Bachelor of Business Administration
BBA (ITM) - Semester-I

Course Code	UM01DBBI72	Title of the Course	Application of Mathematics in Information Technology
Total Credits of the Course	03	Hours per Week	03

Course Objectives:	1. To understand the basic concepts of Mathematics. 2. To improve logic using Mathematics application. 3. To have a proper understanding of mathematical applications in IT, Finance, Commerce and Management. 4. The teaching of selected areas of mathematics (such as calculus) as an example of the intellectual achievements of the modern world

Course Content		
Unit	Description	Weightage* (%)
1.	**Set Theory and Matrix** **Set Theory** Concept of number system (N, Z, Q, R), sets, subsets, equality of two sets, null set, universal set, complement of a set, union and intersection of sets, difference of two sets, venn diagram, De Morgan and Distributive laws (examples only) **Matrix** Types of matrices- Row, column, Square, null, Identity, Diagonal and scalar matrix. Transpose of a matrix. Examples of Addition, Subtraction and multiplication of matrices.	25%
2.	**Mathematics in finance** Simple and Compound interest, nominal and effective rates of interest, Concept of present value and amount of a sum, Annuity (only for a fixed period of time), Types of annuity-Future and present value of annuity, Sinking funds (with equal payments and equal time intervals)	25%
3.	**Linear Programming Problem** LPP: Meaning, nature, limitations of LP, Uses of LP, Definitions: solution, constraints, BFS, FS, Objective functions Solution of LPP by Graphical Method -Transportation Problem- N-W corner rule, Matrix Minima Method, Vogel's Approximation Method.	25%
4.	**Derivatives** Derivatives of explicit, composite and implicit functions, Derivatives of exponential and arithmetic functions, Rules of differentiation (without proof), **Assignment Problem** Only balanced problem by Hungarian Method (Maximum and Minimum)	25%
Teaching- Learning Methodology: (1) ICT Based Teaching Learning Approach		

(2) Blended Teaching Learning Approach for Calculation.	

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Viva(MCQ), Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understand the foundations of mathematics
2.	Be able to perform basic computations in higher mathematics
3.	Develop and maintain problem-solving skills
4.	Use mathematical ideas to model real-world problems

Suggested References:	
Sr.No.	References
1.	Business Mathematics, V.K. Kapoor: Sultan Chand and sons, New Delhi
2.	Business Mathematics, A.G.Patel & G.C.Patel Atul Prakashan
3.	Sharma S.D. Operations Research. Kedar Nath Ram Nath & Co. Meerut

E References:
1. https://www.pdfdrive.com/lectures-in-logic-and-set-theory-volume-2-set-theory-e156797838.html
2. https://www.pdfdrive.com/set-theory-and-logic-e16230754.html
3. http://rccmindore.com/wp-content/uploads/2015/06/Operations-Research.pdf
4. https://theintactone.com/2019/03/04/qtm-u2-topic-1-mathematical-formulations-of-lp-models-for-product-mix-problems/

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Bachelor of Business Administration
(BBA ITM)-Semester - I

Course Code	**UM01DBBI53**	**Title of the Course**	**MANAGEMENT FOR MSMEs**
Total Credits of the Course	**03**	**Hours per Week**	**03**

Course Objectives	1. The Course is designed to meet the needs of entrepreneurs in the MSME sector. 2. The course is helpful in acquiring knowledge to run their businesses professionally, and profitably. 3. The Course helps to develop, and understand the MSME management. 4. It also exposes the students to concepts and processes of entrepreneurship, starting an enterprise & its professional management. 5. It helps the students in knowing modern concepts, policies, Schemes and understanding of MSME sector management.

Course Content		
Unit	**Description**	**Weightage (%)**
1.	**MSMEs from Indian Perspectives** Definition and Meaning of Entrepreneur & Entrepreneurship, Qualities of Successful Entrepreneur MSMEs: Definition (2020), Major Features, MSME Registration Procedures, Steps involved in setting up MSMEs, Performance ,Role & Importance of MSMEs in India	**25 %**
2.	**GOVERNMENT SCHEMES FOR MSMEs & ATMA-NIRBHAR BHARAT** **Government Schemes For MSMEs** Udyog Aadhaar Memorandum scheme Incubation Women Entrepreneurship Grievance Monitoring System Zero Defect Zero Effect scheme Credit Linked Capital Subsidy scheme Quality Management Standards and Quality technology tools **Atma- Nirbhar Bharat -**Introduction Economic Packages	**25 %**
3.	**POLICY INITIATIVES FOR MSMEs** ASPIRE- A Scheme for Promotion of Innovation, Rural Industry & Entrepreneurship The MSME Development Act, 2006 The MSME Development Act (Amendment) Bill, 2015 E-Governance Initiatives/ Digital Initiatives	**25 %**
4.	**EMERGING TRENDS & INSTITUTIONS SUPPORTING MSMEs** Overview of World Trade Organization (WTO), Intellectual Property Rights (IPR),	**25 %**

	International SME Network (INSME), Bar Coding and Visit to nearby MSMEs	

Teaching-Learning Methodology	These are Teacher's and Learners Centric Methods and it facilitate student learning and overall comprehension of material, and to measure student learning through both formal and informal forms of assessment, like interactive / participated methods, group projects, student portfolios, and class participation and in the student-cantered classroom, teaching and assessment are connected.

Evaluation Pattern		
Sr. No.	**Details of the Evaluation**	**Weightage**
1.	Internal Written (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes	
1.	• The Students will understand the concept of Entrepreneur & Entrepreneurship and MSMEs. • The Students will gain knowledge on Performance, Key Challenges of MSMEs. • The Students will learn the Steps involved in setting up MSMEs and Registration. • The Students will understand Role & Importance of MSMEs in India.
2.	The Students will acquire knowledge regarding different Government Schemes available for MSMEs.
3.	• The Students will acquire knowledge regarding ASPIRE Scheme. • The Students will learn About the MSME Development Act, 2006 (Salient Features) and The MSME Development Act (Amendment) Bill, 2015. • The Students will understand E-Governance Initiatives/ Digital Initiatives for MSMEs.
4.	• The Students will acquire knowledge regarding Types of MSME loan options. • The Students will learn about the Emerging Trends & Institutions Supporting MSMEs. • The Students will understand Overview of World Trade Organization (WTO), Intellectual Property Rights (IPR), International SME Network (INSME) and Bar Coding.

Suggested References

Sr. No.	References
1.	Dynamics of Entrepreneurship Development & Management: Vasant Desai
2.	Entrepreneurship Development in India: C B Gupta & N P Srinivasan
3.	Entrepreneurship and small Business Management: C B Gupta & S S Khanka
4.	small Business Entrepreneurship : Paul Burns & Jim Dewhunt

On-line resources to be used if available as reference material
On-line Resources
www.msme.gov.in
https://youtu.be/e9fC3choW2M
http://dcmsme.gov.in
https://udyamregistration.gov.in
https://youtu.be/HjZq1ugzWoc
https://youtu.be/uKRhEiFBi7s
https://youtu.be/VJC7TGzjldo

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Bachelor of Business Administration
BBA (ITM) - Semester-I

Course Code	UM01DBBI54	Title of the Course	Computer Organization
Total Credits of the Course	03	Hours per Week	03

Course Objectives:	1. Intended to teach basics involved in data representation and digital logic circuits used in computer system. 2. To understand the structure, function and characteristics of computer system. 3. To understand the design of various functional units and components of computers.

Course Content		
Unit	Description	Weightage* (%)
1.	**Number System and its Arithmetic** Introduction to Number Systems - Conversions: Decimal, Binary, Octal, Hexadecimal - Binary Arithmetic - Character codes - ASCII, EBCDIC, UNICODE - Representation of Numbers: (Integer)- Signed magnitude method, l's complement method, 2's complement method, Excess Notation method - Representation of Float Numbers: Single precision, Double precision method - Error Detection and Correction Code: Parity bit method, Hamming code	25 %
2.	**Gates and Boolean algebra** Gates - AND Gate, OR Gate, NOT Gate, NAND Gate, NOR Gate, XOR Gate, XNOR Gate, Bubbled AND Gate, Bubbled OR Gate - Boolean algebra - Truth Tables - De Morgan's Theorems	25 %
3.	**Processor Functions and Components** Instruction Execution Cycle - CPU Organization: Data path of a typical VON Neumann machine - Functioning of a processor of hypothetical computer - Parallel Instruction Execution - Categories of Parallel Machines, Array Processors, Multifunctional Units, Pipeline Machines, Multiprocessors - Direct Addressing, Indirect Addressing, Register Addressing, Stack Addressing	25 %
4.	**Overview of I/O and Memory Devices** Overview of I/O devices: Hard Disk, Floppy Disk, CD-ROM (Introduction, Advantages and Disadvantages) - Introduction to RAM, ROM, PROM, EEPROM - Printers (Line, Dot Matrix, Inkjet, Laser) – VDU – Mouse – Keyboard – Scanners – Plotters - OCR (MICR, Barcode Reader)	25 %
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Teaching-Learning Methodology	Information and Communication Technology (ICT) in education is the mode of education that use information and communications technology to support, enhance, and optimise the delivery of information.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Identify, understand and apply different number systems and codes.
2.	Understand the organization of computer system and logic circuits.
3.	Understand fundamentals of computer architecture concepts related to design of processors, memories and I/Os.

Suggested References:	
Sr. No.	References
1.	Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
2.	Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
3.	Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
4.	Malvino Brown: Digital Computer Electronics, 3rd Edition
5.	Malvino and Leach: Digital Principles and Applications, 4th Edition.
6.	S.K.Basandra: Computers Today Galgotia Publi.
7.	Peter Norton: Introduction to Computers TMH.

On-line resources to be used if available as reference material
On-line Resources
http://index-of.es/Computer/Fundamentals%20of%20Computer%20Organization%20and%20Architecture.pdf
https://ebooks.lpude.in/computer_application/bca/term_4/DCAP206_INTRODUCTION_TO_COMPUTER_ORGANIZATION_AND_ARCHITECTURE_DCAP502_COMPUTER_ORGANIZATION_AND_ARCHITECTURE.pdf
https://www.tutorialspoint.com/computer_logical_organization/computer_logical_organization_tutorial.pdf

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Bachelor of Business Administration
BBA (ITM) - Semester-I

Course Code	UM01DBBI55	Title of the Course	Digital Computer Electronics
Total Credits of the Course	3	Hours per Week	3

Course Objectives:	1. To study the Computer Number System. 2. To study the Digital Circuits

Course Content		
Unit	Description	Weightage* (%)
1.	**Number Systems** Number System: Binary, Octal, Decimal & Hexadecimal and their inter-conversions - Character Representation - Data Representation: positive, negative, maximum and minimum number representation (related to 8 bit number) - Real number representation - Binary arithmetic: Binary Addition, binary subtraction using 1's and 2's compliment	25%
2.	**Digital Circuits and its Simplification** Logic gates – Properties and Symbolic Representation - Truth Table (up to 3 input) -NOR and NAND gates as universal gates - De-Morgan's theorem - Simplification of logic expression using Laws of Boolean algebra - Circuit Equivalence	25%
3.	**Combinational Circuits** Decoder & Encoder - Half adder & Full adder - 4-bit binary adder/subtractor - Multiplexer & Demultiplexer	25%
4.	**Sequential Building Blocks** Flip-Flop (RS, D, JK, Master-slave & & T flip-flops) - Registers & Shift registers - Counters: Synchronous and Asynchronous Designing method	25%

Teaching-Learning Methodology	Information and Communication Technology (ICT) in education is the mode of education that use information and communications technology to support, enhance, and optimise the delivery of information.

Evaluation Pattern

Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	Understanding of fundamental concepts related to Number systems.
2.	Ability to describe the functioning of Digital Computer.
3.	Knowledge of logical circuit mechanism.

Suggested References:	
Sr. No.	References
1.	Tanenbaum A S: Structured Computer Organization Prentice-Hall of India Pvt. Ltd.
2.	Malvino Brown: Digital Computer Electronics, 3rd Edition
3..	Malvino and Leach: Digital Principles and Applications, 4th Edition. McGraw Hill Education
4.	Rajaraman V: Computer Fundamentals Prentice – Hall of India Pvt. Ltd.
5.	Sinha P K: Computer Fundamentals BPB Publi, (Second Edition)
6.	S.K.Basandra: Computers Today Galgotia Publi.
7.	Peter Norton: Introduction to Computers TMH.
8.	William H. Gothmann: Digital Electronics – An Introduction to Theory and Practice , 2nd Edition, PHI , 1982
On-line resources to be used if available as reference material	
On-line Resources	
1. https://www.academia.edu/40474484/Digital_Computer_Electronics_Albert_Paul_Malvino	
2. https://www.javatpoint.com/digital-electronics	

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Bachelor of Business Administration
(BBA-ITM)- Semester - I

Course Code	UM01SBBI51	Title of the Course	Environmental Studies
Total Credits of the Course	03	Hours per Week	03

Course Objectives:	Objectives: 1. Creating the awareness about the environmental problems among the students. 2. Imparting the knowledge about environment and its allied problems. 3. Developing the attitude of concern for the environment

Course Content		
Unit	Description	Weightage* (%)
1.	**Introduction of Environmental Studies:** Definition, Scope, Importance, Meaning and Concept of Renewable and Non Renewable Resources, Equitable use of resources for sustainable lifestyles, Need for Public awareness.	25%
2.	**Natural Resources and Associated Problems:** Concept and Threats, Forest Resources, Water Resources, Mineral Resources, Energy Resources, Land Resources, Role of individual in conservation of Natural Resources, National Forest Policy	25%
3.	**Ecosystem** Concept, Structure, Functions of an Ecosystem; Producers, Consumers and Decomposers in Ecosystem; Food Chain, Food Web and Ecological Pyramid Types, characteristics and Threats to Ecosystem Types – Forest, Grassland, Desert and Aquatic Ecosystem Role of Individual in sustaining Ecosystem Community Ecology	25%

4.	**Biodiversity** Introduction Types – Genetic, Species and Ecosystem Biodiversity at Global, National and Local Levels India as a Mega Diversity Nation Threats of Biodiversity Conservation of biodiversity: Ex-situ, In-situ and Levels of action.	25%
...		

Teaching-Learning Methodology	These are teacher-centred methods, learner-centred methods, content-focused methods and interactive/participative methods.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to	
1.	• **Learn how to use resources sustainably** With natural resources such as air, water, oil, minerals are getting depleted rapidly; the environmental studies course can help students understand the importance of these resources and how we can improve the situation by taking appropriate actions in our regular lives to preserve these resources. • **Create awareness about preserving the environment** Understand the significance of protecting the environment. Activities such as

	conducting awareness programs and rallies can prevent the degradation of the environment.
2.	• Develop awareness towards resources conservation and take initiative towards conservation process. • Understand the importance of resources in our life. • Learn the importance of proper use of resources for sustainable development.
3.	• Define the basic rules and concepts of the **ecology** science. • Define the **ecology** of individual, population, community and **ecosystem**. • define the concepts that are the ambient, environment, biome, biosphere, ecosphere, **ecological** relationship and factors, and homeostasis • understand threats to Forest, Grassland, Desert and Aquatic Ecosystem
4	• Explain how plants and animals support each other in the food chain or food web • Identify human-caused species loss as one of the major current threats to **biodiversity** • Explain how the disappearance of one species affects other species.

Suggested References:	
Sr. No.	References
1.	Environmental Studies- Dr. Suresh K. Dhameja. Published by SK Kataria & Sons, New Delhi-110006
2.	Introduction to Environmental Studies- Chandar K. Sharma, Vrinda Publications Pvt. Ltd. Delhi-110091
3	Textbook of Environmental Studies for Undergratuate Courses- Erach Bharucha

On-line resources to be used if available as reference material
On-line Resources
Environmental Studies For Undergraduate Courses - UGC

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Bachelor of Business Administration
BBA (ITM) Semester -I

Course Code	UM01CBBI53	Title of the Course	COMPANYMANAGEMENT–I
Total Credits of the Course	03	Hours per Week	03

Course Objectives:	• To expose the student to the theory and overview of the Business. • To familiarize students with types of companies and forms of Business Organisation.

Course Content		
Unit	Description	Weightage* (%)
1.	Nature & Scope of Business • Meaning of Business • Characteristics of Business • Classification & Functions of Business • Objective of Business	25%
2.	Types of Companies • Incorporated Companies, • Unincorporated Companies, • Basis of Classification : On the basis of Incorporation, On the basis of liability, On the basis of Number of members, On the basis of control, On the basis of Ownership, • Distinction between a public company and a private company, • Sole proprietorship, Partnership and limited liability partnership	25%
3.	Introduction to company Form of Organization • Meaning and Features of Joint Stock Company • Merits & Demerits of Joint Stock Company • Company formation procedure with reference to memorandum of association, articles of association and prospectus. • Conversion of Private Ltd. To Public Ltd Company	25%
4.	Business Combination for Companies	25%

	• Introduction • Objectives of Business Combination • Causes of Business Combination • Types of Business Combination • Forms of Business Combination • Recent trends in combination	

Teaching-Learning Methodology	These are teacher-centred methods, learner-centred methods, content-focused methods and interactive/participative methods.

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weightage
1.	Internal Written / Practical Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to		
1.	To understand various aspect about business.	
2.	To understand different types and forms of companies and how private company is different from public company	
3.	To understand about joint stock company and its procedure to start with different documents.	
4	To understand various aspect of Business Combination and recent development.	25%

Suggested References:	
Sr. No.	References
1.	Company Law & Secretarial Practices by M J Mathew
2.	Company Law By ND Kapoor
3 4 5	Secretarial Practice by M C Kuchhal Forms of business Organisation, S.P.SHAH, DR. PARESH SHHAH, PROF. A.A.SHAH, MAHAJAN PUBLICATION HOUSE, 5TH EDISON Mordern business organisation- Y.K.Bhushan, Sulatan Chand & Publication

On-line resources to be used if available as reference material
http://ebook.mca.gov.in/default.aspx
On-line Resources
https://sdak24.com/management-of-companies-corporate-law-notes/
https://www.dphu.org/uploads/attachements/books/books_3955_0.pdf

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