Session:
- Raised Floor and Suspended Ceiling:
  - Types, standards, and best practices for raised floors and suspended ceilings.
  - Importance of proper grounding and bonding to minimize electrical noise.
- Lighting in Data Centres:
  - Recommended lighting levels for various areas within the data centre.
  - Emergency lighting considerations to ensure safety during power outages.

Day 3: Power and Cooling Systems

Morning Session:
- Power Infrastructure:
  - Components of power distribution from utility feeds to rack-level distribution.
  - Understanding redundancy levels (N, N+1, 2N) and their importance.
  - Overview of Uninterruptible Power Supply (UPS) systems and battery technologies.

Afternoon Session:
- Cooling Infrastructure:
  - Trends in heat loads and their impact on cooling requirements.
  - Various cooling technologies, including precision cooling and liquid cooling solutions.
  - High-density cooling techniques such as cold aisle/hot aisle containment.

Day 4: Network Design and Fire Protection

Morning Session:
- Designing a Scalable Network Infrastructure:
  - Best practices for structured cabling systems to support scalability.
  - Planning for network redundancy to prevent single points of failure.
  - Importance of proper testing and verification of network installations.

Afternoon Session:
- Fire Protection:
  - Fire detection systems and their appropriate deployment within the data centre.
  - Overview of fire suppression systems, including gas-based and water-based solutions.
  - Understanding fire safety standards relevant to data centre environments.

Day 5: Security, Operations, and Examination

Morning Session:
- Physical Security and Safety:
  - Implementing access control measures to safeguard data centre assets.
  - Establishing safety protocols to protect personnel and equipment.
- Auxiliary Systems:
  - Importance of monitoring systems such as Environmental Monitoring Systems (EMS) and Building Management Systems (BMS).
  - Setting up effective notification methods for prompt incident response.

Afternoon Session:
- Operational Considerations:
  - Service level management to meet business requirements.
  - Developing maintenance practices to ensure optimal performance and longevity of data centre components.
- Examination Preparation:
  - Review of key topics covered during the course.
  - Practice questions and discussions to prepare for the certification exam.