BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII Computer Science & Engineering AI & ML : WINTER : 2024
SUBJECT: BUSINESS INTELLIGENCE & ANALYTICS

Day : Monday
Date : 09/12/2024

W-23989-2024

Time : 02:30 PM-05:30 PM
Max. Marks : 60

N.B :

1) All questions are **COMPULSORY.**
2) Figures to the right indicate **FULL** marks.
3) Use of non-programmable **CALCULATOR** is allowed.
4) Draw neat and labeled diagram **WHEREVER** necessary.
5) Assume suitable data if necessary.

Q.1 Explain the role of decision support system with its main components? **(10)**

OR

Q.1 What are the different factors responsible for successful BI projects, briefly explain? **(10)**

Q.2 What are the impacts of the Web on the phases of decision making? **(10)**

OR

Q.2 What is meant by problem decomposition? Why is establishing problem ownership so important in the decision-making process? **(10)**

Q.3 Explain the concept of a neuron and its components. How can we develop a neural network-based system? **(10)**

OR

Q.3 Discuss the steps involved in applying SVMs to a real-world problem. How SVM handles linear and non-linear data. **(10)**

Q.4 Discuss the challenges and limitations associated with sentiment analysis. **(10)**

OR

Q.4 Discuss the role of social media networks in sentiment analysis. How can sentiment analysis be used to understand public opinion and trends on social media platforms? **(10)**

Q.5 Describe the different types of mathematical models used in DSS. Explain the structure and purpose of each model. **(10)**

OR

Q.5 Differentiate between certainty, uncertainty, and risk in decision-making. Discuss the implications of each on model formulation and solution techniques. **(10)**

Q.6 Define automated decision systems (ADS) and their role in modern organizations. Discuss the advantages and limitations of using ADS for decision-making. **(10)**

OR

Q. 6 Describe the typical structure of an expert system. Discuss the components and their interactions within the system. **(10)**

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