**S.P. Mandali's**

# R. A. PODAR COLLEGE OF COMMERCE AND ECONOMICS (AUTONOMOUS),

Matunga, Mumbai-400019

## Course Structure

**For**

Post Graduate Program

## M.Com. (Business Analytics)

**Semester II**

www.rapodar.ac.in

**S.P. Mandali's**

# R. A. PODAR COLLEGE OF COMMERCE AND ECONOMICS (AUTONOMOUS),

Matunga, Mumbai-400019

# Syllabus

# And

# Question Paper Pattern of Course

## Post Graduate Program

# M.Com. (Business Analytics)

## Semester II

Syllabus as per National Education Policy 2020
To be implemented from Academic Year 2025-2026

www.rapodar.ac.in

**POST GRADUATE PROGRAM OUTCOMES :**

| PROGRAM OUTCOME No. | Description |
|---|---|
| PO 1 | Learners will acquire advanced knowledge in accounting principles, financial reporting, and taxation policies |
| PO 2 | Learners will master the effective communication of complex financial information to diverse stakeholders through oral and written means |
| PO 3 | Learners will develop critical thinking skills to analyze financial statements, interpret accounting regulations, and propose strategic financial solutions. |
| PO 4 | Learners will apply accounting principles to solve real-world financial challenges and make informed business decisions. |
| PO 5 | Learners will employ analytical reasoning to interpret financial data, assess business performance, and support strategic planning. |
| PO 6 | Learners will excel in conducting advanced research in accounting, showcasing proficiency in data collection, analysis, and interpretation. |
| PO 7 | Learners will collaborate effectively with interdisciplinary teams to address complex accounting issues and achieve organizational goals. |
| PO 8 | Learners will apply scientific reasoning to evaluate and propose innovative financial strategies and models. |
| PO 9 | Learners will engage in reflective thinking, identifying areas for improvement and continuous learning in the field of accountancy. |
| PO 10 | Learners will leverage digital tools for effective access, evaluation, and synthesis of financial information. |
| PO 11 | Learners will take initiative in ongoing professional development, engaging in self-directed learning to stay updated with evolving accounting standards. |
| PO 12 | Learners will demonstrate multicultural competence, showing sensitivity to diverse cultural perspectives in the global business environment. |
| PO 13 | Learners will exhibit a strong ethical foundation, making decisions with integrity and considering the societal impact of financial practices. |
| PO14 | Learners will showcase leadership qualities, being capable of guiding financial teams and contributing to organizational success. |
| PO15 | Learners will recognize the importance of continuous learning, adapting to advancements in the field of accountancy throughout their professional careers. |

**Program Specific Outcomes**
**(M.Com. Business Analytics)**
**Academic Year: 2025-26.**

| **Program Specific Outcomes No.** | **Program Specific Outcomes** |
|---|---|
| PSO1 | Learners will acquire **disciplinary knowledge** in Analytics and Data Science, preparing them to meet the demands of businesses worldwide and making them business-ready professionals in analytics. |
| PSO2 | Learners will gain **disciplinary knowledge** in Marketing, Retail Analytics, Finance and Risk Analytics, supply chain and logistics Analytics, social and web media analytics. |
| PSO3 | Learners will apply **problem-solving** techniques using Data mining, predictive modeling and Time series forecasting and Machine learning |
| PSO4 | Learners will strengthen their **analytical reasoning** through hands-on experience with software like Python, R, and Tableau. |
| PSO5 | Learners will acquire **research-related skills** essential for conducting analytics projects. |
| PSO6 | Learners will engage in **reflective thinking** to continuously assess and improve their analytical approaches. |
| PSO7 | Learners will develop **critical thinkin**g to evaluate complex business scenarios and make informed decisions. |

# Master in Commerce

## (Business Analytics)

## Under Choice Based Credit, Grading and Semester System Course Structure

## M.com-I

| No. of Courses | Semester I | Credits | No. of Courses | Semester II | Credits |
|---|---|---|---|---|---|
| **Mandatory** | | | **Mandatory** | | |
| 1 | Introduction Business Analytics | **06** | 1 | Introduction To Financial Analytics | **02** |
| 2 | Introduction To Data Science - 1 | **06** | 2 | Data Visualization And Communication | **06** |
| 3 | Business Ethics | **02** | 3 | Data Science | **06** |
| **Electives** | | | **Electives** | | |
| 4 | R-Lab Course | **04** | 4 | Python Data Science – Lab Course | **04** |
| **Research Methodology** | | | **Research Methodology** | | |
| 5 | Research Methodology for Business | **04** | -- | ------ | **--** |
| **On Job Training/Field Project** | | | **On Job Training/Field Project** | | |
| **--** | ------ | **--** | 6 | Business Analytics Related Project | **04** |
| **Total Credits** | | **22** | **Total Credits** | | **22** |

# M.com II

| No. of Courses | Semester III | Credits | No. of Courses | Semester IV | Credits |
|---|---|---|---|---|---|
| **Mandatory** | | | **Mandatory** | | |
| 1 | Machine Learning And Mining Algorithms | **06** | 1 | Predictive Analysis | **06** |
| 2 | Financial Model - Based Analytics - I | **06** | 2 | Financial Model - Based Analytics - II | **06** |
| **Electives (Any One)** | | | **Electives(Any One)** | | |
| 3 | Sales and Marketing Analysis | **04** | 3 | International Financial Reporting Standards | **04** |
| 4 | Tools for Data Analytics – Lab Course - II | **04** | 4 | Supply Chain Design And Management | **04** |
| 5 | Financial Accounting And Analysis | **04** | 5 | Foundation of Behavioural Financial Analysis | **04** |
| **Research Methodology** | | | **Research Methodology** | | |
| 6 | Statistical Tools and Techniques | **02** | -- | ------ | -- |
| **Research Project** | | | **Research Project** | | |
| 7 | Research Project/Internship | **04** | 7 | Research Project | **06** |
| **Total Credits** | | **22** | **Total Credits** | | **22** |

***Revised Syllabus of Courses of Master of Commerce (M.Com) Business Analytics Program at Semester II***

## *Introduction to Financial Analytics*

### Modules at a Glance

| SN | Modules | No. of Lectures |
|---|---|---|
| 1 | Introduction to Financial Analytics | 15 |
| 2 | Financial Modeling | 15 |
| 3 | Financial Securities | 15 |
| 4 | Emerging Trends | 15 |
| | **Total** | **60** |

| SN | Objectives |
|---|---|
| 1 | To equip students with an understanding of the "importance and role of financial analytics" in modern business enterprises and how business firms can take advantage of financial analytics. |
| 2 | Students who wish to specialize in analytics, the course provides a strong foundation in the application of financial analytics with analytical platforms. |

| Course Outcome No. | Course Outcomes |
|---|---|
| CO 1 | Acquire the skills of applying financial analytics techniques to analyse financial data and make informed decisions. |
| CO 2 | Develop the skill of Continuously learning and adapting to new developments in the field of financial analytics to stay relevant in a dynamic business environment. |
| CO 3 | Understand the ethical considerations and legal regulations related to financial analytics and data privacy. |
| CO 4 | Develop the knowledge of using appropriate tools and technologies for financial analytics, including software applications and data visualization tools. |

| SN | Modules/ Units |
|---|---|
| **1** | **Introduction to Financial Analytics** |
| | Introduction: Meaning- scope and relevance of Financial Analytics uses- Features-Documents usedin Financial Analytics: Balance Sheet, Income Statement, Cash flow statement-Elements of Financial Health: Liquidity, Leverage, Profitability. Recent trends in financial analytics |
| **2** | **Financial Modeling** |
| | Financial statement analysis and their interlinking, Equity and bond analysis, Valuation of equity and business (firm), basic portfolio analysis, project finance modelling, risk-return modelling, capital structure analysis, dividend policy and derivatives analytics. |
| **3** | **Financial Securities** |
| | Financial Securities: Bond and Stock investments - Housing and Euro crisis - Securities Datasets and Visualization - Plotting multiple series. Time Series and Sharpe ratio - Sharpe Ratio for Income Statement growth. |
| **4** | **Emerging Trends** |
| | Fintech: IT-enabled financial innovations and the current trend, Emerging Fintech techniques – Social trading, P2P lending, Blockchain, Algorithm trading basics |

**References:**


- Business Analytics for Managers - GEAT H.N.LAURSEN JESPER THORLUND,
- Fundamentals of Business Analytics -R N Prasad,. Seema Achavya, Wiley India Pvt Ltd,New Delhi,
- Financial Analytics with R _ Mark J. Bennets, Cambridge University Press
- Fundamentals of Business Analytics - R N Prasad Seema Achavya, Cengage Learning, NewDelhi,
- Journal of Marketing Analytics, Springer
- Financial Analysts Journal, Taylor & Francis

# EXAMINATION PATTERN

## (Under Choice Based Credit, Grading and Semester System)

## (With effect from Academic Year: 2024-2025)

## (Evaluation pattern)

## 1. Continuous Internal Evaluation System:

| Continuous Internal Evaluation (CIE) | 40 Marks |
|---|---|
| The internal evaluation of 40 marks for M.Com for each semester would be of tests and of class participation, project, case study analysis, Case lets, PowerPoint presentations, group discussion, book review, Research paper, article analysis and any other mode depending on the nature and scope of the course. Continuous Internal Evaluation (CIE), to be conducted by the subject teacher all through the semester. The total mark break up would be suitably divided and the total marks scored by the learner would be submitted to the Controller of Examination. | |

## 2. Question Paper Pattern (Practical/ Theory Courses) :

Maximum Marks: 60

Questions to be set: 04

Durations: 02 hrs

**All Questions are compulsory carrying 15 Marks each:**

| Question No | Particulars | Marks |
|---|---|---|
| **Q1** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q2** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q3** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q4** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |

***Note: Full-Length questions of 15 Marks may be divided into two sub-questions of 08 and 07 marks.***

*Revised Syllabus of Courses of Master of Commerce (M.Com) Business Analytics Program at Semester II*

## *2. Data Visualization and Communication*

### Modules at a Glance

| SN | Modules/ Units | |
|---|---|---|
| | **Modules** | **No. of Lectures** |
| 1 | Basics of Data Visualization | 15 |
| 2 | Principles of Data Visualization | 15 |
| 3 | Data visualization of multidimensional data | 15 |
| 4 | Introduction to data communication | 15 |
| | **Total** | **60** |

| SN | Objectives |
|---|---|
| 1 | To enable the learners to understand the scope of Data Visualisation and Communication in today's era |
| 2 | To provide information pertaining to basics and principles of Data Visualisation and Communication |
| 3 | To develop learning and analytical skills of the learners to enable them to for Data visualization of multidimensional data |
| 4 | To acquaint the learners with recent developments and trends in Data Visualisation and Communication |

| Course Outcome No. | Course Outcomes |
|---|---|
| CO 1 | Acquire the skills to identify patterns, trends, and relationships in complex data sets through visualization. Communicate data effectively to different audiences, considering their needs and level of understanding. |
| CO 2 | Understand the role of context and audience in data communication and adapt visualizations accordingly. |
| CO 3 | Develop the understanding of being updated with emerging trends and technologies in data visualization for continuous improvement and innovation. |
| CO 4 | Learn how to create visually appealing and informative data visualizations using appropriate tools and techniques. |

| SN | Modules/ Units |
|---|---|
| **1** | **Basics of Data Visualization** |
| | Introduction to Data Visualization, Challenges of Data Visualization, Definition and Types of Dashboard, Evolution of Dashboard, Dashboard Design and Principles, Display Media for Dashboard, Types of Data Visualization: Basic Charts Scatter Plots, Histogram, Advanced Visualization Techniques Like Streamline and Statistical Measures, Plots, Graphs, Networks, Hierarchies, Reports. |
| **2** | **Principles of Data Visualization** |
| | The Seven Stages of Visualizing Data: Why Data Display Requires Planning, Iteration and Combination, Principles, Getting Started with Processing: Sketching with Processing, Exporting and Distributing Your Work, Examples and Reference, Functions, Sketching and Scripting, Mapping: Drawing a Map, Locations on a Map, Data on a Map Using Your Own Data. |
| **3** | **Data visualization of multidimensional data** |
| | Need of Data Modeling, Multidimensional Data Models, Mapping of High Dimensional Data into Suitable Visualization Method-Principal Component Analysis, Clustering Study of High Dimensional Data, Visualization Tools. |
| **4** | **Introduction to data communication** |
| | Data Communication, Networks, Protocols and Standards, Standards Organizations. Line Configuration, Topology, Transmission Modes, Categories of Networks Internetworks, Study of OSI and TCP/IP protocol suit, The Model, Functions of the layers, TCP/IP Protocol Suites |

**Suggested Readings**


2. Alice Zheng- Evaluating Machine Learning Models: A Beginner's Guide to Key Concepts and Pitfalls, O'Reilly Media, 2015,
3. Big data black book, Dream Tech Publication.
4. Ben Fry- Visualizing Data. Released December 2007. Publisher(s): O'Reilly Media, Inc.
5. Data Science Using Python and R by Chantal D. Larose and Daniel T. Larose, Wiley Publication.
6. Python for Data Science and Visualization -Beginners to Pro, Udemy.
7. Data communication & Networking by Bahrouz Forouzan.
8. Data and Computer Communications by William Stallings

# EXAMINATION PATTERN

## (Under Choice Based Credit, Grading and Semester System)

## (With effect from Academic Year: 2024-2025)

## (Evaluation pattern)

## 1. Continuous Internal Evaluation System:

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|---|---|
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## 2. Question Paper Pattern (Practical/ Theory Courses) :

Maximum Marks: 60

Questions to be set: 04

Durations: 02 hrs

**All Questions are compulsory carrying 15 Marks each:**

| Question No | Particulars | Marks |
|---|---|---|
| **Q1** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q2** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q3** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q4** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |

***Note: Full-Length questions of 15 Marks may be divided into two sub-questions of 08 and 07 marks.***

***Revised Syllabus of Courses of Master of Commerce (M.Com) Business Analytics Program at Semester II***

## *3. Data Science II*

### Modules at a Glance

| SN | Modules | No. of Lectures |
|---|---|---|
| 1 | Introduction | 15 |
| 2 | Data Processing | 15 |
| 3 | Basic Machine Learning Algorithms | 15 |
| 4 | Clustering | 15 |
| **Total** | | **60** |

| SN | Objectives |
|---|---|
| 1 | To familiarize the learners with the concept and ***Foundation of Data Science*** |
| 2 | To enable learners to understand the scope and complexity of data science |
| 3 | To Handle Missing Or Inconsistent Data Using Appropriate Data Processing Methods. |
| 4 | To Use relevant tools and software for data processing, machine learning, and clustering tasks. |

| Course Outcome No. | Course Outcomes |
|---|---|
| CO 1 | Develop the knowledge of understanding the fundamental concepts and processes involved in data processing, machine learning algorithms, and clustering |
| CO 2 | Acquire the skills to select and apply appropriate data processing, machine learning, and clustering techniques for specific tasks and datasets |
| CO 3 | Learn how to communicate and present the results of data processing, machine learning, and clustering analyses effectively. |
| CO 4 | Understand the practical applications and potential benefits of data processing, machine learning, and clustering in various domains. |

| SN | Modules/ Units |
|---|---|
| **1** | **Introduction** |
| | Big Data and Data Science – Datafication – Current landscape of perspectives – Skill sets needed; Matrices – Matrices to represent relations between data, and necessary linear algebraic operations on matrices -Approximately representing matrices by decompositions (SVD and PCA). |
| **2** | **Data Processing** |
| | Data cleaning – data integration – Data Reduction Data Transformation and Data Discretization. Evaluation of classification methods – Confusion matrix, Students T-tests and ROC curves- Exploratory Data Analysis – Basic tools (plots, graphs and summary statistics) of EDA, Philosophy of EDA – The Data Science Process. |
| **3** | **Basic Machine Learning Algorithms** |
| | Association Rule mining - Linear Regression- Logistic Regression - Classifiers - k-Nearest Neighbours (k-NN), k-means -Decision tree - Naive Bayes- Ensemble Methods - Random Forest. Feature Generation and Feature Selection - Feature Selection algorithms - Filters; Wrappers; Decision Trees; Random Forests. |
| **4** | **Clustering** |
| | Clustering: Choosing distance metrics - Different clustering approaches - hierarchical agglomerative clustering, k-means (Lloyd's algorithm), - DBSCAN - Relative merits of each method - clustering tendency and quality. |

**Suggested Readings**


- Cathy O'Neil and Rachel Schutt, "Doing Data Science, Straight Talk from The Frontline", O'Reilly, 2014.
- Jiawei Han, Micheline Kamber and Jian Pei, "Data Mining: Concepts and Techniques", Third Edition. ISBN 0123814790, 2011.
- Mohammed J. Zaki and Wagner Miera Jr, "Data Mining and Analysis: Fundamental Concepts and Algorithms", Cambridge University Press, 2014.ferences
- Matt Harrison, "Learning the Pandas Library: Python Tools for Data Munging, Analysis, and Visualization, O'Reilly, 2016.
- Joel Grus, "Data Science from Scratch: First Principles with Python", O'Reilly Media, 2015.

# EXAMINATION PATTERN

## (Under Choice Based Credit, Grading and Semester System)

## (With effect from Academic Year: 2024-2025)

## (Evaluation pattern)

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## 2. Question Paper Pattern (Practical/ Theory Courses) :

Maximum Marks: 60

Questions to be set: 04

Durations: 02 hrs

**All Questions are compulsory carrying 15 Marks each:**

| Question No | Particulars | Marks |
|---|---|---|
| **Q1** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q2** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q3** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q4** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |

***Note: Full-Length questions of 15 Marks may be divided into two sub-questions of 08 and 07 marks.***

*Revised Syllabus of Courses of Master of Commerce (M.Com) Business Analytics Program at Semester II*

## Python for Data Science- Lab course

### Modules at a Glance

| SN | Modules | No. of lectures |
|---|---|---|
| 1 | Introduction to Python | 15 |
| 3 | Functions | 15 |
| 4 | Data Manipulation and Visualization | 15 |
| | **Total** | **45** |

| SN | Objectives |
|---|---|
| 1 | To Understand and critically apply the concepts and methods of business analytics |
| 2 | To Strategic understand business analytics and be able to consider the relationships between this discipline and other areas of business to make holistic judgments when analyzing business situations |
| 3 | To Interpret and evaluate the results of clustering algorithms. |

| SN | Modules |
|---|---|
| **1.** | **Introduction to Python** |
| | Introduction of Python, Juypter Notebook, Python Functions, Python Types and Sequences, Python Moreon Strings, Reading and Writing CSV files<br>Introduction to Python Language: Overview, Features of Python, Execution of a Python Program, Innards of Python, Frozen Binaries, Python Interpreter, Comparison of Python with C and Java, Installing Python, Writing &Executing, IDLE. **Data Types, Variables And Other Basic Elements:** Comments, Docstrings, Data types-Numeric, Compound,Boolean, Dictionary, Sets, Mapping, Basic Elements of Python, Variables<br>**Input and Output Operations**: Input Function, Output Statements, Command Line Arguments<br>**Control Statements:** Control Statements- Loop Statement, The else Suite, break Statement, continue Statement,pass Statement, assert Statement, return Statement |
| **2.** | **Series and data Frame** |
| | The Series Data Structure, Querying a Series, The Data Frame Data Structure, Data Frame Indexingand Loading,Querying a Data Frame, Indexing Data frames, Merging Data frames, Data Aggregation and Group Operations, Time Series, Date and Time Data Types and Tools, Time Series Basics, DateRanges, Frequencies, and Shifting, Time Zone Handling, Periods and Period Arithmetic, Resampling and Frequency Conversion, Time Series Plotting, Moving Window Functions |
| **3.** | **Functions** |
| | **Functions:** Defining & Calling a Function, Returning Results, Returning Multiple Values, Built-in Functions,Parameters and Arguments, Recursive Functions, Anonymous or Lambda Functions Operators: Arithmetic operators, Assignment operators, Unary minus operator, Relational operators, Logical operators, Bitwise operators, Membership operators, Identity operators, Precedence of Operators, Associativity of Operators **Arrays**: Creating Arrays, Indexing and Slicing, Basic Array Operations, Arrays Processing, Mathematical Operations on Array, Aliasing Arrays, Slicing and Indexing in NumPy Arrays, Basic Slicing. Advanced Indexing. Dimensions of Arrays, Attributes of an Array, **Strings:** Creating Strings, Functions of Strings, Working with Strings, Length of a String, Indexing & Slicing, Repeating & Concatenation of Strings, Checking Membership, Comparing Strings, Removing Spaces, Finding Substrings, Counting Substrings, Strings are Immutable, Splitting and Joining Strings, Changing Case, Checking<br>Starting and Ending of a String, Sorting & Searching in the Strings, Formatting the Strings, Working with Characters |
| **4.** | **Data Manipulation and Visualisation** |
| | **Data Manipulation with Pandas:** Introducing Pandas Objects, Data Indexing and Selection, Operating on Data in Pandas, Handling Missing Data, Hierarchical Indexing, Combining Datasets: Concat and Append, Combining Datasets: Merge and Join, Aggregation and Grouping, Pivot Tables, Vectorized String Operations, Working with Time Series. High-Performance Pandas: eval( ) and query( )<br>**Visualization with Matplotlib:** Simple Line Plots, Simple Scatter Plots, Visualizing Errors, Density and Contour Plots, Histograms, Binnings, and Density, Customizing Plot Legends, Customizing Colorbars, Multiple Subplots,Text and Annotation, Customizing Ticks, Customizing Matplotlib: Configurations and Stylesheets, Three-<br>Dimensional Plotting in Matplotlib, Geographic Data with Basemap, Visualization with Seaborn |

**REFERENCES:**


- "Learning Python", David Ascher and Mark Lutz
- "Python for Data Analysis: Data Wrangling with Pandas, NumPy, and I Python", Wes McKinney
- "Introduction to Machine Learning with Python: A Guide for Data Scientists", Andreas C. Muller and Sarah Guido

# EXAMINATION PATTERN

## (Under Choice Based Credit, Grading and Semester System)

## (With effect from Academic Year: 2024-2025)

## (Evaluation pattern)

## 1. Continuous Internal Evaluation System:

| Continuous Internal Evaluation (CIE) | 40 Marks |
|---|---|
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## 2. Question Paper Pattern (Practical/ Theory Courses) :

Maximum Marks: 60

Questions to be set: 04

Durations: 02 hrs

**All Questions are compulsory carrying 15 Marks each:**

| Question No | Particulars | Marks |
|---|---|---|
| **Q1** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q2** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q3** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |
| **Q4** | **A) Practical/ Theory Question**<br>**OR**<br>**B) Practical/ Theory Question** | **15 Marks**<br>**15 Marks** |

***Note: Full-Length questions of 15 Marks may be divided into two sub-questions of 08 and 07 marks.***

***Syllabus of Courses of Master of Commerce (M.Com)***
***BUSINESS ANALYTICS Program at***
***Semester II***

*5.Business Analytics Related Project*

Inclusion of project work in the course curriculum of the M.Com. programme is one of the ambitious aspects in the programme structure. The main objective of inclusion of project work is to inculcate the element of research work challenging the potential of learner as regards to his/ her eager to enquire and ability to interpret particular aspect of the study in his/ her own words. It is expected that the guiding teacher should undertake the counselling sessions and make the awareness among the learners about the methodology of formulation, preparation and evaluation pattern of the project work.

**Guidelines for preparation of Project Work**

Work load for Project Work is 01 (one) hour per batch of 15-20 learners per week for the teacher. The learner (of that batch) shall do field work and library work in the remaining 03 (three) hours per week.

***1.*** *General guidelines for preparation of project work based on Business Analytics*

- The project topic may be undertaken in any area of Elective Courses.
- Each of the learners has to undertake a Project individually under the supervision of a teacher-guide.
- The learner shall decide the topic and title which should be specific, clear and with definite scope in consultation with the teacher-guide concerned.
- University/college shall allot a guiding teacher for guidance to the students based on her / his specialization.
- The project report shall be prepared as per the broad guidelines given below:
    - Font type: Times New Roman
    - Font size: 12-For content, 14-for Title
    - Line Space : 1.5-for content and 1-for in table work
    - Paper Size: A4
    - Margin : in Left-1.5, Up-Down-Right-1

- The Project Report shall be bounded.

- The project report should be 60 to 80 pages.

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