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| **CSF346, Data Mining and Data Warehousing, VII Semester, 2023** | | | |
| **Dates for Topics** | | **Topic and Pedagogy** | **Activity**  **Due Dates and Times** |
| **Begin** | **End** |
| **dd/mm** | **dd/mm** | **Week 1 – UNIT-I** | |
| 03/08/23 | 11/08/23 | Motivation (for Data Mining), Data Mining-Definition & Functionalities. Data Warehousing: Overview, Definition, Delivery Process  Lecture Notes – Unit-I PPT |  |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 2 – UNIT-I** | |
| 14/08/23 | 18/08/23 | Difference between Database System and Data Warehouse, Multi-Dimensional Data Model,  Lecture Notes – Unit-I PPT |  |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 3- UNIT-I** | |
| 21/08/23 | 25/08/23 | Data Cubes, Stars, Snow Flakes, Fact Constellations, Concept hierarchy, Process Architecture, 3 Tier Architecture, Data Marting. ROLAP, MOLAP, HOLAP Lecture Notes – Unit-I PPT | **(Quiz-1)** |
|  |  | **Graded Lab-1** |  |
| **dd/mm** | **dd/mm** | **Week 4 – UNIT-II** | |
| 28/08/23 | 01/09/23 | Data Cleaning: Missing Values, Noisy Data, Binning, Clustering, Regression, Inconsistent Data, Data Integration and Transformation  Lecture Notes – Unit-II PPT |  |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 5 – UNIT-II** | |
| 04/09/23 | 08/09/23 | Data Reduction: Data Cube Aggregation, Dimensionality reduction, Data Compression, Numerosity Reduction, Clustering, Discretization and Concept hierarchy generation Lecture Notes – Unit-II PPT |  |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 6 – UNIT-III** | |
| 11/09/23 | 15/09/23 | Definition, Data Generalization, Analytical Characterization, Analysis of attribute relevance,  Lecture Notes – Unit-III PPT | **(Quiz-2)** |
|  |  | **Graded Lab-2** |  |
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| **dd/mm** | **dd/mm** | **Week 7 – Mid Term Exams** | |
|  |  | No classes |  |
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| **dd/mm** | **dd/mm** | **Week 8 – UNIT-III** | |
| 03/10/23 | 06/10/23 | Mining Class comparisons, Statistical measures in large Databases  Lecture Notes – Unit-III PPT | **Assignment – PROJECT will be allocated** |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 9- UNIT-III** | |
| 09/10/23 | 13/10/23 | Measuring Central Tendency, Measuring Dispersion of Data,  Apriori Algorithm, Mining Multilevel Association rules from Transaction Databases  Lecture Notes – Unit-III PPT | **(Quiz-3)** |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 10 – UNIT-IV** | |
| 16/10/23 | 20/10/23 | What is Classification, Issues regarding Classification, Decision tree  Lecture Notes-Unit-IV PPT |  |
|  |  | **Graded Lab-3** |  |
| **dd/mm** | **dd/mm** | **Week 11 – UNIT-IV** |  |
| 23/10/23 | 27/10/23 | Bayesian Classification, Classification by Back propagation  Lecture Notes – Unit-IV PPT | **(Quiz-4)** |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 12 – UNIT-V** |  |
| 01/11/23 | 10/11/23 | Data types in cluster analysis, Partitioning methods. Hierarchical Clustering- CURE and Chameleon  Lecture Notes – Unit-V PPT |  |
|  |  | **Graded Lab-4** |  |
| **dd/mm** | **dd/mm** | **Week 13 -UNIT-V** |  |
| 20/11/23 | 24/11/23 | Density Based Methods-DBSCAN, OPTICS, Grid Based Methods-STING, CLIQUE, Outlier Analysis  Lecture Notes – Unit-V PPT |  |
|  |  | **Lab Experiment Non-Graded** |  |
| **dd/mm** | **dd/mm** | **Week 14 – Revision** |  |
| 27/11/23 | 30/11/23 | Revision |  |
|  |  | **Graded Lab-5** |  |
| **dd/mm** | **dd/mm** | **Week 15 – End Term Exam** |  |
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