MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

Semester-II

Paper Name: Inferential Statistics and Applications
Paper Code: BBA (BA) – 201

Total Credit: 4

Total hours of lectures: 60 hours

Course Outcomes:

After the completion of this course the students will be able to

1. Inspect the key terminologies, concepts tools and techniques used in business statistical analysis.

2. Apply the data frequency & distribution and measures of central tendency and measures of dispersion for solving business problems.

3. Develop the ability to perform statistical calculations using computer based statistical

software.

4. Make use of the basic data analysis-and hypothesis testing procedures

Sl.	Topic/Module	Hour
1.	**Module 1: Probability:** Introduction, Random experiment, Important terminology, Classical definition of probability, Axioms, Conditional probability, Independent events, Random variables, Joint distribution.	5L
2.	**Module 2: Distributions:** Binomial, Poisson, Normal distribution.	10L
3.	**Module 3: Sampling theory:** Meaning, Sampling Error, Sampling Types.	5L
4.	**Module 4 : Estimation :** Introduction to Estimator, Estimation, Point and Interval Estimation.	5L
5.	**Module 5: Test of Significance:** Theory, Terminologies, Large sample tests, Small sample tests, F distribution, Test for correlation co-efficient.	10L
6.	**Module 6 : Application: Introduction :** Relationship between computers and programs -- Basic principles of computers -- File systems -- Using the Python/R interpreter -- Introduction to binary computation -- Input / Output.	1P
7.	**Module 7: Data types and Control structures:** Operators (unary, arithmetic, etc.) -- Data types, variables, expressions, and statements -- Assignment statements -- Strings and string operations -- Control Structures:	1P

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

	loops and decision.	
8	**Module 8: Modularization and Classes:** Standard modules -- Packages -- Defining Classes -- Defining functions -- Functions and arguments (signature).	2P
9	**Module 9: Applications using Python/R:** Frequency distribution, Sampling distributions, Central tendency, variance, probability functions computation.	3P
10	**Module 10: Introduction to Hypothesis Testing using Python/R.**	3P

Suggested Readings:

1. J K Sharma: Business Statistics, fifth edition, Vikas Publishing house.

2. Alexander Holmes: Introductory Business Statistics by OpenStax, XanEdu Publishing Inc.

3. N G Das, Statistical Methods (Combined edition volume 1 & 2), McGraw Hill Education.

4. Ken Black: Business Statistics: For Contemporary Decision Making, Wiley.

5. Yashavant Kanetkar: Let Us Python, BPB.

6. Gowrishankar S, Veena A: Introduction to Python Programming, CRC Press / BSP Books.

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

Paper Name: Inferential Statistics and Applications
Paper Code: BBA (BA) – 291

Total Credit: 2

Total hours of lectures: 60 hours

Course Outcomes:

After the completion of this course the students will be able to

1.examine data types, expressions, statements of an open source software required for inferential statistics and its applications

2. make use of various packages of an open source software required for inferential statistics and its applications

3.apply the data frequency & distribution and measures of central tendency and measures of dispersion for solving business problems using an open source software.

4. apply an open source software language for carrying out basic data analysis-and hypothesis testing procedures

Sl.	Topic/Module	Hours
1.	**Module 1**: **Application**: **Introduction :** Relationship between computers and programs -- Basic principles of computers -- File systems -- Using the Python/R interpreter -- Introduction to binary computation -- Input / Output.	5
2.	**Module 2: Data types and Control structures**: Operators (unary, arithmetic, etc.) -- Data types, variables, expressions, and statements -- Assignment statements -- Strings and string operations -- Control Structures: loops and decision.	5
3.	**Module 3: Modularization and Classes:** Standard modules -- Packages -- Defining Classes -- Defining functions -- Functions and arguments (signature).	10
4.	**Module 4: Applications using Python/R:** Frequency distribution, Sampling distributions, Central tendency, variance, probability functions computation.	10
5.	**Module 5: Introduction to Hypothesis Testing using Python/R:** Large sample tests, Small sample tests, F distribution, Test for correlation co-efficient, ANOVA.	10

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

Suggested Readings:

1. J K Sharma: Business Statistics, fifth edition, Vikas Publishing house.

2. Dr Sharma Pooja: Programming in Python, BPB.

3. Arora, Malik: R Programming For Beginners, Bookcentre

4. Vries Andrie De, R Programming for Dummies, Wiley india Pvt. Ltd

5. Yashavant Kanetkar: Let Us Python, BPB.

6. Gowrishankar S, Veena A: Introduction to Python Programming, CRC Press / BSP Books.

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

Paper Name: Organizational Behaviour
Paper Code: BBA (BA) – 202

Total Credit: 6

Total hours of lectures: 60 hours

Course Outcomes:

After the completion of this course the students will be able to

1.demonstrate the applicability of the concept of organizational behavior to understand the behavior of people in the organization.

2. illustrate the applicability of analyzing the complexities associated with management of individual behavior in the organization.

3. relate with how the organizational behavior can align with the diverse culture of employees in MNCs.

4. identify the role of communication in an organization

Sl.	Topic/Module	Hour
1.	**Module 1: Introduction**: Concept of organizational behavior – Learning Objectives, Nature, Role, importance, Emerging Challenges, Evolution.	8
2.	**Module 2: Personality:** Learning Objectives, Nature, Theories, Shaping of Personalities.	8
3.	**Module 3: Perception and Attribution:** Meaning, Definitions, Influencing factors, Perceptual process.	6
4.	**Module 4: Learning:** Definition, Process, Cognitive theory of learning.	6
5.	**Module 5: Attitudes**: Definition, Objective, Nature, Components-ABC model, Formation, Function, Challenging attitudes.	6
6.	**Module 6: Group Dynamics:** Definition, Objective, Types, Introduction to Group Development and Structuring.	6
7.	**Module 7: Power and Political behaviour:** Definition, Power Dynamics, Sources, Power tactics, Essence of politics, Types of political activities.	6
8	**Module 8: Conflicts:** Definition, Objective, Nature, Nature of conflicts, Process, levels.	6
9	**Module 9: Communication:** Definition, Objective, Types of Interpersonal	6

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

	Communication, Influencing factors, Barriers.	
10	**Module 10: International Organizational Behaviour:**	2

Suggested Readings:

1. K. Aswathappa: Organizational behaviour, Text, Cases and Games, Himalaya Publishing House.

2. Stephen P. Robbins: Organizational Behaviour, Eighteen Edition, Pearson.

3. Stephen P. Robbins: Essentials of Organizational Behavior, Fourteenth Edition, Pearson.

4. Fred Luthans: Organizational behavior: A modern behavioral approach to management, McGraw-Hill.

5. Afsaneh Nahavandi: Organizational Behavior, First Edition, SAGE Publications.

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

Paper Name: Environment & Sustainable Development.
Paper Code: BBA (BA) 204

Total Credit: 2

Total hours of lectures: 60 hours

Course Outcomes:

After the completion of this course the students will be able to

1) explain the knowledge base on ecosystem and types of environmental pollutions.
2) relate with the efforts that can be made at the Industry and Government level to improve the environment, the economy and the quality of life.
3) build basic understanding on sustainable development with a vision to balance our economic, environmental and social needs, allowing opulence for now and future generations.
4) illustrate the environmental issues and challenges

Sl.	Topic/Module	Hour
1.	**Module 1: Introduction:** Multidisciplinary nature, Scope and importance; the need for environmental education. Concept of sustainability and sustainable development.	3
2.	**Module 2: Ecosystems:** Definition, Structure: food chains, food webs and function of ecosystem: Energy flow, nutrient cycle and ecological succession. Ecological Interactions, Biodiversity and Conservation – Levels, India as a mega-biodiversity nation, Threats to biodiversity, Ecosystem and biodiversity services	3
3.	**Module 3: Environmental Pollution:** Types:- Air pollution, Water pollution, Land pollution, Noise pollution; pollutants, Effects of pollution, Control and Remedial measures.	4
4.	**Module 4: Environmental Protection:** Report of the Club of Rome: Sustainable Development, Different Renewable Energy Sources- Wind Power, Water Power, Bio Fuel/Solid Bio Mass, Geothermal Energy, Nuclear Power, Environmental Movements- Chipko movement; Narmada Bachao movement; Tehri Dam conflict.	5
5.	**Module 5: Environmental Policies and Legislations:** Environmental	5

MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY, WB
Syllabus of BBA in Business Analytics (In-house)
(Effective for 2020-2021 Admission Session)
Choice Based Credit System
140 Credit (3-Year UG) MAKAUT Framework
w.e.f 2020-21

	Regulations Different Acts, Environmental Ethics Environmental Impact Assessment (EIA), EIA – Methods and Tools, Appraisal and Clearance for Industry, Evaluation System.	

Suggested Readings:

1. G.N. Pandey: Environmental Management, Vikas Publishing House Pvt. Ltd.

2. Cunningham: Environmental Science, TMH.

3. R. Rajagopalan: Environmental Studies, Oxford.

4. R. Joshi & Munish Kapila: Environment Management, Kalyani Publishers.

5. C.S. Rao: Environmental Pollution Control Engineering, New Age International Publication.