

1. What is BI?

BI - Business Intelligence

BI is a technology-driven process for analyzing data and presenting actionable information to help executives managers and other corporate end-users make informed business decisions

BI encompasses a variety of tools, applications and methodologies that enable Organizations to collect data from internal and external sources, prepare it for analysis develop and run queries against the data and create reports, dashboards and data visualization

The key aspects of BI include:

i) Data mining: Extracting patterns and knowledge from large set of data.

ii) Data warehousing: Aggregating data from different sources into a central responsibility

iii) Reporting: Generating structured reports for Business Analysis

iv) Performance metrics and Benchmarking:

Comparing current performance data to historical data to track performance against

v) Descriptive Analytics: using historical data to understand changes over time in business operation

vi) Querying: Asking specific questions about the data and getting answers in the form of reports

vii) Data Visualization: presenting data in graphics form (charts, graphs, dashboard) for the easier understanding and Analysis

d. What is Data warehouse?

A Datawarehouse is centralized repository that stores integrated data from multiple sources designed to support business intelligence (BI) activities including querying, reporting, and



data Analysis. It Consolidates data from different systems enabling Comprehensive Analysis and Informed decisions - making

### Advantages:

#### i) Improved Data quality and Consistency:

- \* Data from Different Sources is Cleaned, transformed and Standardized
- \* Ensures uniformity and accuracy across the Organization

#### ii) Enhanced Business Intelligence:

- \* Facilitates complex queries and data Analysis
- \* Supports advanced Analytics and data mining providing insights for better decision making

#### iii) Historical data Analysis:

- \* Stores Large volumes of historical data
- \* Allows trend Analysis and long term business forecasting

#### iv) Performance and efficiency:-

Optimized for read heavy Operations and complex Queries.

#### v) Centralized data access:

- \* Provides a Single Source of truth for Organizational data
- \* Easy access data for various depts and Stakeholders

#### vi) Scalability:-

- \* can handle growing volumes of data as the Organizational expands.

#### vii) Enhanced Data Security:-

- \* Centralized management simplifies implementing security measures
- \* Controls access to sensitive data and ensures compliance with regulations