# B.M.S. College of Engineering, Bengaluru-560019

### Autonomous Institute Affiliated to VTU

### February / March 2023 Semester End Main Examinations

Programme: B.E.                                                       Semester: V
Branch: Artificial Intelligence and Machine Learning        Duration: 3 hrs.
Course Code: 22AM5PEABI                                        Max Marks: 100
Course:  AI In Business Intelligence                            Date: 07.03.2023

Instructions: 1. Answer any FIVE full questions, choosing one full question from each unit.
            2. Missing data, if any, may be suitably assumed.

## UNIT - I

| | | | |
|---|---|---|---|
| 1 | a) | Illustrate BI-Architecture in detail. | **8** |
| | b) | Differentiate Transaction Processing Vs Analytical Processing. | **6** |
| | c) | Analyse why descriptive, predictive and perspective based business analytics are necessary. | **6** |

## UNIT - II

| | | | |
|---|---|---|---|
| 2 | a) | What are the components that help in decision making process? | **8** |
| | b) | A data is being collected from a mobile app which keeps track of your health. Design an influence diagram for increase of iron levels in blood based on various eating & drinking habits. | **6** |
| | c) | How do you think intelligence phase helps in decision making process? | **6** |

### OR

| | | | |
|---|---|---|---|
| 3 | a) | Illustrate the role of design and choice phase in decision making process. | **10** |
| | b) | In what way mathematical models help and provide a structure for designing a good decision support system? | **10** |

## UNIT - III

| | | | |
|---|---|---|---|
| 4 | a) | Compare and contrast Hub-and-Spoke Architecture and Centralized Datawarehouse architecture. | **10** |
| | b) | Provide the implementation issues of data warehousing | **10** |

## UNIT - IV

5  a)  Why do you need knowledge management system in an organization?  **6**

   b)  What are the elements of an organizational learning?  **6**

   c)  Illustrate complete knowledge management process  **8**

## OR

6  a)  How does cyclic model of knowledge management functions?  **10**

   b)  Provide the pros and cons of individual decision making and group decision making.  **6**

   c)  Mention various software development tools used in Knowledge management system.  **4**

## UNIT - V

7  a)  Analyze how content-based filtering engine and collaborative filtering functions for a customer who does online shopping.  **6**

   b)  Identify and justify the type of Cloud service models for the given scenario:

   I.  A deployment model is used for Website hosting, where a web server and operating system stack are put on VM's, where a running server snapshot is made (including in memory image) which can be reconstituted in the event of a disaster Test and Development.  **6**

   II.  A deployment model where in the users has control over applications configuration, deployment and management

   III.  A deployment model where complete applications on the cloud is ready for the user to use directly.

   c)  In what way legal, privacy play a major role in an analytics ecosystem. Provide examples.  **8**

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