Data Analytics Question Bank

UNIT -I

Short questions

1. What are the different types of Data Analysis
2. What is Data Warehouse
3. Define Data lakes
4. Define Key value stores
5. What are the steps in ETL process
6. Write a short note on Descriptive Analytics
7. Write a short note on Predictive Analytics
8. What are the components of modern data Eco system
9. Write a short note on Trifacta Wrangler
10. What are the types of file formats in data Eco System

Long Questions

1. Explain different types of data Analysis
2. Explain different Components of Modern data Eco System
3. Explain the Role of Data Analyst with a neat Diagram
4. Explain the Role of Data Engineer with a neat Diagram
5. Explain the Role of Data Scientist with a neat Diagram
6. Explain the Role of Business Intelligence Analyst with a neat Diagram
7. What are the different types of data structures in Data Ecosystem
8. What are the different types of file formats in Data Ecosystem
9. Explain about Data Professional Languages
10. Explain about various data repositories

UNIT-II

Short questions

1. Write a short note on histograms with example
2. Write a short note on Scatter plot with example
3. Write a short note on Heat Map with example
4. Write a short note on Normal distribution with a example
5. Write different types of Code profiling
6. Write a short note on Max() and Min() functions with example
7. How to sort the data in R programming
8. Describe Reshaping data with example
9. Explain Lattice function with example
10. Which function to read the Excel file with an example

Long Questions

1. Write advantages of Visualization in R programming
2. Explain about Histogram , Bar/Line Chart, Box plot with one example
3. Explain about Heat Map with one example
4. Explain Normal distribution with an example
5. Explain Uniform distribution with an example
6. Describe Code profiling
7. Explain different functions used in R Statistics
8. Explain how to analyse the data with a example
9. Explain Visualization with a example
10. Explain how to read data from R with an example

UNIT-III

Short questions

1. Write the procedure to install SQLAlchemy for database interaction
2. What is the command used for closing the SQL Connection
3. Write a short note on NumPy
4. Write a short note on Pandas
5. Write a short note on Matplotlib
6. Write a short note on Seaborn
7. Write a short note on Beautiful Soup
8. Write a short note on Descriptive Statistics
9. What are Type I and Type II Errors
10. What is Hypothesis testing

Long Questions

1. Write the procedure to establish the database connection by using SQLAlchemy
2. What are the different steps in Exploratory Data Analysis
3. Explain how Maths is used for Data Science
4. Explain about Inferential Statistics
5. Explain about Hypothesis testing
6. Create sample database schema with an example
7. How to query data using SQL
8. Explain Univariate Analysis by using histograms ,bar charts
9. Explain Univariate Analysis by using correlation matrices
10. How to formulate Hypothesis

UNIT - IV

Short questions

1. What is data wrangling
2. What are the steps in data wrangling
3. What are the different data wrangling types
4. What is Individual values profiling
5. What is set based profiling
6. How Unions are used in Enriching data
7. How Joins are used in Enriching data
8. Write a short notes on Missing /NULL values
9. Write about different data wrangling tools
10. Write a short notes on Feature Engineering

Long Questions

1. Explain about structuring in data wrangling
2. Explain about Enriching in data wrangling
3. Explain Cleansing in data wrangling
4. Explain about Raw data Stage in Data Wrangling
5. Explain about Refine Data Stage in Data Wrangling
6. Explain about Refine Data Stage in Data Wrangling
7. Explain about Production data Stage in Data Wrangling
8. How to use Transformations to clean data
9. Describe how to address Invalid Values in data wrangling
10. Advantages and Disadvantages of Data Wrangling

UNIT -V

Short questions

1. Write a short note on tableau.
2. Write a short note on tab py
3. How to create Constant set in tableau
4. How to create Dynamic set in tableau
5. How to create Dynamic set in tableau
6. What are tableau data formats
7. How to modify data source
8. How to save data source
9. How to edit data source
10. Write a short note on data base joins in tableau

Long Questions

1. How to do analysis and generate reports in tableau?
2. Tableau Product Overview
3. How to work with CSV file in tableau?
4. How to work with excel file in tableau?
5. How to connect to a database in tableau?
6. How to Generate Live charts in Tableau
7. How to work with the data in Tableau
8. How to connect Tableau to Python
9. How to save data source in Tableau
10. How to create Bar chart in Tableau