

Sample Question Paper
Scheme – I

Programme Name: Computer/Information Technology Engineering

Programme code: CO/IF

Semester: VI

Course Title: Data Warehousing with Mining Techniques

Marks :70

22621

Time:3Hrs.

Instructions:

- (1) All questions are compulsory.
- (2) Illustrate your answers with neat sketches wherever necessary.
- (3) Figures to the right indicate full marks.
- (4) Assume suitable data if necessary.
- (5) Preferably, write the answers in sequential order.

Q.1) Attempt any FIVE of the following.

(10 Marks)

- a) Define Data warehouse how it is different from a database.
- b) Define the term Data cleaning with example.
- c) List different Data cube computation methods.
- d) Define the term Data mining.
- e) State Application of cluster analysis.
- f) List Application of OLAP
- g) Define OLAP Data cube.

Q.2) Attempt any THREE of the following.

(12 Marks)

- a) Explain three tier architecture of data warehousing.
- b) List basic operations of OLAP describe any one .
- c) Define the term 1)OLAP 2)ROLAP 3)MOLAP 4)HOLAP
- d) Describe any four Challenges of Data mining.

Q.3) Attempt any THREE of the following.

(12 Marks)

- a) Compare OLAP and OLTP Systems.
- b) Explain Data Cleaning Process
- c) Explain Market basket analysis
- d) Explain Bitmap index in OLAP.

Q.4) Attempt any THREE of the following.

(12 Marks)

- a) Differentiate between operational database system and data warehouse.
- b) Draw star schema of a data warehouse for sales considering Fact table Sales and dimensional tables as Time, Item, Branch and Location.
- c) Describe the need of data preprocessing.
- d) Describe features of OLAP.
- e) Describe Extraction, Transformation and Loading in data warehousing

Q.5) Attempt any TWO of the following. (12 Marks)

- a) Explain multidimensional Data model? How it is used in data warehouse
- b) Explain top down and bottom up design approach of data warehouse.
- c) List clustering Methods explain any two.

Q.6) Attempt any TWO of the following. (12 Marks)

- a) Explain Data preprocessing technique in data mining.
- b) Explain Apriori algorithms for frequent itemset using candidate generation.
- c) Explain steps involved in KDD process with diagram.