Q.1  a. Briefly compare ‘Enterprise warehouse’, ‘data mart’ and ‘virtual warehouse’.

b. Explain how the system development life cycle for the data warehouse is exactly opposite to the classical SDLC.

c. What are the different ways in which technology can support efficient index access?

d. Write an algorithmic path to calculate the row/ space occupied by a data warehouse.

e. Is the data in data warehouse homogenous or heterogeneous? Illustrate with an example.

f. When is design review performed? Who should be in a design review?

g. Explain the terms Business Metadata & Technical Metadata.  

Q.2  a. “A data warehouse is a subject-oriented, integrated, time-variant and non-volatile collection of data to support of management’s decision-making process.” Discuss critically.

b. How is data structured in a Data Warehouse? Explain?

c. What is Granularity? What are its benefits related to a Data Warehouse?

Q.3  a. Explain how process model and data model can apply to the architecture environment? Why Process model is not suitable for data warehouse.

b. Explain in detail all the three data warehouse data models.

Q.4  a. Discuss star join with an example. Creating a star join for the data warehouse is a mistake. Comment.
b. Explain Multidimensional DBMS. Discuss the ways of implementing it by providing its strength and weaknesses. How is Multidimensional DBMS different from warehouse? (10)

Q.5  

a. Building the warehouse on multiple levels is easiest scenario to manage with fewest risks. Explain.  

(8)

b. Discuss “Design review” and “Event Mapping”.  

(10)

Q.6  

a. Discuss three different types of distributed data warehouse. Explain local and global data warehouses.  

(10)

b. What is EIS? Explain it with the help of an example.  

(8)

Q.7  

Write short notes on any THREE of the following:

(i) ERP-oriented Corporate Data Warehouse  
(ii) Data Warehouse Physical Data Model  
(iii) Cyclicity of Data  
(iv) Drill Down Analysis  

(6+6+6)