

BACHELOR OF TECHNOLOGY (CBCS) (2021-COURSE)
B. Tech. Sem - VII Computer Science & Engineering AI & ML : WINTER: 2025
SUBJECT: BUSINESS INTELLIGENCE & ANALYTICS

Day : Monday
Date : 15/12/2025

W-23989-2025

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** What is Bigdata? Describe the main features of big data in detail. (10)
- OR**
- Q.1** List and explain the main characteristics of Big Data. (10)
- Q.2** List and explain phases of the decision-making process. (10)
- OR**
- Q.2** Describe the classification of Decision Support System with real time application. (10)
- Q.3** What are the stages involved in training a neural network using Backpropagation algorithm? Explain. (10)
- OR**
- Q.3** Explain the Black Box of ANN with Sensitivity.? (10)
- Q.4** How to Fine-Tune BERT for Sentiment Analysis with Hugging Face Transformers. (10)
- OR**
- Q.4** How does the application of artificial intelligence and Big Data Analytics improve publication sentiment analysis and bibliometric research? (10)
- Q.5** Identify in what way the data can benefit the organization with special reference to any company. (10)
- OR**
- Q.5** What are the risks that happen when making any decision on mathematical models? (10)
- Q.6** What is a characteristic of a system classified as an Expert System in AI? (10)
- OR**
- Q. 6** Why a production system model was used to implement the first rule-based expert systems? (10)

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