| b.       | Explain snowflake schema technique with an example. Mention advantages and disadvantages. | its | 10 | 2 | 2 | 3 |
|----------|---|-----|----|---|---|---|
| 28. a.i. | Identify critical success factors of data warehouse environment.                          |     | 6  | 2 | 2 | 3 |
| ii.      | Give the guidelines for building a successful warehouse.                                  |     | 4  | 1 | 2 | 3 |
| b.       | (OR) Explain about meta data management and query management in detail.                   |     | 10 | 1 | 2 | 2 |
| 29. a.i. | Write short note on functionality of data mining.   |     | 5  | 2 | 5 | 4 |
| ii.      | Describe about association rule mining with an example.                                   |     | 5  | 1 | 5 | 4 |
|          | (OR)  |     |    |   |   |   |
| b.       | Write briefly about data mining application.  |     | 10 | 2 | 5 | 5 |
| 30. a.   | Give the case study for EDEKA data warehouse.   |     | 10 | 3 | 6 | 5 |
|          | (OR)  |     |    |   | _ | _ |
| Ъ.       | Brief about the HARBOR data warehouse.  |     | 10 | 3 | 6 | 5 |

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## **B.Tech. DEGREE EXAMINATION, NOVEMBER 2022**

Sixth/ Seventh Semester

## 18CSE487T – DATA WAREHOUSING AND ITS APPLICATIONS

(For the candidates admitted from the academic year 2018-2019 to 2019-2020)

| Note:<br>(i) | Part - A should be answered in OMR si   | heet w | vithin first 40 minutes and OMR she   | et shou        | ld be | han   | ded |
|--------------|---|--------|---|----------------|-------|-------|-----|
| (1)          | over to hall invigilator at the end of 40th n   | ninute |   |                |       |       |     |
| (ii)         | Part - B should be answered in answer bo  | ooklet |   |                |       |       |     |
| Time: 21     | ½ Hours   |        |   | Max.           | Mar   | ks: ´ | 75  |
|              | PART – A (25 × 1 =  | = 25 N | Marks)  | Marks          | BL    | co    | PO  |
|              | Answer ALL Q  |        |   |                |       |       |     |
| 1            | is the process of removing error  |        |   | 1              | 1     | 2     | 3   |
|              | (A) Data extraction   |        |   |                |       |       |     |
|              |   |        | Data mining   |                |       |       |     |
| 2.           | layer is involved in sche<br>accomplished to maintain data and me<br>(A) Process management | etadat | g various task that must be<br>ta in the data warehouse.  Application messaging | e <sup>1</sup> | 1     | 2     | 3   |
|              | (C) Data staging  | (D)    | Data access   | 8              |       |       |     |
| 3.           | In approach, data is extra  | cted   | from the operational systems  | , 1            | 1     | 2     | 3   |
|              | transformed, cleaned and integrated to  |        |   |                |       |       |     |
|              | (A) Centralized   | ` /    | Distributed   |                |       |       |     |
|              | (C) Top down  | (D)    | Bottom up   |                |       |       |     |
| 4.           | architecture is highly scalal nodes.  | ole ar | nd provides fast access between   | 1              | 1     | 2     | 3   |
|              | (A) Massively parallel processing   | (B)    | Cluster   | 5              |       |       |     |
|              | (C) Symmetric multi processing  | ` ′    | Cache coherent non uniform  | l              |       |       |     |
| 5.           | In data quality tool feat   | ure i  | mprove merging of data from   | 1 1            | 1     | 2     | 3   |
|              | dissimilar data sources.  | (D)    | T   |                |       |       |     |
|              | (A) Error checking  |        | Error correction  |                |       |       |     |
|              | (C) Error detection   | (D)    | Error discovery   |                | ,     |       |     |
|              |   |        | . Large and analyza   | . 1            | 1     | 4     | 3   |
| 6.           | the metrics.  |        | e business dimension and analyze  | , -            |       |       |     |
|              | (A) Operational database modelling  |        |   |                |       |       |     |
|              | (C) ER model  | (D)    | Data warehouse modelling  |                |       |       |     |
| 7.           | How many fact tables are there in star  | sche   | ma?   | 1              | 1     | 4     | 3   |
|              | (A) 1   | (B)    |   |                |       |       |     |
|              | (C) 4   | (D)    |   |                |       |       |     |
|              |   | -      |   |                |       |       |     |

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| 8.  | performs aggregation of dastepping up a concept hierarchy for a (A) Drill down (C) Roll up  | ata by reduction in dimension (or) by a dimension.  (B) Slice  (D) Dice                             | 1. | 1  | 1          | 3 | # # # # # # # # # # # # # # # # # # # | x = 1 | <ul> <li>19. Which storage of knowledge discovery involves the combination of 1 1 4 3 multiple data sources?</li> <li>(A) Data selection</li> <li>(B) Data transformation</li> <li>(C) Data cleaning</li> <li>(D) Data integration</li> </ul> |
|-----|---|---|----|----|------------|---|---------------------------------------|-------|---|
| 9.  |   | ld temporary on data warehouse server.  (B) Data warehouse  (D) Data staging                        | 1  | 1  | 4          | 3 |                                       | 2     | 20 is a non parametric test that measures the strength of dependence 1 1 5 3 between two variables  (A) Kendall rank correlation (B) Spearman rank correlation (C) Pearson correlation (D) Positive correlation                               |
| 10. | The commercial product Microsoft a  (A) Desktop OLAP model  (C) Multidimensional OLAP model | (B) Relational OLAP model   | 1  | 1  | 1          | 3 |                                       | 2     | 21 is the process of transforming unstructured text into structural 1 1 6 5 format to identify meaningful patterns  |
| 11. | The operation has to be done a  (A) Yearly  |   | 1  | 1  | 4          | 3 |                                       |       | (A) Spatial data mining (B) Web mining (C) Text mining (D) Data mining  |
| 12. | (C) Day to day  To implement security features, you   | (D) Hourly  1 may use security mechanism at how   | 1  | 1  | 4          | 3 |                                       | 2     | 22. Data warehouse technology provided to the department of by NIC <sup>1</sup> <sup>1</sup> <sup>6</sup> <sup>5</sup> eliminate high response time problems by storing current and historical data from disparate information systems.       |
|     | many levels? (A) 4 (C) 1  | (B) 3<br>(D) 2  |    |    |            |   |                                       |       | (A) Finance (B) Treasuries (C) Ministry (D) Education   |
| 13. | can be divided into product writers.  | tion reporting tools and desktop report   | 1  | 1  | 2          | 3 |                                       | 2     | 23. Hewlett Packard has at least OLAP cubes, each of will support a 1 1 6 5 particular group of decision makers  (A) 4 (B) 8  |
|     | <ul><li>(A) Access tools</li><li>(C) Reporting tools</li></ul>                              | <ul><li>(B) OLAP tools</li><li>(D) Query tools</li></ul>  |    |    |            |   |                                       | 2     | (C) 6 (D) 2  24. The retail industry in Germany felt that it provides the ability to 1 1 6 5  |
| 14. | aggregating, grouping and sorting date  | n leverage meta data in understanding,<br>ta for use  (B) Query management  (D) Metadata management | 1  | 1  | 4          | 3 |                                       | 2     | conduct analyses on information such as sales turnover and inventor levels.  (A) IKEA  (B) ZARA  (C) ALDI  (D) EDEKA  |
| 15. | In operation, older data is rothe space needed to store the entire data (A) Data rollup     | olled up into aggregated form to reduce ata.  (B) Data cleansing                                    | 1  | 1  | 1          | 3 |                                       | 2     | 25. The first version of of Egg was built on sun fire 6800 server.  (A) Customer data warehouse (B) Real application cluster (C) Storage area network (D) Data base administrator   |
| 16. | (C) Data gathering  refers to the technique of sea  | (D) Data transformation arching useful and relevant information                                     | 1  | 1  | 4          | 3 |                                       |       | PART – B ( $5 \times 10 = 50$ Marks)  Answer ALL Questions  Marks BL CO PO  |
|     | from the data warehouse.  (A) Data mart  (C) Data gathering                                 | (B) Data modelling (D) Data mining  |    |    |            |   |                                       | 26.   | a. Explain about the common architecture of data warehouse.   |
| 17. | v   | ithout providing the numerical value.  (B) Continuous data  | 1  | 1. | <u>.</u> 4 | 3 |                                       | b     | (OR) o.i. Summarize about data warehouse readiness assessment.  6 3 4 4   |
|     | (C) Ordinal data  | (D) Nominal data  |    |    |            |   |                                       | j     | ii. How is the project team organized to build a data warehouse project?  4 2 4 4   |
| 18. | iterative and interactive.  | e from data, process is highly  | 1  | 1  | 5          | 2 |                                       |       | i.i. Explain dimensional modeling.  |
|     | <ul><li>(A) Data warehousing</li><li>(C) Data mining</li></ul>                              | <ul><li>(B) Knowledge discovery</li><li>(D) Data mart</li></ul>                                     |    |    |            |   |                                       | i     | ii. Write short notes on the type of transformation task performed on extracted 5 2 1 2 data.  (OR)   |
|     |   |   |    |    |            |   |                                       |       | (OI)  |

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