

Semester Credits	24							
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Course: Basics of Mathematics & Statistics

Code: BBA GB 101

Course Objective: The course is designed to provide a basic applied knowledge mathematics. The students will be to apply the number system & basic algebra, set theory, determinants and matrices, limits, continuity, differentiation & Integration, data frequency & distribution and measures of central tendency and measures of dispersion for solving business problems.

statistical problems

Sl	Course Outcome	Mapped modules
1	Remembering the fundamentals of Mathematics or Statistics	M1,M2,M3,M4,M5,M6
2	Remembering & Understanding the number system & basic Algebra	M1,M2
3	Remembering & Understanding the set theory, determinants and matrices, limits, continuity, differentiation & Integration	M3,M4
4	Remembering & Understanding of data frequency, distribution & measures of central tendency and measures of dispersion for solving business problems	M5, M6
5	Understanding the analysis of basic mathematics	M1, M2, M3, M4
6	Understanding and application of basic mathematics & statistics	M4, M5,M6

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	The Number System and Basic Algebra	8	10	1	
M 2	Set Theory and Permutation and Combination	10	15	1,2	
M 3	Determinants and Matrices	10	15	1,2	
M 4	Limits, Continuity, Differentiation and Integration	16	35	1,2	
M 5	Data, Frequency Distribution	6	10	2,3	
M 6	Measures of Central Tendency and Measures of Dispersion	10	15	2,3	
		60	100		

Basic Mathematics and Statistics

6 credits

BBA GB 101

Module 1:

The Number System – Positive and Negative Integers, Fractions, Rational and Irrational Numbers, Real Numbers, Problems Involving the Concept of Real Numbers.

Basic Algebra – Algebraic Identities, Simple Factorizations; Equations: Linear and Quadratic (in Single Variable and Simultaneous Equations). Surds and Indices; Logarithms and Their Properties (Including Change of Base); Problems Based on Logarithms. (8L)

Module 2:

Set Theory-Introduction; Representation of sets; Subsets and supersets; Universal and Null sets; Basic operations on sets; Laws of set algebra; Cardinal number of a set; Venn Diagrams; Application of set theory to the solution of problems

Permutations and Combinations – Fundamental principle of counting; Factorial notation. Permutation: Permutation of n different things; of things not all different; restricted permutations; circular permutations. Combination: different formulas on combination; complementary combination; restricted combination; Division into groups. Mixed problems on permutation and combination (10 L)

Module 3:

Determinants- Determinants of order 2 and 3; minors and cofactors; expansion of determinants; properties of determinants; Cramer's rule for solving simultaneous equations in two or three variables

Matrices- Different types of matrices; Matrix Algebra – addition, subtraction and multiplication of matrices; Singular and non-singular matrices; adjoint and inverse of a matrix; elementary row / column operations; Solution of a system of linear equations using matrix algebra. (10L)

Module 4:

Limits: Notion & Meaning of Limits; Fundamental Theorems on Limits; Evaluation of Limits of Algebraic & Logarithmic Functions.

Continuity: Continuity of a function at a point $x=a$ & in an interval.

Differentiation: Meaning & geometrical interpretation of differentiation; standard derivatives (excluding trigonometric functions); rules for calculating derivatives; logarithmic differentiation.

Integration: Meaning, Standard formulas, Substitution, Integration by parts (Excluding Trigonometric functions) (16 L)

Module 5:

Data-Collection, Editing and Presentation of Data: Primary data and secondary data; Methods of collection; Scrutiny of data. Presentation of data: textual and tabular presentations; Construction of a table and the different components of a table. Diagrammatic representation of data: Line diagrams, Bar diagrams, Pie charts and divided-bar diagrams.

Frequency Distributions- Attribute and variable; Frequency distribution of an attribute; Discrete and continuous variables; Frequency distributions of discrete and continuous variables; Bivariate and Multivariate Frequency Distributions. Diagrammatic representation of a frequency distribution: case of an attribute; case of a discrete variable: column diagram, frequency polygon and step diagram; case of a continuous variable: histogram and ogive. (6L)

Module 6:

Measures of Central Tendency- Definition and utility; Characteristics of a good average; Different measures of average; Arithmetic Mean; Median; Other positional measures – quartiles, deciles, percentiles; Mode; Relation between Mean, Median and Mode; Geometric and Harmonic Mean. Choice of a suitable measure of central tendency.

Measures of Dispersion- Meaning and objective of dispersion; Characteristics of a good measure of dispersion; Different measures of dispersion – Range, Quartile deviation, Mean deviation, Mean Absolute deviation, Standard deviation; Comparison of the different measures of dispersion. Measures of relative dispersion – Coefficient of Variation. Combined mean and standard deviation, Combined mean and standard deviation. (10 L)

Suggested Readings

1. H. S. Hall & S. R. Knight – Higher Algebra; Radha Publishing House
2. Reena Garg, Engineering Mathematics, Khanna Publishing House
3. Sancheti & Kapoor – Business Mathematics; Sultan Chand & Company
4. Dowling – Introduction to Mathematical Economics; Schaum's Outline Series
5. R. S. Soni – Business Mathematics – Pitambar Publishing House
6. Holden – Mathematics for Business & Economics; Macmillan India, New Delhi.
7. R.G.D Allen – Basic Mathematics; Macmillan, New Delhi

Course: **Business Management**

Code: BBA GB 102

Course Objective: The course is designed to provide a working knowledge and skills of Management Science and understanding the organisational behaviour, group dynamics and change in the organisation. The students will be able to evaluate various functions of management and will be able to examine change management processes.

Sl	Course Outcome	Mapped modules
1	Remembering the broad concepts and various functions of management	M1, M2
2	Understanding the needs and various management approaches	M2,M3,M4,M5
3	Understanding and identifying the various roles- Individual and group	M4,M5
4	Explain and analyse the organisation development	M2,M3,M4,M5
5	Identify and analyse the need for change	M2,M3,M4,M5,M6
6	Contribute as individual and as group to business & development	M4,M5,M6

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	Concept and Nature of Management	9	20	1,2	
M 2	Functions of Management	24	30	1,2	
M 3	Understanding Organizational Behavior (OB)	3	5	1,2	
M 4	Individual in the Organization	17	25	1,2	
M 5	Groups in the Organization	3	5	1,2,3	
M 6	Change in the Organization	4	15	3,4	
		60	100		

Paper: Business Management

[Syllabus referred: BBA – GB 102, BBA (N) – 301, BBA (N) – 203]

Credits: 6

Module I: Concept and Nature of Management

(a) Meaning & Definition of the term Management, Management as a Science or an Art, Management as a Profession, Management as a Process, Difference between Management & Administration; Levels of Management, Roles of a Manager, Quality of a good Manager, Significance of Management, Limitations of Management, Business Environment and its interaction with Management. (5L)

(b) Management Theory: Approaches to Management – Classical, Neo-classical and Modern Contributors to Management Thought – Taylor and Scientific Theory, Fayol's and Administrative Theory, Peter Drucker and Modern Management Thought. (4L)

Module II: Functions of Management

(a) Planning: Meaning, Definition, Process, Types, Principles, Significance & Limitations of Planning; Strategic Planning – Meaning & Process, MBO – Meaning, Process and Requirements for Implementation, Planning Premises – Meaning & Types, Forecasting – Meaning & Techniques. Decision Making – Meaning, Types, Process, Significance & Limitations. (4L)

(b) Organization – Meaning, Process, Principles, Organization Structure – Determinants and Forms: Line, Functional, Line & Staff, Project, Matrix and Committees; Formal and Informal Organization; Departmentation – Meaning and Bases; Span of Control – Meaning and Factors Influencing; Authority, Responsibility and Accountability; Delegation – Meaning, Process; Principles; Centralization and Decentralization – Meaning; Degree of Decentralization; Difference between Delegation and Decentralization. (5L)

(c) Motivation: Meaning, Definition, Features, Importance & Factors of Motivation, Theories – (Maslow, Alderfer, Herzberg, McClelland, Porter & Lawler, Vroom), Financial and non-financial incentives of Motivation. (4L)

(d) Leadership- Meaning & Definition of Leadership, Qualities of a Good Leader, Trait Perspective of Leadership, Behavioural Perspective of Leadership, Ohio & Michigan Studies, Managerial Grid, Contingency Perspective of Leadership, Situational Leadership and Path & Goal of Leadership, Transformational, Transactional, Charismatic Leaders. (5L)

(e) Communication – Type, process, barriers, Strategies to overcome the Barriers. (3L)

(f) Controlling – Meaning, Steps, Types, Techniques, Significance, Limitations. (3L)

Module III: Understanding Organizational Behavior (OB)

& Definition of Organization and Organizational Behavior (OB), Evolution of OB as a discipline, Contribution from other disciplines, Emerging issues in OB. (3L)

Module IV: Individual in the Organization

a) Personality: Definition and Determinants Personality, Approaches to understanding of Personality – The Big Five Model, DISC and FIRO-B, Types of Problem Solving Behaviour and Other Personality Traits. (4L)

b) Learning: Meaning and Definition of Learning, Learning Process, Factors affecting Learning, Principles of Learning, Theories – Connectionism, Classical and Operant Conditioning, Schedule of Reinforcement. (4L)

c) Attitudes & Values: Meaning & Definition of Attitude, Formation of Attitudes, ABC Model, Cognitive Dissonance, Changing of Self and Others Attitudes, Work Attitudes, Job Satisfaction, Organization Commitment. Meaning & Definition Values- Relationship between Attitudes and Values. (3L)

d) Perception: Meaning & Definition of Perception, Basic stages of Perceptual Process, Perceptual Selection, Perceptual Organization, Perceptual Interpretation, Attribution Process, Organizational Applications. (4L)

e) Stress: Concept – Individual & Group Stress – Coping with Stress, Strategies to Overcome Stress. (2L)

Module V: Groups in the Organization

Group Dynamics: Meaning, Definition ,Types& Functions of Groups, Stages of Group Formation, Group Processes, Group Norms, Group Roles, Group Cohesiveness, Group Size, Threats to Group Effectiveness, Evolution of Groups into Teams.

(4L)

Module VI: Change in the Organization

Organizational Change- Meaning & Importance of Change, Resistance to Change, Overcoming Resistance to Change.

(3L)

Suggested Readings

1. Wehrich and Koontz, et al: Essentials of Management; Tata McGraw Hill
2. Robbins, S. P: Management, Prentice Hall.
3. Stoner, J and Freeman, R. E: Management; Prentice-Hall
4. Daft, R. L: Management, Thomson
5. Aswathappa, K: Organizational Behaviour (Text, Cases and Games).Bangalore: Himalaya Publication.
6. Greenberg, J., & Baron, R. A. (2008). Behaviour in Organizations, Pearson.
7. Robbins, S. P.: Essentials of Organizational Behaviour, Prentice Hall.

Course: English Communication

Code : BBA GB 164

Course Objective: The course is designed to develop the student's communicative competence in English by giving adequate exposure in the four communication skills - LSRW - listening, speaking, reading and writing and the related sub-skills, thereby, enabling the student to apply the acquired communicative proficiency in social and professional contexts.

Sl	Course Outcome	Mapped modules
1	Students will be able to Remember & Understand the basic concepts of the usage of English grammar & vocabulary in communication.	M1
2	Students will be able to Comprehend facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating the main ideas given in written texts.	M1,M2
3	Students will be able to Synthesise and Apply acquired linguistic knowledge in producing various types of written texts	M1, M3
4	Students will be able to Comprehend facts and ideas from aural inputs and Synthesise and Apply acquired linguistic knowledge in giving spoken response	M1, M4

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	Functional Grammar & Vocabulary	2	10	1,2	
M 2	Reading Skills	2	20	1,2	
M 3	Writing Skills	8	40	2,3,4	
M 4	Listening & Speaking Skills	8	30	2,3,4	
		20	100		

Detailed Syllabus

Paper: English Communication

Code: BBA GB 164

Contact Hours / Week: 1L + 1T

Credits: 2

Module 1 : Functional Grammar & Vocabulary : Tense: Formation and application; Affirmative / Negative / Interrogative formation; Modals and their usage; Conditional sentences; Direct and indirect speech; Active and passive voice; usage of common phrasal verbs, synonyms & antonyms.

1L + 1T

Module 2 : Reading Skills: Comprehension passages; reading and understanding articles from technical writing. Interpreting texts: analytic texts, descriptive texts, discursive texts; SQ3R reading strategy.

1L + 1T

Module 3 : Writing Skills: Writing business letters - enquiries, complaints, sales, adjustment, collection letters, replies to complaint & enquiry letters; Job applications, Résumé, Memo, Notice, Agenda, Reports – types & format, E-mail etiquette, advertisements

4L + 4T

Module 4 : Listening & Speaking

Listening: Listening process, Types of listening; Barriers in effective listening, strategies of effective listening

Speaking: Presentations, Extempore, Role-plays, GD, Interview

4L + 4T

Suggested readings:

1. Bhatnagar, M &Bhatnagar, N (2010) Communicative English for Engineers and Professionals. New Delhi: Pearson Education.
2. Raman, M & Sharma, S (2017) Technical Communication. New Delhi: OUP.
3. Kaul, Asha (2005) The Effective Presentation: Talk your way to success. New Delhi: SAGE Publication.
4. Sethi, J &Dhamija, P.V. (2001), A Course in Phonetics and Spoken English. New Delhi:PHI.
5. Murphy, Raymond (2015), English Grammar in Use. Cambridge: Cambridge University Press.