

M.Sc. (Part-II) Semester-III (CBCS) Examination
COMPUTER SOFTWARE (NEW)
(Data Warehouse and Data Mining)
Paper-3S1

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) All questions are compulsory.

(2) Assume suitable data wherever necessary.

(3) Illustrate your answer with the help of neat sketches.

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| 1. | (A) Explain the architecture of typical Data Mining System. | 8 |
| | (B) Explain the concept of Hierarchy generation with example. | 6 |

OR

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| 2. | (A) Explain Data Mining functionalities in detail. | 8 |
| | (B) Explain Data transformation methods in detail. | 6 |
| 3. | (A) Explain : | |
| | (i) Data Discretization. | |
| | (ii) Data Generalization. | 8 |
| | (B) Explain general procedure for class comparison. | 6 |

OR

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| 4. | (A) Write DMQL syntax for : | |
| | (i) Task relevant Data specification. | |
| | (ii) Characterization. | |
| | (iii) Classification. | |
| | (iv) Association. | 8 |
| | (B) Explain : | |
| | (i) Discrimination. | |
| | (ii) Clustering. | 6 |
| 5. | (A) Describe the main theoretical foundations that have been proposed for Data Mining. | 7 |
| | (B) Explain the following trends in Data Mining : | |
| | (i) Application Exploration. | |
| | (ii) Scalable and Interactive Data Mining method. | 6 |

OR

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| 6. | (A) State and describe the various features for selecting a Data Mining product. | 7 |
| | (B) Explain Data Mining application in financial data analysis. | 6 |
| 7. | (A) Explain three tier Data Warehouse Architecture. | 7 |
| | (B) Explain the different views regarding the design of Data Warehouse. | 6 |

OR

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| 8. | (A) Explain the difference between OLTP and OLAP. | 7 |
| | (B) Explain the metadata repository in Data Warehouse. | 6 |
| 9. | (A) Explain miscellaneous issues in Data staging. | 7 |
| | (B) Explain various characteristics of Data quality. | 6 |

OR

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| 10. | (A) Describe Dimension table staging. | 7 |
| | (B) State and explain fact table. | 6 |
| 11. | (A) State and explain the process for evaluation of Data Warehouse. | 6 |
| | (B) How warehouse environment manages the existing data ? Explain. | 7 |

OR

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| 12. | (A) State and explain the steps to maintain and grow Data Warehouse. | 7 |
| | (B) Explain overall business dimensional Life Cycle diagram. | 6 |