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Curriculum for Postgraduate Degree (MBA) in Business Analytics (w.e.f. AY: 2020-21)

Part III: Detailed Syllabus

First Semester

Course Name:	Managerial Economics		
Course Code:	PGBA 101	**Category:**	Management Science and Humanities Courses
Semester:	First	**Credit:**	03
L-T-P:	3-0-0	**Pre-Requisites:**	Basic understanding of economics covered in class 11, 12
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:
To integrate the basic concepts of economics with the tools of mathematics and statistics in order to analyze and make optimal business decisions. Starting out with an exposition of the theory of decision making by households and firms, the participants will be made to comprehend the working of the markets, the determination of prices and the techniques of decision making that the players in the market can adopt to ensure that sound decisions are made.

Course Contents:

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Module No.	Description of Topic	Contact Hrs.
1	**Introduction to Managerial Economics:** Basic problems of an economic system; Meaning and nature of managerial economics and goals of managerial decision making; Fundamental economic concepts – incremental, opportunity – cost, discounting, equi-marginal principle; Resource allocation using PPC	**3L**
2	**Demand Analysis** A. Demand Functions – Law of Demand, Explaining the law of demand, Violations of the Law of Demand, Shifts in Demand; Elasticity of Demand: Price Elasticity, Factors affecting price elasticity, Price elasticity and Change in Total Revenue, AR, MR and Price elasticity, Range of Values of Price Elasticity; Income Elasticity, Inferior, Superior and Normal goods, Income Elasticity and Share in Total Expenditure; Cross-Price Elasticity, Substitutes and Complements B. Indifference curves, budget line and consumer equilibrium	**7L**
3	**Production and Cost Analysis :** A. Production Function, Short Run and Long Run, Production with One Variable Input, Total Product, Average and Marginal Products, Law of Variable proportions, Relationship between TP, AP and MP. B. Short Run Costs of Production, Fixed and Variable Costs, Short Run Total, Average and Marginal Cost and Relationship between them, Short Run Cost Curves, Relationship between AVC, MC, AP and MP; Long run cost curves, Relationship between LAC and SAC, Economies of Scale and Scope.	**8L**

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	C. Production with Two Variable Inputs, Isoquants – Characteristics, Marginal Rate of Technical Substitution, Laws of Returns to Scale, Iso-cost Curves. D. Law of supply, elasticity of supply, market equilibrium, changes in equilibrium.	
4	**Alternate Goals of Managerial Firms:** (A) Profit maximization (B) Revenue maximization (C) Managerial utility maximization	**2L**
5	**Managerial Decision Making under Alternative Market Structures:** A. Characteristics of Perfect Competition, Profit Maximization in Competitive Markets, Output Decision in the Short Run, Shut Down Point, Short Run Supply for the Firm and Industry; Output Decision in the Long Run, Break Even Point, Long Run Supply for the Perfectly Competitive Industry B. Price and output decision under different market structure – Monopoly, Monopolistic Competition, Oligopoly	**4L**
6	**Pricing Decisions:** A. Price Discrimination under Monopoly, Transfer Pricing. B. Market Failure C. Game theory &Asymmetric information	**4L**

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7	**Macro Economics and some of its measures**- Introduction, Basic Concepts, Index Numbers, Concept of National Income ; Inflation - Meaning and Kinds, Measures to Control Inflation, Deflation; Monetary Policy, Fiscal Policy, Physical Policy or Direct Controls; Business Cycles and Business Decisions	**5L**
Total		**33L**

Course Outcomes:
After completion of the course, students will be able to:
After the completion of the course, students will be able to –   • Understand the roles of managers in firms   • Understand the internal and external decisions to be made by managers   • Analyze the demand and supply conditions and assess the position of a company   • Design competition strategies, including costing, pricing, product differentiation, and market environment according to the natures of products and the structures of the markets.   • Analyze real-world business problems with a systematic theoretical framework.   Make optimal business decisions by integrating the concepts of economics, mathematics and statistics.

Learning Resources:	
1	*Pindyck and Rubenfeld - Micro Economics – Pearson Education*
2	Koutsoyiannis: Modern Micro Economics
3	*Geetika,PiyaliGhosh and PurbaRoychowdhury: Managerial Economics*
4	*Damodaran, Suma – Managerial Economics – Oxford University Press*

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5	*Lipsey& Chrystal – Economics – Oxford University Press*
6	*Peterson & Lewis – Managerial Economics – Pearson Education*
7	*H.L. Ahuza- Managerial Economics, S. Chand*
8	*D.N. Dwivedi- Managerial Economics, Prentice Hall*

Course Name:	**Financial Reporting, Statement and Analysis**		
Course Code:	PGBA102	**Category:**	Management Science and Humanities Courses
Semester:	First	**Credit:**	04
L-T-P:	4-0-0	**Pre-Requisites:**	To be comfortable with numbers and "T" formats
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	The objective of this course is to provide with a framework for analyzing a firm's past performance, estimating its future performance, and valuing its equity. The course integrates key concepts from accounting, finance, economics, and business strategy and applies them to financial decision-making.
2	The course focuses on how to interpret numbers in the financial statements.

Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**

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1	**Basic Financial Accounting Concept**: Meaning and Scope of Accounting -Definition of accounting-classification of accounting- GAAP- Accounting Concepts and Conventions – Accounting Equation	**3L**
2	**Preparation of Books of Accounts**: Event-Transaction- Accounting Cycle – Golden Rule- Journal-Ledger-Trial Balance	**8L**
3	**Preparation of Financial Statement:** Trading Account-Profit & Loss Account - Balance Sheet (As per Schedule III, 2013) with Adjustment Entries - Preparation and Interpretation of Annual Report –Income Statement – Human Resource Accounting-Value Added Statement .	**12L**
4	**Financial Statement Analysis:** Comparative Statement- Common Size Statement, Trend Analysis- Ratio Analysis-Fund Flow Statement - Cash Flow Statement	**10L**
5	**Cost Concept**-Cost Unit- Technique of Costing Method of Costing- Cost Center- Cost Unit- Cost Sheet preparation and Interpretation-LIFO&FIFO	**5L**
6	**The time value of money** with Interest Formulas: Nominal and Effective Interest Rates; Capitalized Cost	**4L**
7	**The Goal of Financial Management**: Accounting profit vs Economic Profit: The Agency Relationship	**2L**
Total		**44L**

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Course Outcomes:

After completion of the course, students will be able to:	
1	Make a framework for analyzing a business and apply their knowledge systematically to value a business
2	Become familiar with the organization and disclosure of information reported in files and the notes to the financial statements. They will have a detailed understanding of assets and liabilities reported on the balance sheet.
3	Be proficient at calculating and interpreting financial ratios and will understand how to use ratios to compare a firm to its competitors and to evaluate changes in ratios over time and also have an idea of how to use these ratios to help forecast the future.
4	Able to initiate a framework for forecasting future earnings and predicting the stock market's response to quarterly earnings announcements and able to read and critically evaluate financial analyst reports on publicly listed companies.
5	Understand major interest valuation models.

Learning Resources:	
1	*M. Hanif& A. Mukherjee : Financial Accounting. McGraw Hill*
2	*S. K. Paul: Financial Accounting, New Central book Agency*
3	*S. P. Jain & K. L. Narang: Cost and Management Accounting. Kalyani Publication*
4	*P. M. Rao: Financial Statement Analysis and Reporting. PHI*
5	*T. P. Ghosh, N. Ankarnath, K. J. Mehta & Y. A. Alkafazi: Understanding IFRS Fundamentals, Wiley*
6	*Tulsian&Tulsian: Corporate Financial Reporting, S. Chand*

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7	T.Ramachandran: Management Accounting	
8	Basu& Das: Financial Accounting	
9	Khan &Jain: Accounting for Managers	

Course Name:	**OrganizationalBehaviour**		
Course Code:	PGBA103	**Category:**	Management Science and Humanities Courses
Semester:	First	**Credit:**	2
L-T-P:	2-0-0	**Pre-Requisites:**	To know the existence of organization as a place for human livelihood
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	To help the students to develop cognizance of the importance of human behavior and how to align it with basic organizational theories
2	To enable students to describe how people behave under different conditions and understand why people behave as they do
3	To provide the students to analyze specific strategic human resources demands for future action
4	To enable students to synthesize related information and evaluate options for the most logical and optimal solution such that they would be able to predict and control human behaviour and improve results

Course Contents:

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Module No.	Description of Topic	Contact Hrs.
1	**Introduction of Organizational Behavior** :Introduction, definition, historical development, An OB model;contributing disciplines, challenges and opportunities	2L
2	**Foundations of Individual Behavior**: Individual behavior; Intellectual abilities, Physical ability, the role of disabilities. Personality: Meaning, formation, determinants, traits of personality, big five and MBTI, personality attributes influencing OB. Attitude: Formation, components of attitudes, relation between attitude and behavior;Learning; Perception: Process of perception, factors influencing perception, link between perception and individual decision-making; Transactional Analysis: An Introduction to Transactional Analysis;Johari window	7L
3	**Group Dynamics and Team Development**: Group dynamics -definition and importance, types of groups, group formation, group development, group composition, group performance factors; Principle-centered-approach to team development.	3L
4	**Motivation**: Meaning, theories of motivation-needs theory, two factor theory, Theory X and Y, application of motivational theories. Job satisfaction. Case Study analysis.**Leadership**: Meaning, styles of leadership, leadership theories, trait theory, behavioral theories, managerial grid, situational theories.	5L

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5	**Power and Authority** :Definition of Power –Types of Power; Power and Politics in Organization; Organizational Stress ; Conflict: Nature of Conflict & Conflict Resolution; Case Study Analysis	3L
6	**Organizational Change and Development**: Planned Change & OB Techniques; Organizational Development; Organizational Culture: Meaning & Definition, Contemporary Models of Culture and Organizational Effectiveness; Cross Cultural Management	4L
Total		**24L**

Course Outcomes:	
After completion of the course, 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	Demonstrate the applicability of analyzing the complexities associated with management of individual behavior in the organization.
3	Analyze the complexities associated with management of the group behavior in the organization
4	Demonstrate how the organizational behavior can integrate in understanding the motivation (why) behind behavior of people in the organization.

Learning Resources:	
1	*Robbins, S.P. Judge, T.A. &Sanghi, S.: Organizational Behaviour, Pearson*

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2	*Luthans, Fred: Organizational Behaviour, McGraw Hill*
3	*Newstrom J.W. &Devis K.: Organizational Behavior, McGraw Hill*
4	*Aswathappa ,K : OrganisationalBehaviour ,Himalaya Publishing House*
5	*Shukla, Madhukar : Understanding Organizations – Organizational Theory & Practice in India, Prentice Hall*
6	*Sekharan, Uma: OrganisationalBehaviour , The McGraw –Hill Companies*

Course Name:	Business Law		
Course Code:	PGBA 104	**Category:**	Management Science and Humanities Courses
Semester:	First	**Credit:**	2
L-T-P:	2-0-0	**Pre-Requisites:**	High School Civics
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	To know the legal system and the legal environment of business
2	To know about different types of contract
3	To evaluate and analyze about sales contract
4	To investigate about commercial paper and negotiable instruments
5	To evaluate about business environment and intellectual property regimen

Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**

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1	**Introduction to Business Law**: Introduction, Meaning and Nature of Law. Legal Aspects of Business - Society, State and Law, Enforceability of Law, Mercantile Law	2L
2	**Indian Contract Act, 1872** – Contract defined, Elements of valid contract, Classification of contracts, Offer and acceptance, Consideration, Capacity to contracts, Free consent, Legality of object and consideration, Illegal agreements, Termination of contracts, Breach of contract, Indemnity and guarantee, Laws of agency, Power of Attorney	4L
3	**Sale of Goods Act, 1930**: introduction, contract of sale, agreement to sell, documents of title, conditions and warranties, doctrine of caveat emptor: transfer of property: significance of transfer of ownership, rules; performance: delivery of goods by seller, acceptance of delivery by buyer; remedies for breach: Rights of Unpaid-sellers.	4L
4	**Negotiable Instruments Act, 1881** – Definition and characteristics of different types of negotiable instruments, Parties to a negotiable instrument and their capacity, Dishonour of cheques, Discharge from Liability, Crossing of cheques, Bank drafts and Banker's cheques, Endorsement, Dishonour, Insurance Laws	3L
5	**Companies Act, 1956** – Nature and kinds of companies, Formation, Memorandum, Articles, Prospectus, Capital – shares, debentures, borrowing powers, minimum subscription, Appointment of Directors; Winding up of companies (Including Amendments)	3L
6	**Consumer Protection Act, 1986**: definition of consumer, goods and defect, services and deficiency, consumer forums, procedure to approach consumer forumsCompanies Act, 1956: definition of a company, formation of company, memorandum and articles of associations of a company, types of companies, management of companies: directors and meetings; winding up of companies	4L
7	**Intellectual Property Rights**- Laws relating to Patents (Patent Act, 1970), Trademarks(Trademark Act, 1999), Copyright (Copyright Act, 1957), Geographical Indications(Registration &Protection) Act, 1999. Intellectual Property Regime (WTO Guidelines),Rights from Patents, Infringement of Copy Right	4L
Total		**24L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Arrange the basics elements of contracts and classifications of contract
2	Gather knowledge on evolvement of business enterprises
3	Enhance knowledge on bailment and pledge

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| 4 | Proper knowledge on copyrights and trademarks |
| 5 | Gain wisdom on various business protection laws |

Learning Resources:	
1	Kuchhal MC – Business Law (Vikas), 2nd ed
2	Sen&Mitra: Commercial law; World Press 2. Pathak: Legal Aspect of Business, TMH
3	Pillai&Bagavathi: Business law, S. Chand
4	N.D.Kapoor, Elements of mercantile law – Sultan chand and company, New Delhi
5	Tlsian- Business Law (Tata McGraw-Hill, 2nd edition)
6	Das &Ghosh: Business Regulatory Framework: Ocean Publication, Delhi
7	Kuchhal- Mercantile Law (Vikas), 1998, 4th ed.

Course Name:	**Introduction to Business Analytics**		
Course Code:	PGBA 105	**Category:**	MBA(CSE/IT/MCA)
Semester:	First	**Credit:**	2
L-T-P:	2-0-0	**Pre-Requisites:**	Basic concepts of Computer
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	To facilitate students with the basic concept of a Business Analytics
2	To develop the ability to apply knowledge of Analytics for solution of Business problems.

Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**

1	**Business Intelligence:**
	 • Definitions and Examples in Business Intelligence
	 • Need, Features and Use of Business Intelligence (BI)
	 • BI Component
	   o Data Warehouse
	   o Business Analytics
	   o Business Performance Management
	 o User Interface.
		5

2	**Business Analytics:** • Introduction to Business Analytics (BA) – Need • Components (Business Context, Technology, Data Science). • Types (Descriptive, Predictive and Prescriptive).	5

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	• Business Intelligence versus Business Analytics.
	• Transaction Processing v/s Analytic Processing
	   o OLTP v/s OLAP
	   o OLAP Operations
	   o Data models for OLTP (ER model) and OLAP (Star & Snowflake Schema)	

3	**Types of Digital Data:** Definition, Sources, Storage and Characteristics of Structured, Unstructured and Semi Structured Data **Data Warehouse:** • Definition, characteristics, framework • Data lake **Business Reporting, Visual Analytics:** •Definition, concepts • Different types of charts and graphs • Emergence of data visualization and visual analytics	6
4	**Data Mining:** • Concepts and applications • Data mining process. **Text & Web Analytics:** •Text analytics and text mining overview • Text mining applications • Web mining overview • Social media analytics • Sentiment analysis overview **Big Data Analytics:** •Definition and characteristics of big data • Fundamentals of big data analytics	6
5	**Business Performance Management:** •Business performance management cycle • KPI, Dashboard **Analytics in Business Support Functions:** • Sales & Marketing Analytics HR Analytics • Financial Analytics • Production and operations analytics • Analytics in Industries: Telecom, Retail, Healthcare, Financial Services	6
Total		**28L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Develop domain knowledge of various technology and its application to facilitates managerial decision /MIS
2	Enhance capabilities for innovative use of I.T

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3	Understand the significance of global platform for data retrieval/process among different business cultures of the world
4	Understand of ethics and prevention of fraud through technology, theft of data etc
5	Able communication for data driven decision making
6	Encourage cross functional collaboration to enhance efficiency and productivity.

Learning Resources:	
1	Ramesh Sharda, DursunDelen, Efraim Turban, Business Intelligence: A Managerial Perspective on Analytics, Pearson
2	R.N.Prasad and SeemaAcharya, Fundamentals of Business Analytics, Wiley
3	U. Dinesh Kumar, Business Analytics – The Science of Data Driven Decision Making, Wiley
4	Anil Maheshwari, Data Analytics, McGraw Hill
5	JesperThorlund&Gert H.N. Laursen, Business Analytics for Managers: Taking Business Intelligence Beyond, Wiley
6	Sahil Raj, Business Analytics, Cengage
7	James R. Evans, Business Analytics, Pearson
8	Weaving Analytics for Effective Decision Making-By Arindam Banerjee and Tanushri Banerjee
9	Business Analytics-Text and Cases: By Arindam Banerjee and Tanushri Banerjee

Course Name:	Database Management System & SQL		
Course Code:	PGBA 106	**Category:**	MBA Courses(CSE/IT/MCA)
Semester:	First	**Credit:**	03
L-T-P:	**3-0-0**	**Pre-Requisites:**	Basic understanding of database management
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	To understand the different issues involved in the design and implementation of a database

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	system.
2	Study the physical and logical database designs, database modeling, relational, hierarchical, and network models
3	Understand and use data manipulation language to query, update, and manage a database
4	Develop an understanding of essential DBMS concepts such as: database security, integrity, concurrency

Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**
1	**Introduction** Introduction and applications of DBMS, Purpose of data base, Data, Independence, Database System architecture- levels, Mappings, Database, users and DBA.	**4L**
2	**Entity Relationship Model** Basic Concepts , Constraints, Keys , Design Issues , Entity Relationship Diagram, Weak Entity Sets, Extended E-R Features , Design of an E-R Database Schema Reduction of an E-R Schema to Tables.	**4L**
3	**Relational Model** Structure of Relational Databases, The Relational Algebra, Extended Relational Algebra Operations, Modifications of the Database Views, The Tuple Relational Calculus , The Domain Relational Calculus.	**5L**
4	**SQL** Basics of SQL, DDL,DML,DCL, structure – creation, alteration, defining constraints – Primary key, foreign key, unique, not null, check, IN operator, Functions - aggregate functions, Built-in functions – numeric, date, string functions, set operations, sub-queries, correlated sub-queries, Use of group by, having, order by, join and its types, , Any, All , view and its types. transaction control commands –	**5L**

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	Commit, Rollback, Savepoint.	
5	**Relational Database Design** First Normal Form, Pitfall of Relational-Database Condition, Functional Dependencies, Decomposition, Desirable Properties of Decomposition, Boyce-Codd Normal Form ,Third Normal Form.	**6L**
6	**PL/SQL Concepts** Introduction, Cursors, Stored Procedures, Stored Functions, database Triggers.	**6L**
7	**Overview of Storage and Indexing** Data on External Storage – File Organization and Indexing – Cluster Indexes, Primary and Secondary Indexes – Index data Structures – Hash Based Indexing – Tree base Indexing.	**2L**
8	**Transaction Management** Transaction concepts, properties of transactions, serializability of transactions, testing for serializability, System recovery, Two- Phase Commit protocol, Recovery and Atomicity, Log-based recovery, concurrent executions of transactions and related problems, Locking mechanism, solution to concurrency related problems, deadlock, , two-phase locking protocol, Isolation, Intent locking.	**4L**
9	**Query Processing and Query Optimization** Overview, Measures of Query Cost	**2L**
Total		**38L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Understand database concepts and structures and query language
2	To design and build a simple database system and demonstrate competence with the

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	fundamental tasks involved with modeling, designing, and implementing a DBMS.
3	Understand Functional Dependency and Functional Decomposition.
4	Apply various Normalization techniques
5	Perform PL/SQL programming using concept of Cursor Management, Error Handling, Package and Triggers
6	Execute various advance SQL queries related to Transaction Processing & Locking using concept of Concurrency control.

Learning Resources:	
1	A Silberschatz, H Korth, S Sudarshan, "Database System and Concepts"
2	Rob, Coronel, "Database Systems"
3	C. J. Date, "An Introduction to Database Systems"
4	Raghu Ramakrishnan,JohannesGehrke, "Database Management Systems"
5	R. Elmasri and S.B. Navathe ,"Fundamentals of Database Systems"

Course Name:	Business Statistics & Quantitative Techniques		
Course Code:	PGBA 107	Category:	Basic Science Courses
Semester:	First	Credit:	03
L-T-P:	3-0-0	Pre-Requisites:	High School Mathematics
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

Course Objectives:	
1	To impart knowledge of basic statistical tools & techniques
2	To focus on more practical than theoretical.
3	To Learn application in Business decision process and Management.
4	To do statistical analysis informs the judgment of the ultimate decision-maker
5	Conceptual underpinnings of statistical analysis will be required

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Course Contents:		
Module No.	**Description of Topic**	**Contact Hrs.**
1	**Introduction to Statistics:** ➢ Collection of Data and Classification ➢ Measures of Central Tendency- Mean, Median, Mode ➢ Measures of Dispersion in Frequency Distribution- Variance, Standard Deviation	**8L**
2	**Theory of Probability:** ➢ Total probability theorem (Addition Rule) ➢ Conditional probability, Multiplication &Baye's Theorem ➢ Introduction to Random Variables- Discrete and continuous RVs, p.m.f. and p.d.f., c.d.f., Expectation and Variance ➢ Bernouli's Trial, Binomial, Poisson and Normal Distribution	**8L**
3	**Bivariate Data Analysis:** ➢ Covariance, Karl Pearson's Correlation Coefficient, Rank Correlation, Regression (linear) ➢ Least Square Curve Fitting- Linear and Non-linear	**8L**
4	**Test of Hypothesis:** ➢ Introduction to Statistic ➢ Estimation of Parameters- Unbiased and Consistent Estimator ➢ Hypothesis Testing – Statistical Hypothesis, Null Hypothesis and Alternative Hypothesis; Type-I and Type-II Error, Level of Significance, Acceptance and Critical Region; Test for Single Mean & Two Means ➢ Test of Goodness of Fit- Chi-Square test ➢ F test – ANOVA	**8L**
5	**Tests:** ➢ Index Numbers- Unweighted and Weighted-Test of Consistency ➢ Time Series Analysis- Measurement of Secular Trend-Seasonal Variations	**8L**
Total		**40L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	Facilitate Objective Solutions in Business Decision Making
2	Enhance Knowledge in Probability Theory.
3	Describe Normality and its Distribution Concepts
4	Stress The Need For Collection Of Data and its Dispersion Techniques

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5	Apply Time Series Analysis in Market Prediction Rates
6	Draw Conclusions over the Hypothetical Situations
7	Extract the variance among the factors of study concerned

Learning Resources:	
1	R.S.N. Pillai, V. Bagavathi," Statistics", S.Chand Limited, 7th Ed,2008
2	N.D. Vohra, "Business Statistics", Tata McGraw-Hill Education, 2nd Ed,2013
3	G. V. Shenoy, Uma K. Srivastava, S. C. Sharma," Business Statistics", New Age International,2nd Ed, 2005
4	Beri, "Business Statistics" Tata McGraw Hill,2nd Ed,2009
REFERENCE BOOKS:	
1.	Keller. G,"Statistics for Management", Cengage Learning, 1st Ed, 2009
2.	J. K Sharma, "Business Statistics", Pearson, 2nd Ed, 2010.
3.	Arora PN &others," Complete Statistical Methods", S. Chand, 3rd Ed, 2010

Course Name:	**Corporate Communications**		
Course Code:	PGBA108	**Category:**	Management Science & Humanities courses
Semester:	First	**Credit:**	2
L-T-P:	2-0-0	**Pre-Requisites:**	1.Students must have basic command of English to talk about day-to-day events and experiences of life. 2.Comprehend Lectures delivered in English. 3.Read and understand relevant materials written in English.
Full Marks:	100		
Examination Scheme:	Semester Examination: 70	Continuous Assessment: 25	Attendance: 05

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Course Objectives:	
1	To develop documented communication Skills so that it can be used suitably in Organizational life
2	Groom them as effective management professionals

Course Contents:		

Module No.	Description of Topic	Contact Hrs.
1	**Basic Principles of Effective Communication**: Introduction, Definition, Purposes, Types of communication, Understanding Communication, the Communication Process, Models and Barriers to Communication. **The Nature of Business Communication**: Introduction, Types of Business Communication, Communication Network in Organizations Types and Channels of Communication: Introduction, Types of Communication, Classification of Communication Channels.	2L
2	**The Importance of Communication in the Workplace**, Overview and objectives, Intrapersonal communication, Interpersonal Communication, Characteristics of successful communication, Importance of communication in management – communication structure in organization – communication in crisis.	1L
3	**Oral communication** -What is oral Communication – principles of successful oral communication – barriers to communication – what is conversation control – reflection and empathy: two sides of effective oral communication – effective listening – non – verbal communication., conducting seminars and conferences- Procedure of Regulating speech - evaluating oral presentation - Drafting speech	1L
4	**The Importance of Listening in the Workplace**: Introduction, what is listening? Barriers to Listening, Strategies for Effective Listening, Listening in a Business Context	1L

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5	**Written Business Communication**: Introduction, General Principles of Writing, Principles of Business Writing, Purpose of writing – clarity in writing,Stages of Writing, Composing Business Messages, Preparing Notes, Style, Punctuation, Using simple words, Proof Reading. Principles of effective writing – approaching the writing process systematically - The 3X3 writing process for business communication: Pre writing – Writing – Revising – Specific writing features – coherence – electronic writing process.	2L
6	**Internal Business Communication**: Guidelines for Meetings: Introduction, Types of Meetings, Before the Meeting, During the Meeting, After the Meeting, and Common Mistakes made at Meetings, Conducting Meetings, Procedure - preparing Agenda, Minutes and resolutions	2L
7	**Internal Business Communication** – Electronic Media and Stakeholder Communication: Introduction, what is an Intranet? Communicating through Email, Communication with Stakeholders, Circulars and Notices, Memos, Agenda and Minutes	2L
8	**External Business Communication** – Writing Business Letters: Introduction, Principles of Business Letter Writing, Types of Business Letters, Format for Business Letters, Writing routine and persuasive letters, Styles, Types – Request, Enquiry, Placing Order, Instruction, Action, Complaint, Adjustment, Sales,collection letters, Reference, Good News & Bad News, positive and negative messages.Using Facsimiles (Fax), E-mail. External Communication - Employment Communication – Resumes and Cover Letters: Introduction,Writing a Resume, Writing Job Application Letters, Other Letters about Employment	6L
9	**Internal and External Business -Communication** – Writing Business Reports: Introduction,Types of Business Reports, Format for Business Reports, Steps in Report Preparation - what is a report purpose, kinds and objectives of reports.	5L

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	Report Writing – Report Planning, Types of Reports, developing an outline, Nature of Headings, Ordering of Points, Logical Sequencing, Graphs, Charts, Executive Summary, List of Illustration, Report Writing. Structure of reports - long & short reports - formal & informal reports - writing research reports, technical reports, project reports - norms for including exhibits & appendices, Acknowledgement	
10	**Other Forms of External Business Communication**: Introduction, Communication with Media through News Releases, Communication about the Organization through Advertising Handling Business Information – Annual Report, House Magazine, Press Release, Press Report	2L
	TOTAL	**24L**

Course Outcomes:	
After completion of the course, students will be able to:	
1	To demonstrate his/her ability to write error free while making an optimum use of correct Business Vocabulary & Grammar.
2	Distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.
3	Distinguish among various levels of organizational communication and communication barriers while developing an understanding of Communication as a process in an organization.
4	Stimulate their Critical thinking by designing and developing clean and lucid writing skills.

Learning Resources:	
1	Monipally: Business Communication, Tata McGraw Hill

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2	Business Communication Essentials (6th Edition) by Courtland L. Bovee& John V. Thill, Pearson
3	Business English: A Complete Guide for All Business and Professional Communications by Prem P Bhalla; UBS Publishers
4	The Effective Presentation: Talk your way to success by AshaKaul; SAGE
5	Madhukar: Business Communications; Vikas Publishing House
6	Senguin J: Business Communication; Allied Publishers
7	Assignment & Thesis Writing by Jonathan Anderson& Millicent Poole.
8	Business Communication : Rajendrapal&Korlahalli

Course Name:	**Programming Practice Lab with Python**		
Course Code:	PGBA 191	**Category:**	MBA Courses
Semester:	First	**Credit:**	02
L-T-P:	**0-0-4**	**Pre-Requisites:**	Familiar with a Basic computer language
Full Marks:	100		
Examination Scheme:	Semester Examination: 60	Continuous Assessment: 35	Attendance: 05

Course Objectives:	
1	a)Master the fundamentals of writing Python scripts b)Learn core Python scripting elements such as variables and flow control structures
2	a)Use Python to read and write files b)Make their code robust by handling errors and exceptions properly
3	a)Explore Python's object-oriented features

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	b)Search text using regular expressions
4	Understand the Exception Handling and Object oriented concept of Python.

Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	**Python Programming:-** **Introduction :-** 1.History 2.Features 3.Setting up path 4.Working with Python 5.Basic Syntax 6.Variable and Data Types 7. Operator	**4**
2	**Conditional Statements** If ,If- else, Nested if-else, Looping, For, While, Nested loops **Control Statements** Break, Continue, pass	**4**
3	**String Manipulation** Accessing Strings, Basic Operations, String slices, Function and Methods	**4**
4	**Lists** Introduction, Accessing list, Operations, Working with lists, Function and Methods **Tuple**	**8**

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	Introduction, Accessing tuples, Operations, Working, Functions and Methods **Dictionaries** Introduction, Accessing values in dictionaries, Working with dictionaries, Properties	
5	**Functions** Defining a function, Calling a function, Types of functions, Function Arguments, Anonymous functions, Global and local variables, Recursion, Some recursive codes ,Recursion vs Iteration	**8**
6	**Exception Handling** Exception, Exception Handling, Except clause, Try , finally clause, User Defined Exceptions	**4**
7	**The Object-Oriented Approach: Classes, Methods, Objects** Basic concepts of object programming, Implementation of Properties of Object-oriented Programming, Inheritance,	**4**
8	**File Handling** Introduction to File Handling, Data Files, Opening and Closing Files, Reading and Writing Files	**4**
9	**Data Visualization using Python** Concept of Data Visualization, Using Pyplot of Matplotlib library, Creating Line chart, Bar chart and Pie chart using pyplot interface, Customizing the Plot	**4**
Total		**44P**

Course Outcomes:	
At the end of the course, the student should be able to:	
1	Knowledge of the structure and model of the Pythonlanguage.

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2	Populate different functions using PYTHON
3	Acquiring Inheritance concept with real life examples using Python.
4	Knowledge of different Charts alongwith the comparison of different charts.

Learning Resources:	
1	"Core Python Programming" by R.NageswarRao
2	"Python:the complete reference" by Martin C.Brown
3	"Let us Python" by YashvantKanetkar

Course Name:	DBMS Lab		
Course Code:	PGBA 192	**Category:**	MBA Courses(CSE/IT/MCA)
Semester:	First	**Credit:**	02
L-T-P:	**0-0-4**	**Pre-Requisites:**	Basic understanding in database management
Full Marks:	100		
Examination Scheme:	Semester Examination: 60	Continuous Assessment: 35	Attendance: 05

Course Objectives:	
1	Learn to create and use a database.
2	Be familiarized with a query language.
3	Have a good understanding of DDL ,DML and DCL commands.
4	Familiarize advanced SQL queries.

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Course Contents:

Module No.	Description of Topic	Contact Hrs.
1	**StructuredQuery Language** 1. Creating Database 2. Creating a Table 3. Specifying Relational 4. Data Types 5. Specifying Constraints 6. Creating Indexes .	**4**
2	**Table and Record Handling** 1. INSERT statement 2. Using SELECT and INSERT together 3. DELETE, UPDATE, TRUNCATE statements 4. DROP, ALTER statements .	**8**
3	**Retrieving Data from a Database** 1. The SELECT statement 2. Using the WHERE clause 3. Using Logical Operators in the WHERE clause 4. Using IN, BETWEEN, LIKE , ORDER BY, GROUP BY and HAVING Clause 5. Using Aggregate Functions 6. Combining Tables Using JOINS 7. Subqueries	**12**
4	**Database Management** 1.Creating Views 2. Creating Column Aliases 3. Creating Database 4. Users 5.Using GRANT and REVOKE commands – Commit, Rollback, Savepoint.	**8**

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5	**PL/SQL Concepts** 1. Introduction 2. Cursors 3. Stored Procedures 4. Stored Functions 5. database Triggers.	**16**
Total		**48P**

Course Outcomes:	
At the end of the course, the student should be able to:	
1	Design and implement a database schema for a given problem-domain
2	Populate and query a database
3	Create and maintain tables using PL/SQL.

Learning Resources:	
1	Beginning SQL Programming,Kauffman, SPD/WROX
2	Ivan Bayross, "SQL, PL/SQL the Programming Language of Oracle"