M.L. Dahanukar College of Commerce

Teaching Plan: 2022 - 23

Department: I.T. Class: M.Sc. (I.T.) Semester: I

Subject: Research in Computing

Name of the Faculty: Shri. Subhash Bansode

| Month | Topics to be Covered | Internal Assessment | Number of Lectures |
|-----------|--|------------------------|--------------------------|
| July | Unit-1: Role of Business Research | | 4 |
| August | Unit-1: Information Systems and Knowledge Management, Theory Building, Organization ethics and Issues Unit 2: Beginning Stages of Research Process: Problem definition, Qualitative research tools, Secondary data research | | 16 |
| September | Unit 3: Research Methods and Data Collection: Survey research, communicating with respondents, Observation methods, Experimental research Unit 4: Levels of Scale measurement, attitude measurement | | 18 |
| October | Unit 4: Questionnaire design, sampling designs and procedures, determination of sample size Unit 5: Data Analysis and Presentation: Editing and Coding, Basic Data Analysis | | 16 |
| November | Unit: 5: Univariate Statistical Analysis and Bivariate Statistical analysis and differences between two variables. Multivariate Statistical Analysis. | | 6 |

Sign of Faculty

P.T.V.A.'s M.L.Dahanukar College of Commerce

Teaching Plan: 2022 – 2023 Department: Information Technology

Class: M.Sc (part I) – Sem-I Subject: DATA SCIENCE Name of the Faculty: Prof. Supritha Bhandary

| Month | Topics to be Covered | Internal | Number |
|-------|--|------------|----------|
| | | Assessment | of |
| | | | Lectures |
| AUG | Data Science Technology stacks: Rapid Information Factory, Ecosystem, Data Science Storage Tools, Data Lake, Data Vault, and Data Warehouse Bus Matrix. Layered Framework: Definition of Data Science Framework, Cross-Industry Standard Process for Data Mining (CRISP-DM) | | 16 |
| SEP | Business layer, Utility layer. Three Management Layers: Operational Management Layer, Processing-Stream Definition and Management, Audit, Balance, and Control Layer, Balance, Control, Yoke Solution, Cause-and- Effect, Analysis System, Functional Layer, Data Science Process. Retrieve Super step, | | 18 |
| OCT | Assess Super step Errors, Analysis of Data, Practical Actions, Engineering a Practical Assess Super step , Process Super step : Data Vault, Time-Person-Object Location-Event Data Vault, Data Science Process, Data Science | | 12 |
| NOV | Transform Super step: Univariate Analysis Computer Vision(CV), Natural Language Processing(NLP),Neural Networks,TensorFlow. Organize and Report Super steps Organize Super step, Report Super step, Graphics, Pictures, Showing the Difference | | 14 |

Sign of Faculty

ML Dahanukar College

Teaching Plan: 2022 - 23

Department: <u>I.T.</u> Class: <u>MSc.(I.T.) Part-I</u> Semester: <u>I</u>

Subject: <u>Soft Computing Techniques</u>

Name of the Faculty: Ms. Rasika Sawant

| Month | Topics to be Covered | Internal | Number of |
|-----------|---|------------|-----------|
| | | Assessment | Lectures |
| August | Unit I | | 14 |
| | Introduction of soft computing | | |
| | Various types of soft computing techniques | | |
| | Classification | | |
| | Clustering | | |
| | Bayesian Networks | | |
| | Probabilistic reasoning | | |
| | Applications of soft computing | | |
| | Unit II | | |
| | Artificial Neural Network | | |
| | Supervised Learning Network | | |
| September | Associative Memory Networks | | 16 |
| | Unit III: | | |
| | Un Supervised Learning Networks | | |
| | Special Networks | | |
| | Third Generation Neural Networks | | |
| | Unit IV: | | 16 |
| | Introduction to Fuzzy Logic, Classical Sets and | | |
| October | Fuzzy sets | | |
| | Classical Relations and Fuzzy Relations | | |
| | Membership Function | | |
| | Defuzzification | | |
| | Fuzzy Arithmetic and Fuzzy measures | | |
| November | Unit IV: | | 14 |
| | Fuzzy Rule base and Approximate reasoning | | |
| | Fuzzy logic control systems | | |
| | Unit V: | | |
| | Genetic Algorithm | | |
| | Differential Evolution Algorithm | | |
| | Hybrid soft computing techniques | | |

Sign of Faculty

ML Dahanukar College

Teaching Plan: 2022 - 23

Department: I.T. Class: <u>MSc.(I.T.) Part-I</u> Semester: I

Subject: <u>Cloud Computing</u>

Name of the Faculty: Mr Dhanraj Jadhav

| Month | Topics to be Covered | Internal | Number of |
|-----------|---------------------------------------|------------|-----------|
| | | Assessment | Lectures |
| | Unit I: | | 20 |
| September | Introduction to Cloud Computing | | |
| | Parallel and Distributed Computing | | |
| | Virtualization | | |
| | Unit II | | |
| | Cloud Computing Architecture | | |
| | Fundamental Cloud Security | | |
| | Unit II: Industrial Platforms and New | | 16 |
| October | Developments | | |
| | Unit III: | | |
| | Specialized Cloud Mechanisms | | |
| | Cloud Management Mechanisms | | |
| | Cloud Security Mechanisms: | | |
| November | Unit IV: | | 12 |
| | Fundamental Cloud Architectures | | |
| | Advanced Cloud Architectures | | |
| December | Unit V: | | 12 |
| | Cloud Delivery Model Considerations | | |
| | Cost Metrics and Pricing Models | | |
| | Service Quality Metrics and SLAs | | |
| | | | |

Sign of Faculty