Total No. of Questions: Total No. of Pages:

Roll No. _____

MBA IV Sem(Main) Exam
BUSINESS ANALYTICS
M-460 Data Mining for Business Decisions
4M1455

Time: 3 Hours   **Maximum Marks: 70**

Instructions to Candidates:
1) The question paper is divided in three parts.
2) Part A contains 10 questions which are compulsory . Part B contains eight questions out of which five are to be attempted. Part C contains one question which is compulsory.

Part A(Word limit 25 only)

All questions are compulsory

Q.1 Briefly explain Dimensional Modeling in Data Warehouse.

Q.2 Define Knowledge Discovery.

Q.3 What is the main difference between data analysis and data analytics?

Q.4 What is the difference between Predictive and descriptive analytics?

Q.5 What are the major differences between classification and clustering process.

Q.6 Define data Classification.

Q.7 What do you understand by Data Preprocessing?

Q.8 Compare Soft computing vs. Hard computing,

Q.9 What is Model-Based Clustering?

Q.10 What do you understand by Supervised and unsupervised learning?

10 x 2 = 20

Part B
Attempt any five questions

Q.1 Explain Data Warehouse architecture. Summarize all the differences between OLTP and OLAP systems.

Q.2 Explain data mining as a step in the process of knowledge discovery and briefly discuss about data integration & data transformation process.

Q.3 Explain following terms in details with examples.
(a) Descriptive Analytics (b) Predictive Analytics (c) Prescriptive Analytics

Q.4.Explain Decision tree modeling in detail by taking suitable example.

Q.5 How does Frequent Item set Mining can help in process of Market Basket Analysis? Explain by taking example of FP Growth algorithm.

Q.6 Why Clustering is important process in Data Analysis? Discuss Partitioning and Hierarchical Clustering Methods.

Q.7 Explain when to use regression over classification. Compare Linear Regression with nonlinear regression.

Q.8 What is Soft Computing? Explain Neural Network and Genetic algorithms and their utility in Data mining

5 x 6 =30

Part C
Compulsory

Q.1 Explain Association rule mining in detail? Find out the association rules using Apriori algorithm for the following transactions. Assume that the minimum support required is 40%

Transaction id	Items
t1	{1, 3, 4}
t2	{2, 3, 5}
t3	{1, 2, 3, 5}
t4	{2, 5}
t5	{1, 2, 3, 5}