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 **Time:3Hrs.**

22621

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 datawarhousing

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.

Sample Test Paper I

MSBTE Outcome based Curriculum
Scheme – I

Programme Name: Computer Engineering/Information Technology

Programme Code: CO/IF

22621

Semester: Sixth

Course: Data Warehousing with Mining Techniques

Marks : 20 **Time:1 hour**

Instructions: All questions are compulsory

h) Illustrate your answers with neat sketches wherever necessary
i) Figures to the right indicate full marks
j) Assume suitable data if necessary
k) Preferably, write the answers in sequential order

Q1. Attempt Any FOUR **(08 Marks)**

a) Define Metadata repository.

b) Define OLAP data cube.

c) List different views to design a data warehouse

d) Describe types of OLAP servers.

e) Describe Data warehouse models

f) State basic operations of OLAP

Q2. Attempt any THREE **(12 Marks)**

e) Differentiate between star and snowflakes schema

f) Explain ROLAP and MOLAP

g) Explain Architecture for online analytical mining.

h) Explain benefits of Data warehousing.

Sample Test Paper II

MSBTE Outcome based Curriculum
Scheme – I

Programme Name: ComputerEngineering/Information Technology

Programme Code: CO/IF

22621

Semester: Sixth

Course: Data Warehousing and mining(22621)

Marks: 20 **Time:1 hour**

Instructions: All questions are compulsory

e) Illustrate your answers with neat sketches wherever necessary
f) Figures to the right indicate full marks
g) Assume suitable data if necessary
h) Preferably, write the answers in sequential order.

Q1. Attempt Any FOUR **(08 Marks)**

a) Describe characteristics of star schema.

b) Define Data mining and Data cleaning.

c) List methods of data preprocessing.

d) Define cluster Analysis.

e) Describe Association rule of data mining.

f) List applications of clustering.

Q2. Attempt any THREE **(12 Marks)**

a) Explain market basket analysis with example

b) Explain need of data preprocessing.

c) Explain join index in OLAP

d) Describe the requirement of clustering in data mining