DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY

Chhatrapati Sambhajinagar.

CIRCULAR /SU/CM/Basket/NEP-2020/College/97/2025

It is hereby inform to all concerned that, on recommendation of the Dean, Faculty of Commerce & Management; **the Academic Council at its meeting held on 09/ 05/ 2025 has been accepted the *"Basket of Generic/Elective Courses (For the Students of other Faculties)"*** as per direction by the ***National* Education Policy-2020** under the Faculty of Commerce & Management **run at the all Affiliated Colleges,** Dr. Babasaheb Ambedkar Marathwada University.

This is effective from the Academic Year 2025-26 and Onwards as per appended herewith.

All concerned are requested to note the contents of this circular and bring notice to the students, teachers and staff for their information and necessary action.

University Campus,
Aurangabad-431 004.
REF.NO. SU/COM/2025-26/4270-72

Date:-

Deputy Registrar,
Syllabus Section

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Copy forwarded for Information and Necessary Action:-

1] **The Head, concerned Department,**
2] The Director, Board of Examination & Evaluation,
3] The Director, University Network & Information Centre, UNIC, with a **request to upload this Circular on University Website.**
Dr. Babasaheb Ambedkar Marathwada University **Chhatrapati Sambhajinagar.**

Dr.Babasaheb Ambedkar Marathwada University,
Chhatrapati Sambhajinagar

Basket III : of Generic / Open Elective Under the Faculty of Commerce & Management.

Semester –III

B.Com - GE/OE - 3	1. Fundamental of Taxation
	2. Fundamental of Banking
B.Com E-Commerce – GE/OE -3	3. Digital Ethics.
BBA- GE/OE -3	4. Retal Management
BCA- GE/OE -3	5. Advance Web Technology
	6. Digital Electronics

Semester –IV

B.Com - GE/OE -4	1. Fundamentals of Insurance 2. Digital Marketing
B.Com –E –Commerce – GE/OE -4	3. E-CRM
BBA - GE/OE - 4	4. Project Proposal
BCA- GE/OE - 4	5. Advanced Networking
	6. Linux

DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, CHHATRAPATI SAMBHAJINAGAR

Faculty of Commerce & Mangement

B. Com. Second year

(Three Year/Four Years (Hons.) /Four Years (Hons. With Research)

Basket – III & IV

GE/OE

To be Chosen from other discipline of Same Faculty

(AS PER NEP-2020)

From the Academic Year 2025- 26 & Onwards/

Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar

UG Syllabus as per NEP Pattern - B.Com. Second year Sem III

General / Open Elective

GE/OE 3: Fundamentals of Taxation

No. of Credits	No. of Teaching Hours	No. of Lectures per Week
2	30	2

Objectives: To provide basic information of the income tax to the students to enable them to acquire fundamental knowledge of the tax.

Course Outcomes: Understand the basic concepts in the law of income tax and determine the residential status of different persons.

Unit No.	Contents	No. of Hours
I	**Introduction to Income Tax:** Income, Agricultural income, Assesse, Person, Casual income, Assessment year, Previous year, Introduction of heads of income, Gross total income, Total income, Tax evasion, Avoidance, Tax Planning, Income exempt from tax, Income Tax slabs for the Assessment year.	10
II	**Residential Status Under Income Tax Act:** Concept of "Residence" under Income Tax Act, Classification of Residential Status, Taxability and residential status, Residential status of an individual, HUF and a Company.	10
III	**Income under the head Salary (Theory & Numeric):** Basis of Charge, Meaning of Salary, Allowances, Annuity or Pension Gratuity. Fees, Commission, Perquisite or Profits in lieu of Salary Leave Salary or Leave Encashment, Provident Fund, Deductions from Salary, Relief under Section 89, Computation of income from salary.	10

Total Weightage : 50 Marks
Semester End Examination (S. E. E.) : 30 Marks
Continuous Internal Assessment (C. I. A.) : 20 Marks

University Examination Pattern:

Q.1 Objective type question (05 questions * 2 marks = 20 marks)
Q.2 to Q.7 Solve any four (Each of 05 marks) (Four questions to be Numerical and two Theory)
Paper setters should keep in mind the limitation of two hours while designing the papers.

Suggested Readings:

1. Ahuja, Girish and Gupta Ravi. Systematic Approach to Income Tax. Bharat Law House, Delhi.
2. Singhania, Vinod K. and Singhania Monica. Students' Guide to Income Tax, University Edition. Taxmann Publications Pvt. Ltd., New Delhi
3. T.N. Manoharan-Income tax Law-Snow White Publishers Mumbai
4. Dr. H.C. Mehrotra and Dr. S.P. Goyal-Income Tax Law and Accounts-Sahitya Bhavan Publication.
5. CA. Raj K. Agrawal -Handbook on Income Tax -Bharat Law House Pvt. Ltd.

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Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar

UG Syllabus as per NEP Pattern - B.Com. Second year Sem III

General / Open Elective

GE/OE 3: Fundamentals of Banking

No. of Credits	No. of Teaching Hours	No. of Lectures per Week
2	30	2

Objectives:

This course allows students to gain a comprehensive understanding of Indian banking system. It offers an in-depth exploration of various banking functions, including deposit, lending, investment, and risk management. Students will gain insights into the role of banks in the economy, the regulatory framework governing banking activities, and emerging trends shaping the banking industry.

Course Outcomes:

1. Understand the basic concepts and functions of banking in India.
2. Explain the structure and types of banks operating in the Indian financial system.
3. Evaluate the role of the Reserve Bank of India and its regulatory functions.
4. Understand modern banking services including digital and e-banking.
5. Apply fundamental banking knowledge to real-life banking and customer service scenarios.

Unit No.	Contents	No. of Hours
I	**Introduction to Banking:** Meaning and Evolution of Banking, Types of Banks: Commercial, Cooperative, Development Banks, Functions of Commercial Banks, Role of Banking in Economic Development	10
II	**Indian Banking System & Regulatory Framework:** Structure of Indian Banking, Types of Accounts: Savings, Current, Fixed, Recurring, KYC Norms and Banking Regulations, Role and Functions of RBI	10
III	**Modern Banking and Customer Services:** E-Banking: Internet Banking, Customer Services, Mobile Banking, ATM, NEFT, RTGS , Digital Payment Systems: UPI, Wallets, POS , Banker-Customer Relationship, Grievance Redressal Mechanism in Banks	10

B.COM(E-COMMERCE)- THIRD SEMESTER

Subject: Digital Ethics

No. of Credits: 2

Coursecode: ECOM306T

Vertical	No. of Credits	No. of Teaching Hours	No. of Lectures per Week
OE/GE	02	30	02

Objectives:

- To develop understanding of the ethical challenges and responsibilities in the digital age.
- To equip students with knowledge of responsible online communication, digital ethics, netiquette, and intellectual property rights, providing practical skills applicable in both professional and personal setting.

Course Outcomes :

CO1: Learners will understand the concept and need of digital ethics.
CO2: Learners will be able to identify social media ethics.
CO3: Learners will be able to understand and protect themselves from cyber attacks.

Unit No.	Contents	No. of Hours
I	**Introduction to Digital Technology Ethics:** Concept of digital ethics, Ethical decision-making in technology development, Understanding netiquette and its importance in online communication, Netiquette in different online platforms: email etiquette, Distinguish between ethical and unethical behaviour In digital world, Privacy challenges in digital realm.	10
II	**Social Media Ethics:** Responsible use of social media platforms, Ethical considerations in social media marketing; Collection, storage, and sharing of personal and sensitive Data, protecting participant privacy, Digital plagiarism; Plagiarism-check tools; Ensuring reliability of digital information; Responsible use of Artificial Intelligence in research.	12
III	**Cyber Security & Ethics:** Understanding Cyber Security and its ethical implications, Security for personal devices; Password practices, Software updates; Ethical hacking; cyber-attacks in real-world scenarios.	08

Total Weightage : 50 Marks
Semester End Examination (S. E. E.) : 30 Marks
Continuous Internal Assessment (C. I. A.) : 20 Marks

Suggested Readings:

- Managing Intellectual Property: The Strategic Imperative, Prentice Hall India, 2010.
- C. Brooks, C. Grow, P. Craig, and D. Short, Cybersecurity Essentials, Sybex, 2018.
- E. Thompson, The Digital Citizen: Navigating Online Ethics and Etiquette in a Connected World, IngramSpark, 2023.

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GENERAL ELECTIVE /OPEN ELECTIVE			
Subject Title	**Retail Management.**		
Subject Ref. No.	**GE/ OE**	**No. of Credits**	**2**
		No. of Periods/Week	**2**
		Assignment/ Sessional	**20**
		Semester Exam	**30**

COURSE OBJECTIVES

CO 1:To aware Students about Retail Management.

CO 2 :Understand the recent trends in Retail Management.

CO 3 :To Train Students for Retail Management Profession.

Learning Outcomes: Student will be able:

1. To Mange Merchandise and supply Chain.
2. To Comply with Financial ,Ethical and legal Rights of customer.

Pre-requisite: Students should have the basic knowledge of Retail Management

Unit	Contents	Number of Lectures
Unit-1:	.Merchandising and Store operation: selection and Managing the products offered in the store. Inventory control and stock Management. Store Operations: Managing day to day activities of the Retail store,ensuring a pleasant shopping experience.	**08**
Unit-2:	Sales Management: setting sales targets and training sales and staff ,Monitoring performance. Marketing and Promotions: Planning Advertising campaigns and use e-retailing platforms.	**08**
Unit-3:	Role of Human Resource Management: Recruitment ,Training and Retention of staff Handling customer service and Feedback.Building long term Relationships and managing empolyees.	**08**

Unit-4:	Financial Management: Budgeting, Pricing and Controlling costs, analysing sales data and Profitability.	**06**

Total Weightage : 50 Marks.
Semester End Examination(S.E.E.) : 30 Marks.
Continuous Internal Assessment (C.I.A) : 20 Marks.

University Examination Pattern:

Q.1. Objective type questions (05 Questions *2 Marks = 20 Marks).
Q.2 to Q.7 Solve any Four (Each of 5 Marks)(Four Questions to be Numerical and Two Theory).
Paper setters should keep in mind the limitation of two hours while designing the papers.

Suggested Readings:

Retail Management: A Strategic Approach: Barry .R. Berman &Joel.R.Evans, Pearson.
Reatil Management:Pradhan Swapna ,Tata Mc-Grawill.
Retail Management : Text and cases by Harjit singh ,S.Chand.
Reatil Management:Suja .S. Nair,Himalaya Publication .
Retail Managenment in India by Chetan Bajaj ,Rajnish Tuli ,Nidhi Varma shirvastav ; Oxford University Press.

GE/OE-03

Subject Title :	A] Advance Web Technology			
Subject Ref. No.	BCA307T	No. of Credits	:	02
Assignments/Sessional	:			20
Semester Exam.	:			30

Course Outcomes (COs)

At the end of the course, students will be able to:

1. **CO1:** Explain the structure and syntax of HTML5, including semantic elements, lists, tables, and multimedia embedding.
2. **CO2:** Describe the principles of CSS styling, including selectors, the box model, and layout techniques (e.g., Flexbox).
3. **CO3:** Analyze the role of forms in web development, including input types, validation, and accessibility considerations.
4. **CO4:** Evaluate responsive web design techniques, including media queries, viewport settings, and fluid grid systems.

Prerequisite :	
Unit –I :	**HTML Fundamentals** 1.1 Introduction to Web Technologies • How websites work • Client-server architecture • Role of HTML in web development 1.2 HTML Basics • HTML document structure (<!DOCTYPE>, <html>, <head>, <body>) • Basic tags (<h1>-<h6>, <p>, , <hr>) • Text formatting tags (, , <mark>) 1.3 HTML Lists & Links • Ordered ( ), Unordered ( ), and Description (<dl>) lists • Creating hyperlinks (<a href="">) • Absolute vs. Relative URLs 1.4 HTML Media Elements • Embedding images (<img>) • Audio (<audio>) and Video (<video>) tags • Using iframes (<iframe>)
Unit –II :	**Advanced HTML & Forms** 2.1 HTML Tables • Creating tables (<table>, <tr>, <td>, <th>) • Table attributes (colspan, rowspan) • Table styling with CSS 2.2 HTML Forms • Form structure (<form>) • Input types (text, email, password, radio, checkbox, etc.) • Form attributes (action, method, name) 2.3 Semantic HTML • Semantic tags (<header>, <nav>, <section>, <article>, <footer>) • Benefits of semantic markup (SEO, accessibility) 2.4 HTML Meta Tags & SEO Basics

	• meta tags (charset, viewport, description) • Importance of title tags (<title>) • Basic SEO principles for HTML
Unit – III :	CSS Styling & Layouts 3.1 Introduction to CSS • Inline, Internal, and External CSS • CSS syntax (selectors, properties, values) • Basic styling (color, font, background) 3.2 CSS Box Model • Margin, Border, Padding, Content • Box-sizing property 3.3 CSS Layout Techniques • Display property (block, inline, inline-block) • Positioning (static, relative, absolute, fixed) • Flexbox basics 3.4 Responsive Web Design • Media queries (@media) • Viewport meta tag • Fluid grids and responsive units (%, vw, vh)
Reference Books :	"Head First HTML and CSS" – *Elisabeth Robson & Eric Freeman* HTML,DHTML,JavaScript,Perl&CGIIvanBayross HTML& CSS:TheCompletereference,FifthEditionByThomas Powell

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Subject Title		BJ Digital Electronics		
Subject Ref. No.		BCA307T (B)	No. of Credits	2
			No. of Periods / Week	30 / 2
			Assignments / Sessional	20
			Semester Examination	30

Course Objectives

At the end of the course, students will be able to:

1	To provide the fundamental concepts associated with the digital logic and circuit desig
2	To introduce the basic concepts and laws involved in the Boolean algebra and families and digital circuits
3	To familiarize with the different number systems, logic gates, and combinational and sequential circuits utilized in the different digital circuits and systems.

Course Outcomes (COs)

At the end of the course, students will be able to:

CO-1	Examine the structure of number systems and perform the conversion among diff number systems
CO-2	Became familiar with the digital signal, positive and negative logic, Boolean algebra, gates, logical variables, the truth table.
CO-3	Illustrate reduction of logical expressions using Boolean algebra, k-map and tabul method and implement the functions using logic gates

Pre Requisite		There is no prerequisites for attending this course	No of Lecture
Unit – I		**Number Systems** Analogue versus Digital ,Number Systems , Decimal Number System, Binary Number System, Octal Number System, Hexadecimal Number System, 1's Complement & 2's Complement subtraction, Conversion Binary - Decimal, Octal-Decimal, Hexadecimal-Decimal, Decimal-Binary, Decimal-Octal, Decimal-Hexadecimal, Binary - Octal, Octal - Binary, Hex - Binary, Binary - Hex, Hex - Octal and Octal - Hex. **Binary Codes & Digital Arithmetic** Binary Coded Decimal (BCD), , ASCII code, Basic Rules of Binary Addition	10

		and Subtraction. Binary Addition. Multiplication. Subtraction Using 1's & 2's Complement.	
Unit – II		**Logic Gates & Boolean Algebra** Positive and Negative. Truth Table. Logic Gates. OR Gate. AND Gate. NOT Gate. EX-OR Gate. NAND Gate. NOR Gate. EX-NOR Gate. Universal Gates. Introduction to Boolean Algebra. Postulates of Boolean Algebra. Theorems of Boolean Algebra.	10
		Simplification Techniques Sum-of-Products Boolean Expressions. Product-of-Sums Expressions. Σ and Π Nomenclature. Karnaugh Map Method. Construction of a Karnaugh Map. K Map for 2, 3 & 4 variables, rolling & Overlapping. Don't care condition	
Unit – III		**Arithmetic Circuits** Combinational Circuits. Implementing Combinational Logic. Arithmetic Circuits Basic Building Blocks. Half-Adder. Full Adder.Half-Subtractor.Full Subtractor. **Flip-Flops** Flip-Flop. Clocked R-S Flip-Flop. J-K Flip-Flop. J-K Flip-Flop with PRESET and CLEAR Inputs. Toggle Flip-Flop. D Flip-Flop.	10
Text Books		1) Digital Electronics Principles. Devices and Applications By Anil K. Maini . John Wiley & Sons. Ltd 2) Digital Electronics & Micro- Computer R.K Gaur Dhanpat Rai Publication 3) Modern Digital Electronics By R.P Jain MC Graw Hill Publication	
Additional Reference Books		Digital Fundamentals by Thomas L. Floyd . Pearson Education Limited	

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Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar

UG Syllabus as per NEP Pattern - B.Com. Second year Sem IV

General / Open Elective

GE/OE 4: Fundamentals of Insurance

No. of Credits	No. of Teaching Hours	No. of Lectures per Week
2	30	2

CO 1: To aware students about Insurance.
CO 2: To understand the need & recent trends in Insurance.
CO 3: To prepare students for Insurance agent.

Learning Outcomes: Student will be able:
1. To Prepare for Risk-Management and Protection.
2. To Prepare for a Professional Insurance advisor.

Unit No.	Contents	No. of Hours
I	**Introduction to Insurance:** Meaning, Definition, Significance & needs of Insurance, Functions of Insurance, History and Development of Insurance, Role of Insurance in Economic Development, Principles of Insurance,	10
II	**Insurance Regulation:** Silent features of Insurance Act-1938 & IRDAI (Appointment of Insurance Agents) Regulations-2016, Concept of Risk, Climate Change and Risk Management.	10
III	**Insurance Classification & Insurance Agent:** Concept of Life Insurance, Health Insurance, General Insurance, Agricultural Insurance, Re- Insurance & Banc assurance. Opportunities in Insurance sector, Qualities & Challenges of Insurance Agent, Concept of Digital Transformation in Insurance.	10

Total Weightage : **50 Marks**
Semester End Examination (S. E. E.) : 30 Marks
Continuous Internal Assessment (C. I. A.) : 20 Marks

University Examination Pattern:
Q.1 Objective type question (05 questions * 2 marks = 20 marks)
Q.2 to Q.7 Solve any four (Each of 05 marks) (Four questions to be Numerical and two Theory)
Paper setters should keep in mind the limitation of two hours while designing the papers.

Total Weightage	**: 50 Marks**
Semester End Examination (S. E. E.)	: 30 Marks
Continuous Internal Assessment (C. I. A.)	: 20 Marks

University Examination Pattern:

Q.1 Objective type question (05 questions * 2 marks = 20 marks)

Q.2 to Q.7 Solve any four (Each of 05 marks) (Four questions to be Numerical and two Theory)

Paper setters should keep in mind the limitation of two hours while designing the papers.

Suggested Readings:

1) Dr. Prem Kumar Srivastava (2024) Banking: Theory and Practice 12th Edition, Himalaya Publishing House, New Delhi.

2) Dr. K. Ramachandra, Prof. Alla Bakash S., S. Nagabhushana (2025) A Text Book on Modern Banking,1 st Edition, Himalaya Publishing House, New Delhi

3) I. R. Bhagat, L. C. Kurpatwar and D. N. Ghumbre (2024) 'Indian Banking System', Taran Publication, New Delhi

4) B. H. Damji (2020) Modern Banking, Vidhya Books Publisher, Aurangabad. (Marathi)

5) Dr. Megha Kanetkar (2019) Indian Financial System: Sainath Prakashan, Nagpur (Marathi)

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Dr. Babasaheb Ambedkar Marathwada University, Chhatrapati Sambhajinagar

UG Syllabus as per NEP Pattern - B.Com. Second year Sem IV

General / Open Elective

GE/OE 4: Digital Marketing

No. of Credits	No. of Teaching Hours	No. of Lectures per Week
2	30	2

CO 1: To aware students about Digital Marketing.
CO 2: To understand the recent trends in Digital Marketing.
CO 3: To Train students for Digital Marketing profession.

Learning Outcomes: Student will be able:
1. To Prepare a Professional Digital Marketing.
2. To use of Social Media platform for digital Marketing

Unit No.	Contents	No. of Hours
I	**Introduction to Digital Marketing:** Meaning, Definition, Significance and Features of Digital Marketing, Traditional marketing Vs Digital Marketing, Evolution of Digital Marketing, Digital Marketing Concepts, Key Drivers, Digital Consumer & Communities.	10
II	**Digital advertising:** Meaning, Definition and Features of Digital Advertising, Scope of Digital Advertising Market in India, Skills in Digital Marketing, Concept of Affiliate Marketing, Email Marketing and Mobile Marketing.	10
III	**Social Media Marketing:** Meaning, Definition and Features of Social Media Marketing, Significance, Needs of Social Media Marketing, Concept of Social Media Marketing Strategy, Facebook Marketing, LinkedIn Marketing, Twitter(X) Marketing, Google Ads.	10

Total Weightage : 50 Marks
Semester End Examination (S. E. E.) : 30 Marks
Continuous Internal Assessment (C. I. A.) : 20 Marks

University Examination Pattern:
Q.1 Objective type question (05 questions * 2 marks = 20 marks)
Q.2 to Q.7 Solve any four (Each of 05 marks) (Four questions to be Numerical and two Theory)
Paper setters should keep in mind the limitation of two hours while designing the papers.

Suggested Readings:

1. Digital Marketing –Kamat and Kamat-Himalaya
2. Fundamentals of Digital Marketing Puneet Singh Bhatia, McGraw Hill.
3. Digital Marketing: From Fundamentals to Future Swaminathan & Karthik Kumar, Pearson Education India.
4. Digital Marketing, V. Ahuja, Oxford University Press
5. Digital Marketing, S.Gupta, McGraw-Hill

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B.COM(E-COMMERCE)- FOURTH SEMESTER

Subject: E-CRM **No. of Credits:** 2

Coursecode: ECOM406T

Vertical	No. of Credits	No. of Teaching Hours	No. of Lectures per Week
OE/GE-3	02	30	02

Objectives:

- To highlight the role of relationship management in the success of entrepreneurial venture
- To orient learners towards the practical aspects & techniques of e-CRM.
- To develop basic understanding of analytical e-CRM & its implementation.
- To motivate learners to research further on the various areas under e-CRM

Course Outcomes :

- Correlate the CRM link with the different aspects of business functions.
- Understand the role of CRM in a competitive business environment.
- Comprehend different CRM models in manufacturing & service industry
- Analyse the different challenges in implementing CRM

Unit No.	Contents	No. of Hours
I	**Introduction to E-CRM** Concept of CRM & e-CRM, e-CRM advantages, e-CRM technologies, Difference between CRM & e-CRM, CRM software, Factors responsible for integration in CRM	10
II	**e-CRM Implementation** Stages of Technology Implementation Functional CRM, Departmental CRM, Partial CRM, Full CRM, Application of e-CRM, Framework for Implementing CRM,	10
III	**E-CRM Technology** CRM TECHNOLOGY COMPONENTS: (a) Operational CRM, (b) Collaborative CRM, (c) Analytical CRM, Upcoming Technologies in CRM, Choosing the right CRM Vendor, Salesforce Automation & Mobile CRM.	10

Total Weightage : 50 Marks
Semester End Examination (S. E. E.) : 30 Marks
Continuous Internal Assessment (C. I. A.) : 20 Marks

Suggested Readings:

- Customer Relationship Management - N H Mullick publisher -Oxford University Press 2016
- Customer Relationship Management, Emerging Concepts, Tools and Application, 2000 Jagdish N.Sheth, Atul Parvatiyar & G.Shainesh, publisher TMH.
- "Customer Relationship Management", 2021 Ken Burnett, the Handbook of Key Pearson Education.
- "Customer Relationship Management", 2013 Ed Peelen & Rob Beltman Pearson Education.

4-4

GENERAL ELECTIVE /OPEN ELECTIVE				
Subject Title	**Project Proposal**			
Subject Ref. No.	**GE/ OE**	**No. of Credits**		**2**
		No. of Periods/Week		**2**
		Assignment/ Sessional		**20**
		Semester Exam		**30**

COURSE OBJECTIVES

CO 1 :To enable students to select appropriate business topic for Projects.

CO 2 :To understand the fundamentals of research and Project proposal writing.

CO 3 : To prepare professional projects proposals with proper formatting ,budgeting ,timeliness,and ethical Consideration.

Learning Outcomes: Student will be able:

1) Identify real world business problem for Project work.
2) Understand ethical consideration in Research and Data Collection.

Pre-requisite: Students

Unit	Contents	Number of Lectures
Unit-1:	Components of a project proposal:Title (selection of research topic) formation, Statement of Problem,Objective of the study ,scope and limitation.	**06**
Unit-2:	Research Basic:Hypothesis Formulation, Data Collection method Primary and secondary,Research design overview and Sampling Techniques.	**08**
Unit-3:	Literature Review and Gap Identification: Purpose of literature review,Sources of Secondary Data, Referencing and Plagiarism awarness.	**08**
Unit-4:	Purposal Writing and Presentation: Drafting purposal (Format and Structure)Time line Preperation (work Breakdown)Ethical Consideration	**08**

	in Business Research ,preparation for viva -voce and PPT presentation.	

Total Weightage	:	50 Marks.
Semester End Examination(S.E.E.)	:	30 Marks.
Continuous Internal Assessment (C.I.A)	:	20 Marks.

University Examination Pattern:

Q.1. Objective type questions (05 Questions *2 Marks = 20 Marks).
Q.2 to Q.7 Solve any Four (Each of 5 Marks)(Four Questions to be Numerical and Two Theory).
Paper setters should keep in mind the limitation of two hours while designing the papers.

Suggested Readings:

Kothari .C.R – Research Methodology: Methods and Techniques.
Uma Sekaren- Research Methodology for Business.
Harvard Business Review- Guide to Project Management.
Research methods and stastical Techniques.- Snatosh Gupta Deep & Deep Publication.
Research Methodology : Ranjit kumar Pearson.

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GE/OE (Choose any one for other Faculty Students) GE/OE-04

GE/OE-4

Subject Title	A] Advanced Networking			
Subject Ref. No.	BCA406T	No. of Credits	:	2
		No. of Periods / Week	:	2
		Assignments / Sessional	:	20
		Semester Examination	:	30

Course Objectives

1)	Understand basic concepts of computer networks, types, and their advantages.
2)	Describe the structure and functioning of OSI and TCP/IP models.
3)	Apply knowledge of IP addressing, subnetting, and identify proper addressing schemes.
4)	Demonstrate the use of networking devices, protocols, and understand basic network security concepts.

Pre Requisite	NA
Unit – I	Introduction to Computer Networks • What is a network? • Types of Networks: LAN, MAN, WAN, PAN • Advantages of Networking • Network Devices: Hub, Switch, Router, Modem Network Models • OSI Model – 7 Layers (basic overview) • TCP/IP Model – 4 Layers • Comparison between OSI and TCP/IP
Unit – II	IP Addressing and Subnetting • What is an IP Address? • Types: IPv4 and IPv6 • Classes of IP Address • Concept of Subnetting (simple examples)
Unit – III	Transmission Media and Protocols • Wired media: Twisted Pair, Coaxial, Fiber Optic • Wireless media: Wi-Fi, Bluetooth • Basic protocols: HTTP, FTP, TCP, UDP, IP

	Internet and Network Security • How the Internet works • Firewalls and Antivirus • Basics of Encryption • Cyber Threats: Phishing, Malware, Hacking
Text Books	1. **"Computer Networks"** **Author:** Andrew S. Tanenbaum (International author, but widely prescribed) **Indian Edition by:** Pearson Education India
	2. **"Data Communications and Networking"** **Author:** Achyut S. Godbole **Publisher:** Tata McGraw-Hill
Additional Reference Books	1. **"Data Communication and Networking"** **Author:** Sanjay Sharma **Publisher:** S.K. Kataria & Sons
	2. **"Computer Networks"** **Author:** Bhushan Trivedi **Publisher:** Oxford University Press

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GE/OE -4

Subject Title	BJ Linux		
Subject Ref. No.	BCA406T	No. of Credits	2
		No. of Periods / Week	2
		Assignments / Sessional	20
		Semester Examination	30

Course Objectives

At the end of the course, students will be able to:

1)	Understanding the basic set of commands and utilities in Linux systems.
2)	Learn the important Linux library functions and system calls

Course Outcomes (COs)

At the end of the course, students will be able to:

CO-1	Understanding the basic set of commands and utilities in Linux/UNIX systems.
CO-2	Learn the important Linux library functions and system calls

Pre Requisite		Operating System Concepts, Windows Platform	Number of Lecture
Unit – I		**Introduction:** Basic Linux System Concepts, GNU, Free Software, and Open Source Software, Open Source Software Licenses, Distributions of Linux O.S, Installing Ubuntu, The GNOME Desktop, Linux Commands	10
Unit – II		**Managing the basics:** User Administration, Linux File-System Administration, File Permissions, and Networking Management.	10
Unit – III		**SoftwareInstallation:** The Package Management, Vi/Vim Editor, Regular Expressions. Open SSH Server, VNC Server, Installation of Python.	10
Text Books		1. "Ubuntu Server Guide" by UBUNTU LTD. 2. "Introduction to Linux", A Hands on Guide by Machtelt Garrels "GNU/Linux Advanced Administration", by Josep Jorba Esteve and Remo Suppi Boldrito	