

BBA SEM I



Department of Management
Birla Institute of Technology, Mesra, Ranchi - 835215 (India)

Institute Vision

To become a Globally Recognized Academic Institution in consonance with the social, economic and ecological environment, striving continuously for excellence in education, research and technological service to the National needs.

Institute Mission

- To educate students at Graduate, post graduate and Doctoral levels to perform challenging engineering and Managerial jobs in industry.
- To provide excellent research and development facilities to take up Ph.D. programmes and research projects.
- To develop effective teaching learning skills and state of art research potential of the faculty.
- To build national capabilities in education, and research in emerging areas.

Department Vision

To be recognized as a frontrunner in Management education in the country in consonance with the social, economic and ecological environment while striving to contribute to nation building through excellence in research and development activities

Department Mission

- To educate students at Post Graduate and Doctoral level to perform better in challenging environment
- To nurture first generation entrepreneurs with innovative mindset.
- To provide excellent Consulting, and Research & Development facilities for faculty and students.
- To uphold the values of Personal Integrity and Social Responsibility

Program Educational Objectives (PEO)

1. To develop managerial and communication skills of students to enable them to manage real life business problems.
2. To impart professional education and training in the field of management & entrepreneurial education.
3. To disseminate knowledge and information by industry-academia interface and continuing interaction with alumni to meet the demand of quality education
4. To produce graduates who are socially responsible and capable of engaging in Life long learning

Program Outcomes (PO)

On successfully completing the program a graduate shall be able to:

- a. Apply basic concepts of management and its interdisciplinary knowledge to identify and analyse complex issues pertaining to contemporary organisations.
- b. Initiate and participate in change process and value creation across all levels.
- c. Identify suitable resources and utilise them optimally.
- d. Take decisions with commitment to professional ethics and responsibilities.

MT 101 General Principles of Management

COURSE INFORMATION SHEET

Course code: MT -101

Course title: General Principles of Management

Pre-requisite(s): NIL.

Co- requisite(s): NIL

Credits: 3 L:3 T:0 P:0

Class schedule per week: 03

Class: BBA

Semester / Level: I / 1

Branch: BBA

Name of Teacher:

COURSE OBJECTIVE

This course enables the students:

A.	To understand the basic principles of Management; used to manage an enterprise.
B.	To have an insight into the evolution of management theory and familiarity with different schools of management thoughts
C.	To appreciate the six major functions of Management i.e. Planning, Organizing, Staffing, Leading, Directing and Controlling.
D.	To explain the concept and nature of management.
E.	To understand the significance of management, along with the various levels of Management and the skills required at each level

Course Outcomes

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

CO1	To apply the basic knowledge of subject area
CO2	To analyse the concept of management and its functions.
CO3	To apply management skills required at each level
CO4	To apply various leadership role in the community
CO5	To demonstrate the Intellectual curiosity to see the world around

Syllabus

Module 1: Introduction to Management: (9 lectures)

Definition, Nature, Managerial Roles, Managerial skills and Levels, Basic Functions of Management, Evolution of Management Thoughts and Trends and Challenges of Management in Global Scenario

Module 2: Planning:(7 lectures)

Definition, Nature, Importance, Types of Planning, Steps in Planning, Planning Premises Forecasting and decision making .

Module 3: Organizing: (9 lectures)

Concept, Definition, Formal and Informal Organisation, Organizational Structure:- Types & significance (Functional Organization, Product/ Market Organisation and Matrix Structure), Span of Management, Delegation of authority.

Module 4: Staffing & Controlling: (7 lectures)

Definition, Process of staffing, Meaning & Need of Control, Controlling Process, Types of Control Devices.

Module 5: Directing:(9 lectures)

Meaning of Motivation, Motivational theories - Maslow Hierarchy of Need Theory & Herzberg Two Factor Theory Leadership Definition, Characteristics (referring few theories of leadership)

Text books:

1. Koontz, H. and Wehrich, H (1998) & (2001) Essentials Of Management (Tata McGraw Hill: New Delhi) Edition- 5th and 10th

Reference books:

1. Stoner, Freeman and Gilbert, Management (Prentice Hall of India: New Delhi) Edition -5

Gaps in the syllabus (to meet Industry/Profession requirements)**POs met through Gaps in the Syllabus****Topics beyond syllabus/Advanced topics/Design****POs met through Topics beyond syllabus/Advanced topics/Design**

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP Projectors
Tutorials/Assignments
Seminars
Mini projects/Projects
Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and Internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure

Direct Assessment

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Components	CO1	CO2	CO3	CO4	CO5
Mid Sem Examination Marks	√	√	√	-	-
End Sem Examination Marks	√	√	√	√	√
Assignment & Quizzes	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outcomes and Course Outcomes

Mapping of Course Outcomes onto Program Outcomes

Course Outcome #	Program Outcomes			
	A	B	C	D
1	H	L	H	H
2	H	-	H	M
3	H	M	L	H
4	H	M	H	H
5	H	L	H	M

Mapping Between COs and Course Delivery (CD) methods			
CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD1
CD2	Tutorials/Assignments	CO2	CD1, CD2, CD4
CD3	Seminars	CO3	CD1
CD4	Mini projects/Projects	CO4	CD1, CD2, CD5, CD8
CD5	Laboratory experiments/teaching aids	CO5	CD1, CD2, CD3, CD4, CD6, CD8
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

MT 102 Business Statistics

COURSE INFORMATION SHEET

Course code:	MT102
Course title:	Business Statistics
Pre-requisite(s):	Nil
Co- requisite(s):	Nil
Credits: 4	L: 3 T: 1 P: 0
Class schedule per week:	4
Class:	BBA
Semester / Level:	I / 1
Branch:	Management
Name of Teacher:	

Course Objectives

This course enables the students:

A.	To understand the importance of data and how to collect, organise and summarise those data.
B.	To describe preliminary statistical techniques to solve problems.
C.	To explain the merits and limitations of different statistical techniques.
D.	To impart the knowledge of interpreting the result of data analysis.
E.	To enable the students in terms of understanding the statistical aspects related to business thereby enhancing their skills in this regard.

Course Outcomes

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

CO1	Appraise the need for data analysis.
CO2	Formulate the statistical problem and solve it.
CO3	Interpret the results of statistical analysis for improved managerial decision making.
CO4	Design and describe problems of inferential statistics.
CO5	Apply analytical skills in both private and public business organizations in the country.

Syllabus:

Module – 1: Introduction to Statistics: (8 Lecture)

Definition of Statistics, Scope of Statistics, Types of Data. Methods of collecting Data, Diagrammatic and Graphic Presentation of Data, Graphs of Frequency Distribution. Numerical exercises.

Module – 2: Measures of Central Tendency: (12 Lecture)

Need for measuring central tendency of data; Arithmetic Mean, Geometric Mean, Harmonic Mean, Median, Mode: their properties, merits and demerits. Numerical exercises.

Module – 3: Measures of Dispersion: (12 Lecture)

Need for measuring dispersion of data; Range, Mean Absolute Deviation, Quartile Deviation, Standard deviation, Coefficient of Variation: their properties, merits and demerits. Numerical exercises.

Module – 4: Correlation and Regression Analysis (for ungrouped data): (Lecture 12)

Need for studying correlation, Types of Correlation, Methods of Studying Correlation: Scatter Diagram, Karl Pearson’s coefficient of correlation, Spearman’s Rank Correlation, Method of least squares. Need for studying regression analysis, Two regression equations, Regression co-efficients and its properties. Numerical exercises.

Module – 5: Business Forecasting through Time Series Analysis: (12 Lecture)

Significance of forecasting in business, Steps in Forecasting, Role of Time Series Analysis, Components of Time Series: Secular Trend, Seasonal Variations, Cyclical Variations, Irregular Variations. Method of Semi-averages. Numerical exercises.

Note: The treatment of the subject matter is to be application oriented in the field of management. The proof of theorems and derivations of formulae is not required.

Text books:

1. Gupta S.P. and Gupta M.P. (2015), Business Statistics. (Sultan Chand & Sons: New Delhi).18th ed.
2. Das N.G. (2017). Statistical Methods (combined volumes). (Tata McGraw-Hill: New Delhi).

Reference books:

1. Richard I. Levin, David S. Rubin, Masood H. Siddiqui (2017), Statistics for Management. (Pearson: New Delhi) 8th ed.
2. Hogg Robert V., MckeanJoeseeph, Craig Allen T. (2017), Introduction to Mathematical Statistics (Pearson: New Delhi) 7th ed.
3. Miller James D. (2017), Statistics for Data Science (Packt Publishing: Birmingham-Mumbai) 1st ed.

Gaps in the syllabus (to meet Industry/Profession requirements)

POs met through Gaps in the Syllabus

Topics beyond syllabus/Advanced topics/Design

POs met through Topics beyond syllabus/Advanced topics/Design

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP

projectors
Tutorials/Assignments
Seminars
Mini projects/Projects
Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure

Direct Assessment

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Components	CO1	CO2	CO3	CO4	CO5
Mid Sem Examination Marks	√	√	√	-	-
End Sem Examination Marks	√	√	√	√	√
Assignment & Quizzes	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outcomes and Course Outcomes

Mapping of Course Outcomes onto Program Outcomes

Course Outcome #	Program Outcomes			
	A	B	C	D
1	H	L	H	H
2	H	-	H	M
3	H	M	L	H

4	H	M	H	H
5	H	L	H	M

Mapping Between COs and Course Delivery (CD) methods			
CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD1
CD2	Tutorials/Assignments	CO2	CD1, CD2, CD4
CD3	Seminars	CO3	CD1
CD4	Mini projects/Projects	CO4	CD1, CD2, CD5, CD8
CD5	Laboratory experiments/teaching aids	CO5	CD1, CD2, CD3, CD4, CD6, CD8
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

MT 103 Introduction to Business Accounting

COURSE INFORMATION SHEET

Course code: MT103

Course title: Introduction to Business Accounting

Pre-requisite(s): NIL

Co- requisite(s): NIL

Credits: 03 L:3 T:0 P:0

Class schedule per week:3

Class: BBA

Semester / Level: I/1

Branch: Management

Name of Teacher:

Course Objectives

This course enables the students:

A.	To understand the concept and role of accounting in financial reporting in modern economy
B.	To develop the understanding of basic accounting concepts and techniques of and accounting system. Principles and procedures underlying the accounting process.
C.	To provide an understanding, importance of accounting; preparation of final accounts for profit making organization
D.	To understand the preparation of accounting for non-profit organization.
E.	To provide the knowledge of bills of exchange transaction and bank reconciliation statement.

Course Outcomes

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

CO1	Demonstrate the role of accounting in business in economic world.
CO2	Explain the principles of accounting and book keeping.
CO3	Apply accounting rules in determining financial results and preparation of financial statement
CO4	Develop and practice the maintenance of accounting books for non-profit making organisation
CO5	Determine the processes of billing in business and banking transaction.

Syllabus

Module I (9 Lectures)

Accounting :Basics of Accounting, Accounting Mechanics Double Entry System, Classification, Golden Rules, Concepts and Conventions Journal: Meaning, Advantages, Ledger meaning, Posting and Balancing, Trial Balance Objectives, defects, locating errors and preparations of Trial Balance, Subdivision of journal-daybook.

Module II (9 Lectures)

Final Accounts:Trading Account, Profit and Loss Account, , Balance sheet, Closing entries, Assets and their Classification, Liabilities and their Classification, Uses and Limitations of Balance sheet.

Module III (9 Lectures)

Capital and Revenue Expenditure and Receipts: Rules for Determining Capital Expenditure and Revenue Expenditure, Deferred Revenue Expenditure, Capital and Revenue Receipts, Capital and Revenue Profit and Loss.

Module IV (9 Lectures)

Accounting for Non-Profit: Organization: Accounting Procedures, Receipts and Payments Accounts, Distinction between Receipts and Payments Accounts, Income and Expenditure Account problems

Module V (9 Lectures)

Bills of Exchange: Parties to a Bills of Exchange, Types, Promissory Notes, Distinction between Promissory Notes and Bills of Exchange, Dishonour of Bills, preparation of Bank Reconciliation

Text books:

- 1) Hanif and Mukherjee (2003), Modern Accountancy Volume 1, Tata McGraw Hill Publishing Company limited, New Delhi, 2nd ed.
- 2) Grewal, T.S (2003) Introduction to Accountancy; S. Chand & Company Ltd.
- 3) Tulsian P. C., Financial Accounting, Pearson, sixteenth impression, 2015

Reference books:

- 1) Robert. N .Anthony., David .F .Hawkins., Kenneth .A .Merchant.(2004). Accounting Text and Cases, Tata McGraw Hill Publishing Company Limited, New Delhi, 11th ed.
- 2) Frank wood .& Alan Sangster. (2008). Business Accounting, Pearson education limited, 11th ed. (3,4,)

Gaps in the syllabus (to meet Industry/Profession requirements)**Pos met through Gaps in the Syllabus****Topics beyond syllabus/Advanced topics/Design****Pos met through Topics beyond syllabus/Advanced topics/Design**

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP projectors
Tutorials/Assignments
Seminars
Mini projects/Projects
Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure

Direct Assessment

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Components	CO1	CO2	CO3	CO4	<u>CO5</u>
Mid Sem Examination Marks	√	√	√	-	-
End Sem Examination Marks	√	√	√	√	√
Assignment	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outcomes and Course Outcomes

Mapping of Course Outcomes onto Program Outcomes

Course Outcome #	Program Outcome			
	a	b	c	D
1	L	M	L	M
2	M	L	H	M
3	M	M	M	H
4	L	M	H	M
5	M	M	M	H

Mapping Between COs and Course Delivery (CD) methods			

CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD1
CD2	Tutorials/Assignments	CO2	CD1
CD3	Seminars	CO3	CD1 and CD2
CD4	Mini projects/Projects		
CD5	Laboratory experiments/teaching aids		
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

MT 104 Computerised Accounting Lab

COURSE INFORMATION SHEET

Course code: MT 104

Course title: Computerised Accounting Lab

Pre-requisite(s): NIL

Co- requisite(s): NIL

Credits: 2 L: 0 T: 0 P: 4

Class schedule per week: 4

Class: BBA

Semester / Level: I/1

Branch: Management

Name of Teacher:

Course Objectives

This course enables the students:

A.	To understand the nature, significance and objectives of accounting and its growing importance.
B.	To analyse and understand the need of the computers in accounting
C.	To determine the use of technology in accounting
D.	To highlight the importance of IT
E.	To apply the latest practices of accounting

Course Outcomes

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

CO1	Demonstrate entries in Books of Accounts
CO2	Integrate IT & Accounting
CO3	Apply Professional Research Abilities in this area

CO4	Create and group accounts & Ledgers.
CO5	Construct & prepare various books of accounts.

Syllabus

Module 1: Computerized Accounting (6 classes)

Introduction to Computerized accounting, Essentials of computerized accounting, Features of Computerized Accounting, Advantages and Disadvantages of computerized accounting, Computerised Vs Manual accounting

Module 2: Introduction to Accounting Package (4 classes)

Features of Accounting Package, Getting functional with Accounting Package, Creation /Setting up of company.

Module 3: Accounting Vouchers (6 classes)

Types of Vouchers - Contra voucher, payment voucher, receipt voucher, sales voucher. Editing and Deleting of vouchers voucher numbering and customizing of vouchers.

Module 4: Creation and Grouping of accounts & Ledger (6 classes)

Creation of accounts and grouping of accounts, Single group and multiple groups. Creation of ledger, entering of transaction and preparation of Ledger.

Module 5: Subsidiary Books & Preparation of Final Accounts (6 classes)

Preparation of various books - Purchase books, Purchase return book, Sales book, Sales return book, Cash book Closing stock and other stock adjustment, Trial balance, Depreciation and other Adjustment entries, Profit and loss account and Balance sheet Text Books

Text books:

1. Frankwood., & Alan Sangster. (2008). Business Accounting, Pearson education limited. 11th ed.(1,3,4,5,6,7)
2. J.R.Monga (2004). Financial Accounting concepts and application, Volume -1: Text. Mayoor paperbacks. 18th ed. (1,7)

Reference Books:

1. Robert. N.Anthony.,David.F.Hawkins., Kenneth.A.Merchant.(2004). Accounting Text and Cases. Tata McGraw Hill Publishing Company Limited, New Delhi, 11th ed.
2. Hanif and Mukherjee (2003), Modern Accountancy Volume 2, Tata McGraw Hill Publishing Company limited, New Delhi, 2nd ed.

Gaps in the syllabus (to meet Industry/Profession requirements)

POs met through Gaps in the Syllabus

Topics beyond syllabus/Advanced topics/Design

POs met through Topics beyond syllabus/Advanced topics/Design

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP projectors
Tutorials/Assignments
Seminars
Mini projects/Projects

Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure

Direct Assessment

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Compoents	CO1	CO2	CO3	CO4	CO5
Mid Sem Examination Marks	√	√	√		
End Sem Examination Marks	√	√	√	√	√
Assignment & Quizzes	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outocmes and Course Outcomes

Mapping of Course Outcomes onto Program Outcomes

Course Outcome #	Program outcomes			
	a	b	c	d
1	H	H	M	M
2	H	M	M	M
3	H	M	M	M
4	H	L	L	M
5	H	M	M	M

Mapping of Course Outcomes and Course Delivery Methods			
CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD1
CD2	Tutorials/Assignments	CO2	CD1, CD3,CD5
CD3	Seminars	CO3	CD1, CD4,CD5
CD4	Mini projects/Projects	CO4	CD1,CD5,
CD5	Laboratory experiments/teaching aids	CO5	CD1,CD5,
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

105 Business Communication I

COURSE INFORMATION SHEET

Course code: MT -105

Course title: Business Communication I

Pre-requisite(s): NIL.

Co- requisite(s): NIL

Credits: 2 L:0 T:0 P:4

Class schedule per week: 04

Class: BBA

Semester / Level: I / 1

Branch: BBA

Name of Teacher:

COURSE OBJECTIVE

This course enables the students:

A.	To develop inter personal skills and create an effective goal-oriented team player within an individual.
B.	To develop professionals with practical attributes along with moral values
C.	To enhance communication and problem-solving skills.
D.	To re-engineer attitude and understand its influence on behaviour.

Course Outcomes

After the completion of this course, students will able:

CO1	Explain the significance of Communication skills for a manager
CO2	Identify his Strengths and Weaknesses as an Individual
CO3	Communicate effectively as a member of a work group
CO4	Design and make effective presentations
CO5	To frame appropriate answers to typical interview questions

Syllabus

Syllabus:

Module 1: SELF ANALYSIS (12 Classes)

SWOT Analysis, who am I, Attributes, Importance of Self Confidence, Self Esteem

Module 2: ATTITUDE & CREATIVITY (12 Classes)

Factors influencing Attitude, Challenges and lessons from Attitude, Etiquette, Out of box thinking, Lateral Thinking

Module 3: DYNAMICS OF GROUP DISCUSSIONS& DEBATE (12 Classes)

Significance of GD, Methodology, & Guidelines. Different skill set required for GD, Recruitment process & group discussion. Debating effectively Difference between Group Discussion and Debate.

Module 4: MOTIVATION& TIME MANAGEMENT (12 Classes)

Factors of motivation, Self-talk, Intrinsic & Extrinsic Motivators, Value of time, Diagnosing Time Management, Weekly Planner To do list, Prioritizing work.

Module 5: PRESENTATION & SPECIFIC PURPOSE PUBLIC SPEAKING (12 Classes)

Understanding meeting and conference, purpose and traits of a seminar or presentation, personality traits enhancement for public speaking (inner and outer traits), do's and don'ts.

Module 6: INTERVIEWS:

Types & Styles of Interview, Fundamentals of Facing Interviews, tips before going down for an interview, while waiting for your turn to come, different rounds of interview & Frequently Asked Questions

Texts Books:

1. TEXT BOOK: SOFT SKILLS, 2015, Career Development Centre, Green Pearl Publications .
2. Rizvi, M.Ashraf. Effective Technical Communication, New Delhi: Tata McGraw Hill, 2007.

References Books:

1. Brusaw, Charles T., Gerald J. Alred & Walter E. Oliu. The Business Writer's Companion, Bedford: St. Martin's Press, 2010.
2. Carnegie Dale, How to win Friends and Influence People, New York: Simon & Schuster, 1998.
3. Daniel Coleman, Emotional Intelligence, Bantam Book, 2006
Lewis, Norman. How to Read Better and Faster. New Delhi: Binny Publishing House.

Gaps in the syllabus (to meet Industry/Profession requirements)**POs met through Gaps in the Syllabus****Topics beyond syllabus/Advanced topics/Design****POs met through Topics beyond syllabus/Advanced topics/Design**

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP Projectors
Tutorials/Assignments
Seminars
Mini projects/Projects

Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and Internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure**Direct Assessment**

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Components	CO1	CO2	CO3	CO4	CO5
Mid Sem Examination Marks	√	√	√	-	-
End Sem Examination Marks	√	√	√	√	√
Assignment & Quizzes	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outcomes and Course Outcomes

Course Outcome #	Program Outcomes			
	A	B	C	D
1	H	L	H	H

2	H	-	H	M
3	H	M	L	H
4	H	M	H	H
5	H	L	H	

Mapping Between COs and Course Delivery (CD) methods

CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD5
CD2	Tutorials/Assignments	CO2	CD2, CD4, CD5
CD3	Seminars	CO3	CD5
CD4	Mini projects/Projects	CO4	CD2, CD5, CD8
CD5	Laboratory experiments/teaching aids	CO5	CD2, CD3, CD4, CD6, CD8, CD5
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

MT 106 Fundamentals of Computing

COURSE INFORMATION SHEET

Course code: MT106

Course title: Fundamentals of Computing

Pre-requisite(s): NIL

Co- requisite(s): NIL

Credits: 04 L: 03 T: 0 P: 02

Class schedule per week:

Class: BBA

Semester / Level: I/1

Branch: BBA

Name of Teacher:

Course Objectives

This course enables the students:

1.	To understand the Basics Of Computer.
2.	To describe the Basics Of Number System.
3.	To Know the Operations on different types of Number systems like Binary, Octal, hexadecimal.
4.	To clarify the Basics of Operating systems.
5.	To explain how to use software packages in day to day activities.

Course Outcomes

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

CO1	Apply math and Boolean algebra in performing computations in various number systems.
CO2	Simplify Boolean algebraic expressions.
CO3	Perform operations on Numbers like Addition/Subtraction of Numbers in 2's Complement Notation, Binary Multiplication, and Binary Division.
CO4	Demonstrate the use of Internet and World Wide Web, Communication Protocols & LAN.
CO5	Demonstrate the use of Time-Sharing OS using Unix & Linux O/S.

Syllabus

Module 1: Computer Basics and Languages (14 Classes)

Models of a Computer Systems, Characteristics of Computers, Problem Solving. Why Programming Language? Assembly Language, High-level Language, Compiling High-level Language, Some High-level Languages.

Module 2: Data Representation (14 Classes)

Representation of Characters in Computers, Representation of Integers and Real in binary,

Hexadecimal Representation of Numbers, Conversion between Different Number Systems.

Module 3: Binary Arithmetic (14 Classes)

Binary Addition, Binary Subtraction, Signed Numbers, Two's Complement Representation of Numbers, Addition/Subtraction of Numbers in 2's Complement Notation, Binary Multiplication, Binary Division.

Computer Input/output Unit: Description of Computer Input Units Other Input Methods, Computer Output Units.

Module 4: Memory (14 Classes)

Memory Cell Memory Organization Read-only Memory, Serial-access Memory Physical Devices Used to Construct Memory, Magnetic Hard Disk, Floppy Disk Drives, CDROM, Magnetic Tape Drives.

Module 5: Computer Networks (14 Classes)

Need for Computer Communication Networks, Internet and World Wide Web, Communication Protocols, Local Area Networks

Operating Systems: Why We Need an OS, Batch OS, Multiprogramming OS, Time-Sharing OS, Unix OS.

Text Books:

1. ITL ESL. *Introduction to Computer Science*. Pearson, New Delhi.
2. O'Brien & James. *Introduction to Information System*. McGraw-Hill.

Reference Books:

1. Sinha, P.K. & Sinha, P. *Computer Fundamentals*. BPB, New Delhi
2. Fundamental of Computers – By V. Rajaraman B.P.B. Publications
3. Fundamental of Computers – By P. K. Sinha

Gaps in the syllabus (to meet Industry/Profession requirements)

POs met through Gaps in the Syllabus

Topics beyond syllabus/Advanced topics/Design

POs met through Topics beyond syllabus/Advanced topics/Design

Course Delivery methods
Lecture by use of boards/LCD projectors/OHP Projectors
Tutorials/Assignments
Seminars
Mini projects/Projects
Laboratory experiments/teaching aids
Industrial/guest lectures
Industrial visits/in-plant training
Self- learning such as use of NPTEL materials and Internets
Simulation

Course Outcome (CO) Attainment Assessment tools & Evaluation procedure

Direct Assessment

Assessment Tool	% Contribution during CO Assessment
Mid Sem Examination Marks	25
End Sem Examination Marks	50
Quiz (s)	20
Assignment	5

Assessment Components	CO1	CO2	CO3	CO4	<u>CO5</u>
Mid Sem Examination Marks	√	√	√		
End Sem Examination Marks	√	√	√	√	√
Assignment & Quizzes	√	√	√	√	√

Indirect Assessment –

1. Student Feedback on Faculty
2. Student Feedback on Course Outcome

Mapping between Program Outcomes and Course Outcomes

Mapping of Course Outcomes onto Program Outcomes

Course Outcome #	Program outcomes			
	A	b	c	d
1	M	L	M	L
2	M	L	M	M
3	M	L	M	M
4	H	M	H	M
5	M	L	H	M

Mapping Between COs and Course Delivery (CD) methods

CD	Course Delivery methods	Course Outcome	Course Delivery Method
CD1	Lecture by use of boards/LCD projectors/OHP projectors	CO1	CD1
CD2	Tutorials/Assignments	CO2	CD1
CD3	Seminars	CO3	CD1,CD2, CD5
CD4	Mini projects/Projects	CO4	CD1,CD2, CD5
CD5	Laboratory experiments/teaching aids	CO5	CD1,CD2,CD5
CD6	Industrial/guest lectures		
CD7	Industrial visits/in-plant training		
CD8	Self- learning such as use of NPTEL materials and internets		
CD9	Simulation		

