

## Paper / Subject Code: 88703 / Business Intelligence

TIME: 2½ Hours

Total Marks: 75

- N. B.: (1) **All** questions are **compulsory**.  
 (2) Make **suitable assumptions** wherever necessary and **state the assumptions** made.  
 (3) Answers to the **same question** must be **written together**.  
 (4) Numbers to the **right** indicate **marks**.  
 (5) Draw **neat labeled diagrams** wherever **necessary**.  
 (6) Use of **Non-programmable** calculators is **allowed**.

1. Attempt **any three** of the following: 15

- Define business intelligence? Explain architecture of the business intelligence.
- What is decision support system (DSS)? What are the factors that affect the degree of success of a DSS.
- Describe the phases in the development of a decision support systems (DSS).
- Enumerate approaches to the decision-making process.
- Explain main components of the main components of a business intelligence system
- What is system? Write the role of a closed cycle marketing system with feedback effects

2. Attempt **any three** of the following: 15

- Explain the concept of mathematical models according to their characteristics, probabilistic nature, temporal dimension.
- Describe different applications of Data Mining.
- Compare incomplete, noisy, or inconsistent data.
- Enumerate basic data mining tasks in details.
- Explain data cleansing? Why is data cleansing important for data mining?
- Differentiate between supervised and unsupervised learning.

3. Attempt **any three** of the following: 15

- Explain Taxonomy of classification model.
- Explain the concept of k-means algorithm for Clustering.
- Describe in details support vector machines
- Write about different Taxonomies of clustering methods.
- Differentiate between Partitioning method and Hierarchical method.
- Explain the concept of agglomerative and divisive hierarchical methods.

4. Attempt any three of the following:

15

- a. What is relational marketing? Write motivations & objectives of relational marketing.
- b. Explain types of data feeding a data mart of relational marketing analysis.
- c. Describe the term Market Basket Analysis.
- d. Describe in details optimization models for logistics planning.
- e. What is supply Chain optimization? Explain in brief.
- f. What is the role of cross efficiency analysis and virtual input and virtual output in identification of good operating practices?

5. Attempt any three of the following:

15

- a. Describe how AI and intelligent agents support knowledge management. Relate XML to knowledge management and knowledge portals.
- b. Define 1. Data 2. Information 3. Knowledge
- c. Describe knowledge management activities in details.
- d. Describe in details the Process and Practice Approaches to Knowledge Management
- e. Compare and contrast between Artificial Intelligence versus Natural Intelligence
- f. Write different areas of expert systems.

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