Unit 1

Q1 .Write short note on: Operational support system.

Q2. Explain Data Warehouse Architecture in detail

Q3. Differentiate Data Warehouse vs. Data Mart

Q4.Differentiate top-down and bottom-up approaches for building data warehouses. Discuss the merits and limitations of each approach.

Q5. What is meant by Metadata in the context of a Data warehouse? Explain the different types of metadata stored in a data warehouse. Illustrate with a suitable example.

Q6. What is metadata?Why do we need metadata when search engines like google seem so effective?

Q7 Explain the steps in dimensional modeling and its advantages of dimensional modeling

Q8. Explain with examples Factless Fact Table and Fact constellation.

Q9. In real-world data, tuples with missing values for some attributes are a common occurrence. Describe various methods for handling this problem

Q10. Describe the process of Extraction, Transformation and Loading (ETL)with a neat and labeled diagram.

Q11. Discuss various OLAP models and their architecture.

Q12. Describe about the following OLAP operations on a cube:

   i) Rollup ii) Drill down iii) Slice iv) Dice v) Pivot.

Q13. **All Design Star Schema case study problems**

Unit 2

Q1. Describe the steps involved in knowledge Discovery in Databases (KDD)

Q2. Explain types of attributes with example

Q3 In real-world data, tuples with missing values for some attributes are a common occurrence. Describe various methods for handling this problem .

Q4. Explain different normalization techniques such as min-max normalization, z-score and decimal scaling with example

Q5. Discuss different steps involved in data preprocessing.

Q6. Numerical on-   i) Binning Method   ii) 5 steps summary(mean, mode, medium, boxplot, histogram)

Q7 short notes on Data visualization techniques

Q6 Explain data discretization and concept hierarchy generation