Statement of OBE/COs

Session 2023-24

Criterion II **2.6.1**

PROGRAM OUTCOMES/PROGRAM SPECIFIC OUTCOMES

CRITERION II **2.6.1**

Shri Nagpur Gujarati Mandal's

VMV Commerce, JMT Arts & JJP Science College

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NAAC Accredited 'B' + Grade

-Affiliated to-

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur

Manual of OBE

Academic Session 2022-23

Prepared by
Shri Nagpur Gujarati Mandal's
VMV Commerce, JMT Arts & JJP Science College
Wardhaman Nagar, Nagpur-08
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Shri Nagpur Gujarati Mandal's

VMV Commerce, JMT Arts & JJP Science College

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-: Vision :-

To inspire and empower students from diverse backgrounds to become competent individuals by offering comprehensive education.

-: Mission :-

- To create equal opportunities and make education accessible to students from diverse social groups.
- To empower students with the necessary skills and knowledge to contribute meaningfully to the socio-economic development of society.
- To promote scientific inquiry and awareness of technological advancements among students so that they can keep pace with scientific research and development.
- To instill a sense of empathy among students so that they develop into morally responsible individuals.

1. Statement of OBE

Outcome-based teaching-learning (OBE) is a student-centered approach where instruction and assessment align with specified objectives and outcomes. The emphasis is on evaluating student performance based on these outcomes at various levels.

Outcome-based education (OBE) is a model that prioritizes setting, assessing, and attaining predetermined educational objectives to support students' growth in both their personal and professional lives. We typically employ the "constructive alignment" method. coined by Professor John Biggs in 1999, which fosters a learning environment conducive to achieving desired outcomes through diverse learning activities.

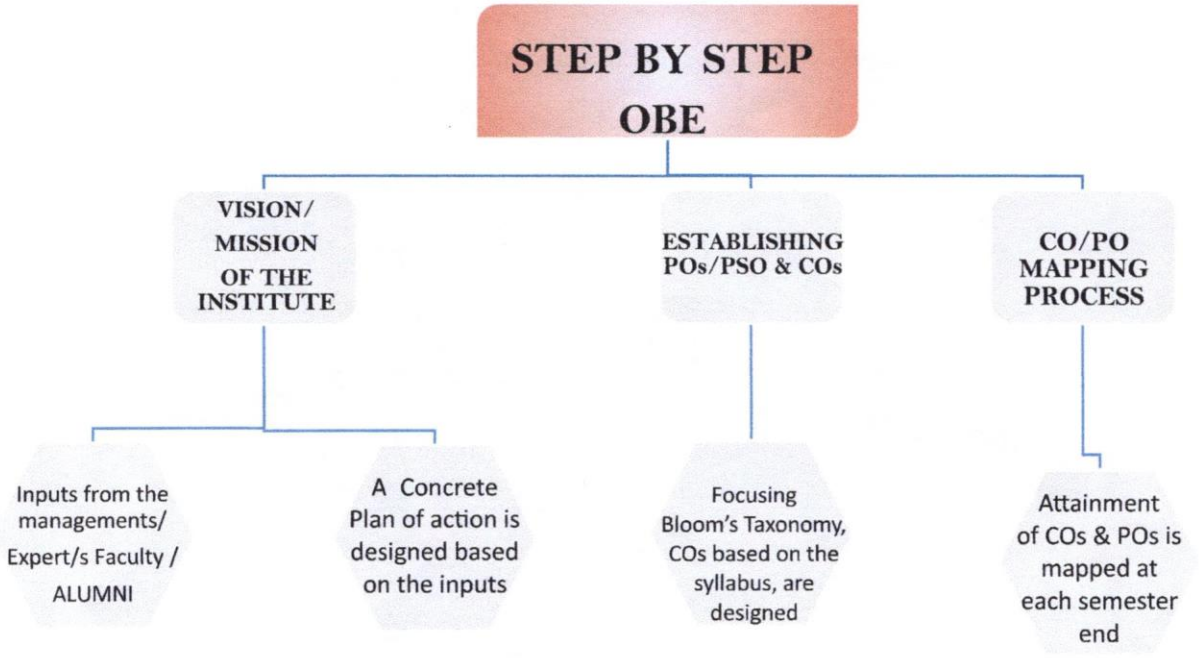

Fig: 1 OBE Design (Institution Specific)

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1. BLOOM'S TAXONOMY

Bloom's Taxonomy, developed by Benjamin Bloom in 1956, classifies learning outcomes and objectives. It has been widely used for various purposes, such as framing digital tasks, evaluating apps, and crafting questions and assessments. In 2001, Lorin Anderson and David Krathwohl revised the taxonomy, replacing "Synthesis" with "Creation" as the highest level. This change implies that "Creation" represents the most complex or demanding cognitive skill, serving as the pinnacle of cognitive tasks.

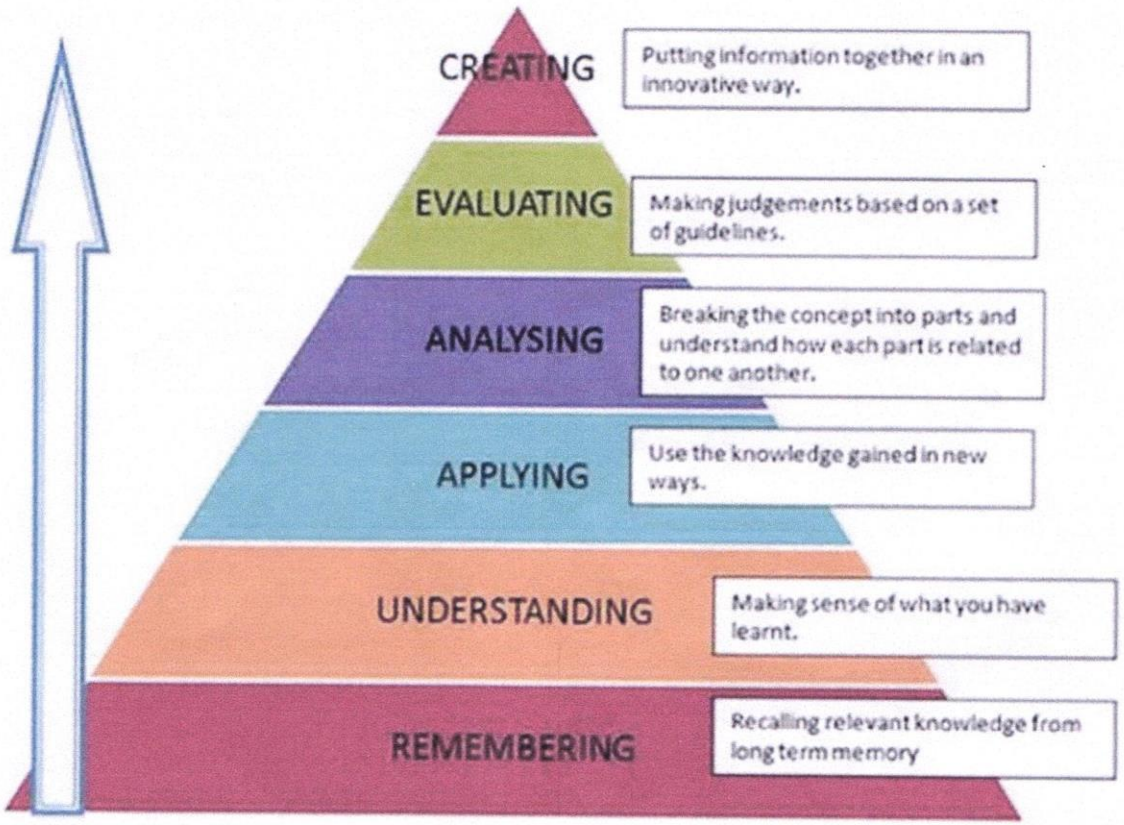

Fig (2): Bloom's Taxonomy

3. STATEMENT OF PO, PSO, AND CO

Programme Outcomes

Programme Outcomes (POs) outline the knowledge and skills expected from graduates/postgraduates of an institution, covering general aspects of a particular program. They encompass competencies and expertise attained upon program completion, broader than Course Outcomes (COs)

Programme Specific Outcomes

Programme Specific Outcomes (PSOs) are defined outcomes of a program that graduates must achieve by its conclusion.

Course Outcomes

Course Outcomes (COs) represent the knowledge and skills acquired by students at the end of a course, indicating what they can do after completing it. COs are determined based on course content covered in each module, with each course typically having six or fewer COs. CO statements are crafted using Bloom's Taxonomy keywords to denote cognitive processes.

5. PROGRAMME OUTCOME FOR UG AND PG

5.1. FOR UG -BA, BCOM, BSC, BBA, BCA

VMV College's UG Programme aims for graduates to showcase the following outcomes after the successful completion of the chosen programmes.

PO 1. Professionalism and Ethics: Demonstrate accountability and professionalism grounded in ethical, altruistic, moral, and humanistic principles.

PO 2. Leadership and Social Acuity: Exhibit leadership qualities and adaptability to regional and national contexts, managing challenges for societal advancement.

PO 3. Digital Competence: Utilizing technology and skills to process information and data contributes to societal progress.

PO 4. Communication and Teamwork: Engage effectively with stakeholders, cultivating teamwork, mutual respect, and decision-making abilities.

PO 5. Critical Thinking: Cultivate an inquisitive mindset, enabling analysis and fostering active learning through critical thinking.

5.2 FOR PG-MCOM, MA, MSC, MCA,MCM

VMV College's PG Programme aims for graduates to demonstrate the following outcomes after the successful completion of the chosen Post-graduate programmes.

PO 1 Research and Quality: Cultivate a research-oriented mindset, emphasizing quality in thinking and a scientific approach. Employ systems for continuous enhancement of standards.

PO 2 Best Practices: Foster a culture of innovation and entrepreneurship, seamlessly integrating best practices for global excellence.

PO 3 Lifelong Learning: Equip individuals with skills and attitudes conducive to lifelong learning, encouraging self-directed education for refining professional expertise.

PO 4 Foreseer and Mission-driven: Galvanize stakeholders towards ambitious goals through diligence, resilience, and effective management.

PO 5 Global Perspective and Solutions: Develop a comprehensive understanding of global challenges to conceive and execute solutions effectively.

6. PROGRAMME SPECIFIC OUTCOMES (PSO)

B.A Political Science

PSO 1: Students are future pillars of our country. for building a strong nation future pillars should have basic & complete knowledge of politics & political theory. Political Science caters to students' needs to become a goodcitizen &a good politician.

PSO 2: Various branches of political science such as Political Theory, Western Political Thoughts, Indian Government & Politics, State Government & Politics, Comparative Government & Politics, International Relations, Foreign Policy & Diplomacy impart complete knowledge of Politics, Election Process, Working, strategy of various Political Parties, Critical Analysis of Agenda of various Political Parties by utilizing appropriate theoretical knowledge, knowledge of National & International problems.

PSO 3: Students get knowledge about the Legislature, Executive & Judiciary their working process & checks and balances amongst each other.

PSO 4: Political Science students can critically Analyse of behaviour of public representatives inside & outside the house with both clarity & precision. Key phrasing relevant to the study of the subject.

PSO 5: Political science students can think critically & utilize a variety of theoretical knowledge& variety of Research Methodologies to understand & explain Historical & Political events &views of various PoliticalThinkers.

B. A. History

PSO1: Understand the background of our religion, customs, institutions, administration, and so on.

PSO2: Understand the present existing social, political, religious, and economic conditions of thepeople.

PSO3: Understand the history of countries other than India with a comparative approach.

PSO4: Analyze the relationship between the past and the present is lively presented in History.

PSO5: Think and argue historically and critically in writing, discussion, and interpretation.

PSO6: Prepare for different competitive examinations.

B.A. Economics

PSO1: To able to understand basic concept of economics.

PSO4: To ability to analyze historical and current events from an economic perspective.

PSO5: The ability to write expressing an economic point of view.

PSO6: To create students' ability to suggest various economic problems.

PSO7: Be exposed to alternative approaches to economic problems through exposure to courseworkin allied fields.

B.A. English Language and Literature

PSO 1: Recognize the varied and diverse milieu that shapes the literary landscape. (Understanding)
PSO 2: Apply language requirements within the globalized framework. (Application)
PSO 3: Evaluate and interpret literary works through the lens of literary theories and philosophical perspectives. (Analysis)

Department of Economics

(Part of B.A. Program)

PSO1: Understand the basic concept of economics.

PSO2: Analyse economic behavior in practice.

PSO3: Utilize an economic way of thinking.

PSO4: Apply the theoretical knowledge of historical and current events from an economic perspective.

PSO5: Participate in expressing an economic point of view.

PSO6: **Evaluate** various economic problems.

Department of Political Science

PSO 1: Use theoretical knowledge In competitive examinations for administrative services, students benefit from the subject of political science.
PSO 2: Develop skills in journalism.
PSO 3: Apply conceptual knowledge as a Member of Parliament.
PSO 4: Participate in local governance institutions, state politics, and at the central level, i.e., Lok Sabha, and Rajya Sabha, can also become a leader.
PSO 5: Utilize professional knowledge to become a Minister of State, Foreign Minister, and can work in an embassy.

B.Com, BCCA, and B.C.A

PSO 1: Apply theoretical and conceptual knowledge in Commerce, Business Management, Accounting, Taxation, and Computer Application to solve problems, employing technical and mathematical skills effectively.

PSO 2: Utilize professional knowledge and skills across various domains

including communication, entrepreneurship, programming, and accounting.

PS0 3: Evaluate diverse business phenomena and environments, conducting research to foster social responsibility and environmental awareness.

B.A. English
PSO 1: Apply communication skills in day-to-day life.
PSO 2: Solve problems in written communication.
PSO 3: Choose appropriate vocabulary for effective communication.
PSO 4: Implement Language proficiency in Mass Communication, and translations.
PSO 5: Use Language skills in competitive exams.
PSO 6: Develop creative abilities and research plans.

MA ENGLISH LANGUAGE & LITERATURE

PSO1: **Observe** the relationship between art and life to comprehend the social, emotional, psychological, political and cultural features of literary texts. (**Understand**)

PSO2: **Summarize** the basic pedagogical principles and praxis relating to the teaching of English language and literature **(Evaluate**)

PSO3: Develop the critical skills and theoretical knowledge necessary to work towards a research degree (**Create**)

PSO4: Construct a research plan to pursue further studies in areas of intent. (**Creating**)

B.Sc. Computer Science

PSO 1: Proficiency in Programming Languages: Graduates will demonstrate proficiency in at least one high-level programming language such as C, C++ Java, or others, and be able to apply programming concepts to solve real-world problems.

PSO2: Understanding of Data Structures and Algorithms: Graduates will have a deep understanding of fundamental data structures and algorithms, and be able to analyze the efficiency and correctness of algorithms for various computational tasks.

PSO3: Software Development Skills: Graduates will possess practical software development skills, including the ability to design, implement, test, and maintain software systems using industry-standard tools and methodologies.

PSO4: Database Management: Graduates will be proficient in database management concepts and technologies, including database design, SQL querying, database administration, and data modeling.

PSO5: Computer Systems Knowledge: Graduates will have a solid understanding of computer systems architecture, operating systems principles, and computer networks, enabling them to develop efficient and reliable software applications.

Bachelor of Vocational – Acting

1st Year (Semester I & Semester II)

PSO1: Understands the basic technique of stage acting

PSO2: Learn how to play a role and make it believable

PSO3: know how to analyse a script and the situations therein

PSO4: know the importance of creation in the art of acting

PSO5: Learn the use of costumes for character building

2nd Year (Semester III & Semester IV)

PSO1: Understands the technique of creating a Role on Stage

PSO2:how to effectively create an illusion of reality on stage

PSO3: Learn how to act in Films

PSO4: Understand the technique of camera acting

PSO5: Know a difference between documentary and Film

Program Specific Outcome of

3rd Year (Semester V & Semester VI)

PSO1: Understand the technique of Acting on Stage and Acting in Films

PSO2: Learn how to make a documentary

PSO3: know the technique of TV Acting

PSO4: Understand Film as a Mass Media

PSO5: Can act in any commercial venture of the entertainment industry

Bachelor of Vocational – Theatre & Stagecraft

1st Year (Semester I & Semester II)

PSO1: Understands the duties and responsibilities of Stage Manager

PSO2: Learn how to prepare a Stage Lighting Design

PSO3: Learn how construct a scenic Design

PSO4: Understand Production Management of a Drama

PSO5: Learns how to create a background score for Dramas, Documentaries And Films

Bachelor of Vocational – Acting

2nd Year (Semester III & Semester IV)

PSO1: Understand the technique background Music Score

PSO2: Learns Modern Sound Recording Techniques

PSO3: Understands Acoustics, Audio Signal Processing

PSO4: Learn Audio Engineering

PSO5: Learns Computer Audio Systems

Bachelor of Vocational – Acting

3rd Year (Semester V & Semester VI)

PSO1: Creating background Music Score for a Video Project

PSO2: Learns Modern Video Shooting Techniques

PSO3: Learn Video Engineering

PSO4: Understand Film as a Mass Media

PSO5: Understand the basics of scriptwriting and Screenplay writing

Department of MCA

PSOl: Computational Knowledge: The students will be able to apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualisation of computing models from defined problems and requirements

PSO2: Problem Analysis: The students will be able to think critically for Identify, formulate, research literature, and solve complex computing problems reaching substantiated conclusions using fundamental principles of mathematics, computing sciences, and relevant domain disciplines

PSO3: Design /Development of Solutions: The students will be able to design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.

PSO4: Conduct Investigations of Complex Computing Problems: The students will be able to use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions, maintenance and its implementation

PSO5: Modern Tool Usage: The students will be able to create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.

PSO6: Professional Ethics: The students will be able to understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.

PSO7: Project management and finance: The students will be able to demonstrate knowledge and understanding of the computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

BBA

PSO1: Develop ethical thinking.

PSO2: Develop functional and general management skills.

PSO3: Inculcate a global mindset.

PSO4: Evaluate different business problems using analytical, creative, and integrativeabilities.

PSO5: Build and Demonstrate leadership, teamwork, and social skills.

PSO6: Communicate effectively in different contexts.

PSO7: Analyze socio-political-economic environment of business organizations.

BCCA

PSO 1: Problem analysis: Identify, formulate, review, research, and analyse complex organisational problems reaching substantiated conclusions using principles of information technology and ethics of management.

PSO 2: Design/development of sustainable solutions: Design solutions for problems that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, legal, ethical and environmental considerations using different computer application tools.

PSO 3: Skills in Programming: Possess practical and theoretical knowledge of programming skills, database and web development tools sufficient to earn a living and contribute to the economic development of the region, state and nation.

PSO 4: Communication: Communicate effectively on complex technical activities with the community and society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

PSO 5: Life-long learning: Recognize the need and ability to engage in independent and lifelong learning in the broadest context of emerging markets and technological change.

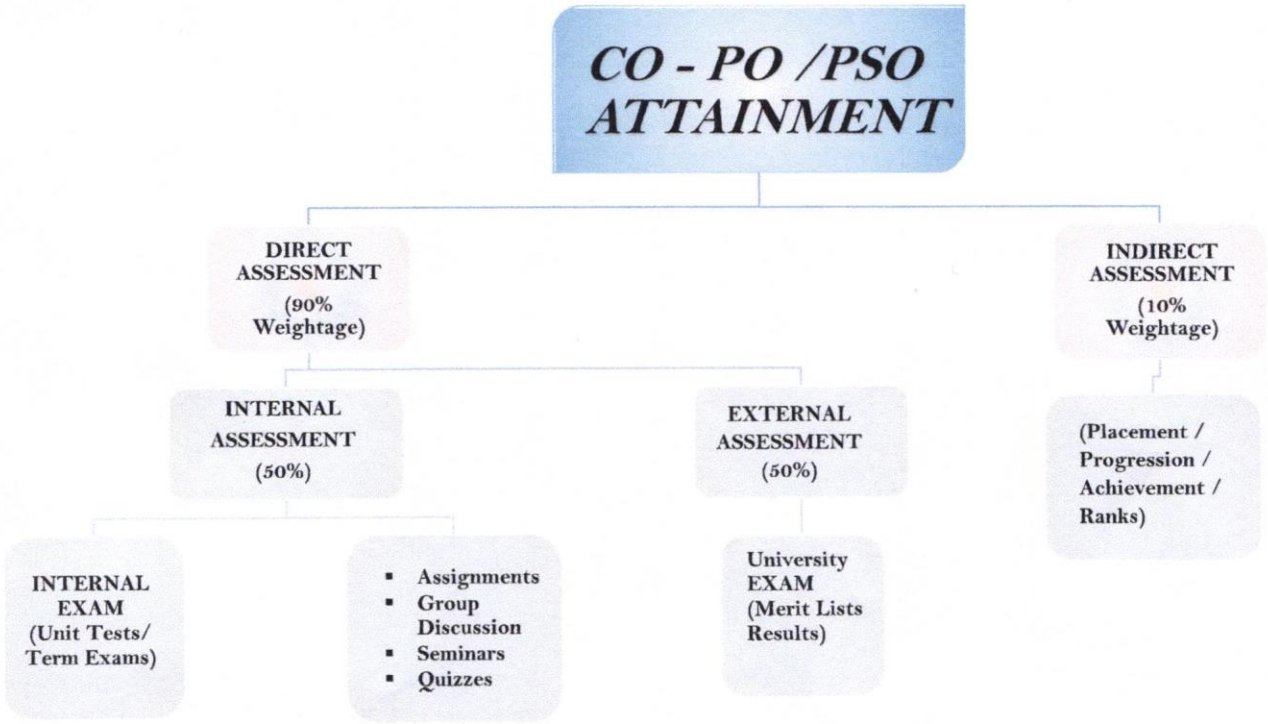

Fig: 3 CO-PO/PSO Attainment (Institution Specific)

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SOP for CO-PO / PSO Mapping

Step: 1 Framing of POs of UG / PG

Step: 2 Framing of PSOs of Programs

Step: 3 Framing of COs of all the Subjects

Step: 4 Setting of Question Paper based on COs

Step: 5 Matrix 1

Students ⟺ QP Mapping

Satisfaction Criteria

If Marks Obtained ≥ 40

False → 0

True → 1

Step: 6 Matrix 2

CO ⟺ QP Mapping

Satisfaction Criteria

If Question Based on CO

False → 0

True → 1

Step: 7 Matrix 3

CO ⟺ PO Mapping

CO ⟺ PSO Mapping

Criteria

	Low	Medium	High	No
X	1	2	3	0
	0< x ≤30	30≤ x ≤50	50≤ x ≤90	0

Step: 8 Attainment

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Fig: 4 SOP for CO-PO / PSO (Institution Specific)

Step 7: CO-PO-PSO Mapping

Sample

VMV COMMERCE, JMT ARTS AND JJP SCIENCE COLLEGE, NAGPUR															
FACULTY NAME:															
BRANCH:										**SESSION:**					
COURSE:				**YEAR:**			First			**SEMESTER:**					
SUBJECT:										**SUBJECT CODE:**					
Course Articulation Matrix															
CO-PO MAPPING															
	PO1	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**	**PO7**	**PO8**	**PO9**		**PSO1**	**PSO2**	**PSO3**	**PSO4**	**PSO5**
CO1	3	2	-	-	-	-	-	-	-		1	2	3	-	-
CO2	3	3	-	3	-	-	1	-	-		3	2	-	-	-
CO3	2	3	-	2	-	1	2	-	-		2	2	-	-	-
CO4	2	2	-	3	-	-	2	-	-		1	3	-	2	2
CO5	-	-	-	-	-	-	-	-	-		-	-	-	-	1
WT. AVG	**2.50**	**2.50**		**2.67**		**1.00**	**1.67**				**1.75**	**2.25**	**3.00**	**2.00**	**1.50**

Criteria

Mapping Corelation (x)	**Low**	**Medium**	**High**	**No**
	1	**2**	**3**	

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	0<x≤30	30<x≤50	50<x≤90	0

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COURSE OUTCOMES

B.Sc. Computer Science

Course Outcomes of Computer Science (Part of B.Sc. Program)

SEMESTER - 1

Paper-1

C Programming

CO1 Explain and develop well-structured programs using algorithm and flowchart.

CO2 Write a code in c using different control structures

CO3 Use the concept of array and function to write a code

CO4 Store the data and access it using heterogonous data types like structure and union

Paper-2

Fundamentals Of Information Technology

CO1 Explain meaning and working basic components of computer system and convert the number in other different system

CO2 Distinguish hardware and software components of computer systems.

CO3 Describe various generations and types of printers

CO4 Identify different network topologies and use of it.

Semester - 2

Paper-1

Programming In C++

CO1 Use the concept of object-oriented design, use of classes and objects to write a code.

CO2 Use the concept of constructor, destructor and operator overloading.

CO3 Apply the knowledge of inheritance and its types.

CO4 Describe the type of exception handling methods.

Paper-2

System Analysis and Design

CO1 Describe the organizational and business context of systems development.

CO2 Explain and apply system development methodologies, model, tools and techniques for developing quality software.

CO3 Describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.

CO4 Explain about implementation, software testing, and deployment issues.

Semester - 3

Paper-1

Data Structures

CO1 Apply the concept of linked list and its types for data organization

CO2 Explain the working of stack data structure and application of stack for conversion of infix to postfix, evaluation of postfix expression, quick sort and tower of Hanoi

CO3 Explain the working of queue data structure and application of queue as priority queue.

CO4 Apply the knowledge of tree and graphs concepts and traversing through non-linear data structure.

Paper-2

Operating System

CO1 Differentiate between process and thread. Apply different CPU scheduling and process scheduling algorithm.

CO2 Perform the analysis of performance comparison and understand the concept of deadlock and determine the solution of it.

CO3 Describe the various memory management techniques.

CO4 Classify various file allocation methods and use the concept of protection mechanism.

Semester - 4

Paper-1

Programming In Java

CO1 Use different java programming tool.

CO2 Apply the knowledge of programming constructs.

CO3 Discuss and implement packages, applets, threads and exception handling.

CO4 Perform the analysis of event driven java programming with graphics and controls using a tool kit.

Paper-2

Linux Operating Systems

CO1 Explain the syntax and purpose of different commands of Linux operating system.

CO2 Use vi editor.

CO3 Explain top utilities in Linux and granting access permission to file.

CO4 Manage user accounts, changing password and access to the files.

Semester – 5

Paper-1

VB Programming

CO1 Explain and use different components VB programming language.

CO2 Explain and use concept of arrays, procedures, functions and modules.

CO3 Apply the knowledge of designing menus and database using built in tools.

CO4 Explain the types of database handling and error handling.

Paper-2

Database Management Systems

CO1 Explain concept of basic of DBMS and different data models.

CO2 Perform the analysis of working with er models.

CO3 Explain and use relational model and relational algebra.

CO4 Describe the type of functional dependency and type of different normal forms

Semester - 6

Paper-1

Compiler Constructions

CO1 Describe working principle of compiler design.

CO2 Explain and use of top - down & bottom - up parsing techniques.

CO3 Apply the knowledge of algorithms and implementation techniques for type-checking , code-generation and optimization.

CO4 Classify the various internal form of source program-semantic analysis, symbol tables, error detection and recovery and directed acyclic graph.

Paper-2

SQL /PL/SQL

CO1 Explain and use principles of Codd rules, DDL,DML,TCL.

CO2 Use the concept of views and programming constructs.

CO3 Explain the types of Exception handling and procedures cursors

CO4 Discuss the various functions and triggers

B.Sc. Chemistry

Semester 1

Paper 1

Inorganic Chemistry

CO1: To enable students to know and understand about the basic concept regarding structure of atoms, ions subatomic particles and properties of different elements with reference to ionization energy, metallic and non-metallic characteristics of differentelements present in modern periodic table.

CO2: To enable students to understand chemical bonding concept and predict molecular geometry

CO3: To make students to understand the concept of S-Block elements and noble gases.

CO4: To enable students to know about various concept regarding P-Block elements and Food Adulteration their detection

Paper 2:

Physical Chemistry

CO1: To enable students to know about Thermodynamics and Thermochemistry.

CO2: To enable students to know about the basic concept regarding Gaseous State

CO3: To enable students to know about liquid crystals, properties of liquids, their determination and applications.

CO4: To make students to understand the properties of Colloidal State and Surface Chemistry.

Paper 3:

Laboratory Course

CO1: **i)**To enable students to know essential facts, concepts and principles in the analysis of radicals.

ii) To enable students to gain the knowledge regarding the identification and separation of various adulterant present in food items.

CO2: To enable students to gain skill in monitoring by observation and measurements of chemical and physicalproperties

Semester 2

Paper 1:

Inorganic Chemistry

CO1: To enable students to know about hybridization and reactivity along with mechanisms for organic reaction

CO2: To make students to understand about the orientation and reactivity of organic reactions

CO3: To enable students to know the methods of preparations of compounds and their applications in different fields ofscience and medicine

CO4: To enable students to gain knowledge of unsaturated hydrocarbons and reactivity to explain addition andsubstitution reactions.

Paper 2:

Physical Chemistry

CO1: To enable students to know maximum conversion of heat into work, change in free energy entropy and criteria ofspontaneity

CO2: To enable students to know about phases, components and degrees of freedom of system their properties andapplications.

CO3: To enable students to know about the conductance, its variation with dilution and the determination ofconductance with different methods.

CO4: To enable students to know about the velocity of chemical reaction of different types and the theories related to it.

Paper 3:

Laboratory Course

CO1: To enable students to know the characteristics of organic compounds and their identification

CO2: To enable students to know the relationship of various thermodynamic parameters and their relationship toelectrophiles and nucleophiles.

Semester 3
Paper 1:
Inorganic Chemistry

CO1: To make students to gain knowledge about general information and properties of molecular orbitals andsynthesis of tetra nitride and poly halides compounds.

CO2: To enable students to know about general information and properties of I,II and III transition series members.

CO3: To enable students to know about chemical properties of Lanthanides and Actinides elements

CO4: To enable students to know about the quantitative assessment of scientific data.

Paper 2:

Organic Chemistry

CO1: To enable students to know about the structural, chemical and physical properties of different organic halides

CO2: To enable students to know about the structural, synthesis, chemical and physical properties along with classification of alcohols and phenols

CO3: To enable students to know about the structural, chemical and physical properties of aldehydes and ketones

CO4 :To enable students to know about the structural, chemical and physical properties of carboxylic acids and its derivatives.

Laboratory Course

CO1: To enable students to know about quantitative analysis by volumetric methods and able to learn the applications oftypes of titrations and To Study and investigate the physicochemical properties of Soil

CO2: To enable students to know about the steps involved in the identification of organic compounds

B.Sc. –II, Semester – IV

Paper- I

(Inorganic Chemistry)

CO1: To enable students to understand about the different types of coordination compounds and its various aspects.

CO2: To enable students to know about isomerism in coordination compounds and Able to recognize and understandvarious redox reactions.

CO3: To enable students to understand the basic concept regarding Colorimetry and Spectrophotometry along withvarious separation techniques.

CO4: To enable students to know about the basic concept regarding Inorganic Polymer and Water Analysis.

Paper- II

(Physical Chemistry)

CO1: To enable students to understand about basic idea regarding physico-chemical identification of a crystalstructure.

CO2: To make students to gain knowledge of Electrochemistry through various laws and theories.

CO 3: To enable students to understand about the various types of spectra, rotational Vibra vibrational and electronic energylevels.

CO4: To enable students to understand the concept regarding Quantum Chemistry and Dielectric and MagneticProperties of molecules.

Laboratory Course

CO1: To enable students to understand synthesis of various complexes and basic knowledge of separation of binarymixtures using chromatography technique. Also to enhance the student's knowledge regarding physicochemical analysis of water.

CO2: To enable students to know about the steps involved in the identification of organic Compounds.

B.Sc. –III
Semester – V
Paper- I (Organic Chemistry)

CO1: To enable students to understand about various types of nitrogen, its derivatives, synthesis; and their properties.

CO2: To enable students to know about the synthesis and chemical properties of various heterocyclic compounds.

CO 3: To enable students to gain information about various quantitative analytical methods **and** Vari And various organometalliccompounds.

CO 4: To enable students to understand various aspects, laws and applications of spectroscopic Methods

Paper- II
(Physical Chemistry)

CO1: To enable students to understand about the various aspects of quantum chemistry, and its various theories.

CO 2: To understand about the various aspects of quantum chemistry, atomic orbital and its various theories along withapplications.

CO3: To enable students to understand about different properties and theories related solution. They will also get theknowledge about magnetic properties, its measurements.

CO4: To enable students to understand about basic concept of photochemistry and Raman spectra.

Laboratory Course

CO1: To enable students to understand the estimation of various organic compounds using different methods.

CO 2: To enable students to understand about the various applications of laws related to physical parameters and theirverifications.

B.Sc-III, Semester –VI
Paper-I
(Inorganic Chemistry)

CO 1: To enable students to understand about interaction of metal complexes with various ligands and their electronicspectra.

CO 2: To enable students to understand about the magnetic, thermodynamic and kinetic parameters of metal complexes

CO 3: To enable students to understand about the various application of spectroscopic and separation techniques likechromatography, ion-exchange and solvent extraction methods.

CO 4: To enable students to understand about the inorganic polymers their types, synthesis and properties

Paper- II
(Organic Chemistry)

CO 1: To enable students to understand various aspects NMR and its applications.

CO2: To enable students to understand organic synthesis and carbohydrate it's types and properties.

CO3: To enable students to gain an understanding of amino acids, peptides, proteins, nucleic acids, fats, oils, anddetergents

CO4: To enable students to gain an understanding of synthetic dyes, drugs and polymers.

Laboratory Course

CO1: To enable students to gain the knowledge about synthesis of various complexes and study their properties usingvarious methods.

CO2: To enable students to understand binary mixture separation and identification of various compounds.

B.COM COURSE OUTCOMES: CO

Paper -1 Fundamentals of Accounting

CO1: Given the information about the business transactions/ each student will be able to identify the nature of transaction/events and will be able to record the financial transaction in the books of accounts i.e. Journal, Ledger, personal, Real, Nominal Account and Subsidiary Books etc. by applying double entry book system of accounting.

CO2: Given the Trial Balance of a Sole Trading concern along with the accompanied adjustments the students will be able to prepare the financial statement of a Sole Trader at the end of a financial year.

CO3: Given the detail business transactions between the Head office and Branches, students will be able to prepare Branch Account, cash and Credit sales, debtors & stock and debtor method of accounting.

CO4: Given the Trial Balance along with the adjustment of a Co-operative society a student would be able to prepare Trading Account, Profit & Loss Account, Profit & Appropriation Accounts and Balance Sheet of Co-operative Society As per State Co-operative Societies Act, 1960.

CO5: Given the information of business Receipts and Payments, student' a simple cash book.

B.A. HISTORY

Semester - I

CO 1: Study the ancient Indian civilization such as Harappa and Vedic and understand social, political and religious changes during the period.

CO 2: Develop the ability to understand the origin and tents of Jainism and Buddhism.

CO 3: Acquire knowledge about ancient Indian dynasties – Maurya, Gupta and Vasatika.

CO 4: Introduction to prominent Sultanate dynasties and their administrative systems in medieval India.

CO 5: Acquire knowledge on religious, culture and art history in medieval India.

B.A. Semester II

History of India from 1526 to 1761

CO 1: To understand rise and establishment of Mughal dynasty in India.

CO 2: Know about the war of succession or Shahjahan and understand the Deccan Policy of Aurangzeb.

CO 3: Introduction to history of Marathas; understand significance of coronation and administrative system of Chhatrapati Shivaji.

CO 4: Analyse the Maratha War of Independence and study third battle of Panipat in Peshwa period.

CO 5: Understanding foundation of East India Company's rule in India. Semester III

History of India :

1764 to 1885

CO 1: Understand the rise of British Power in India and analyse their agrarian policy and land revenue system.

CO 2: Analyse policies of Governor-Generals in India under East India Company's rule.

CO 3: Study socio-religious movements of modern India.

CO 4: Understand the administrative reforms introduced by Viceroys during establishment of British rule in India.

CO 5: Analyse the causes of rise of Indian nationalism and emergence of local organisations.

B.A. Semester IV

History of India :

1885 – 1947

CO 1: Understand the origin and establishment Indian National Congress. Understand the nature of moderates and extremists' ideology.

CO 2: Understand the phases of Indian National Movement and its impact under the leadership of Mahatma Gandhi.

CO 3: Study various missions proposed by British government.

CO 4: Examine role of Subhash Chandra Bose and his formed INA in struggle of Indian Independence.

CO 5: Evaluate Mountbatten plan and Indian Independence Act of 1947.

B.A. Semester V

Modern World – 1789-1920

CO 1: Introduction to landmark events in World history.

CO 2: Understand policy of imperialism and changes in world political order.

CO 3: Emergence of State of Germany and its diplomatic policy.

CO 4: Critically analyse background of First World War and international peace making attempts that followed.

B.A. Semester VI

Modern World : 1920-1960

CO 1: Analyse causes for the rise of dictatorship in Europe.

CO 2: Understand international crisis; inter world war period politics and events leading to Second World War and its aftermath.

CO 3: Understand world politics after World War and attempts to restore World peace.

CO 4: Introduction to political shifts in West Asia.

Bachelor of Vocational – Acting

SEMESTER - I

Paper -1

Acting as Observed Art

CO1 Presentation Acting in Amateur and professional Theatre Productions

CO2 Perform Acting in religious programmes

CO3 Presentation in Various theme Parks

CO4 Create portfolio to promote themselves

Paper -2

Acting as Created Art

CO1 Acting in Creative Theatre Productions

CO2 Acting in Cultural programmes

CO3 Presentation at Various Theatre Auditoriums

CO4 Perform as an actor in various traditional Theatres

Bachelor of Vocational – Acting

SEMESTER - II

Paper -1

Acting and its Basic Elements

CO1 Acting in Amateur and professional Theatre Productions

CO2 Perform Acting in religious programmes

CO3 Presentation in Various theme Parks

CO4 Create portfolio to promote themselves

Paper -2

Acting and Improvisation

CO1 Presentation Acting in Creative Theatre Productions

CO2 Acting in Cultural programmes

CO3 Presentation at Various Theatre Auditoriums

CO4 Perform as an actor in various traditional Theatres

Bachelor of Vocational – Acting
SEMESTER – III
Paper -1
Types of Acting

CO1 Perform Acting in Professional Theatre Productions

CO2 Acting in Short Films

CO3 Perform in Various Advertisements produced at local level

CO4 Presentation as an anchor in Documentaries

Paper -2

Actor And His Body

CO1 Acting in Physical Theatre Oriented Production

CO2 Acting in Open Theatres

CO3 Perform at Various Theatre Festivals

CO4 Presentation as an actor in various Active Theatre Groups

Bachelor of Vocational – Acting

SEMESTER – IV

Paper -1

Acting Techniques

CO1 Acting in Mega Theatre Productions

CO2 Acting in front of Camera

CO3 Presentation in Various Advertisements produced at local level

CO4 Perform as an anchor at Events

Paper -2

Role Interpretation and Role Playing

CO1 Acting in Intimate Theatre

CO2 Acting in Black Box Theatres

CO3 Presentation at Various Theatre Institutions

CO4 Perform as an actor in various Regional Theatre Groups

Bachelor of Vocational – Acting

SEMESTER - V

Paper -1

Acting in Drama

CO1 Presentation Acting in Various Plays

CO2 Acting in Drama

CO3 Perform in Various Commercial Plays

CO4 Voice over artists in Plays & Mahanatya

Paper -2

Acting in Films

CO1 Acting in Professional Film Production House

CO2 Acting in Films

CO3 Presentation in Various Advertisements

CO4 Perform as a Voice over artists in Films

Bachelor of Vocational – Acting

SEMESTER – VI

Project

Project Work - Project Seminar

CO1 Acting in Various Short Films

CO2 Acting in Docu-Drama

CO3 Presentation in Various Commercial Media Houses

CO4 Perform as a Professional artists in Feature Films, Telefilms & Advertisements

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - I

Paper -1

Drama Theatre Concepts & Forms

CO1: Work as a Makeup Artists in Amateur Theatre Productions

CO2: Work as Makeup Artists in Professional Theatre Productions

CO3: Work As Costume Designer in Amateur Theatre Productions

CO4: Work As Costume Designer in Professional Theatre Productions

Paper -2

Indian Folk Theatre

CO1: Can work as costume designer for Theatre Productions

CO2: Can work as costume creator for Theatre Productions

CO3: Work as a Technical assistant in Historical plays

CO4: Work as a Technical assistant in Periodical plays

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - II

Paper -1

Indian Traditional Theatre

CO1: Work as Makeup Artists in religious programmes

CO2: Create technical portfolio to promote themselves

CO3: Work as a Technical assistant in Marathi Theatre, Hindi Theatre

CO4: Work as a Technical assistant in Bengali Theatre, Gujrati Theatre

Paper -2

Modern Indian Theatre

CO1: Understands Basic concepts of Makeup like, Background, Highlight, Shadow

CO2: Learn how do stylized Makeup for traditional plays

CO3: Work as a Technical assistant in Non-realistic plays & Realistic plays

CO4: Work as a Technical assistant in Experimental plays & Comedy Plays

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - III

Paper -1

Greek Theatre

CO1: Learn how to design Traditional Costumes

CO2: Learn how to design Modern Costumes

CO3: Learns how to establish relationships amongst the characters through costume design

CO4: Learn how to design Set for Western plays

Paper -2

Elizabethan Theatre

CO1: Understands Basic concepts of Set Designing

CO2: Learn how to make properties according to the style of the plays

CO3: Learns how to design Computer Aided Set Design

CO4: Learn how to design Sets and costumes for Elizabethan Theatre

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - IV

Paper -1

Modern Western Theatre

CO1: Work as set & Light Designer for Theatre Productions

CO2: Work as Art Director for Short Films

CO3: Work as Light Designer for Short Films

CO4: Work as Art Director for TV Advertisements

Paper -2

Styles of Play Production

CO1: Create portfolio to promote themselves

CO2: Work as Art Director in Documentaries

CO3: Work as light designer for Documentaries

CO4: Work as Light Designer for TV Advertisements

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - V

Paper -1

Experimental Theatre

CO1: Work as Sound Recordist in Professional Sound Recording companies

CO2: Work as Sound Recordist in Professional Projects of Entertainment Industry

CO3: Understands the technique Set Design

CO4: Learn how to prepare a computer aided design for the set of a Drama

Paper -2

Professional Theatre

CO1: Learn how to make Models of Set for the Drama

CO2: Understand woodwork for preparation of Drama Sets

CO3: Understand the technique of Traditional and Modern Light Design

CO4: Understands Qualities of Lights, intensity, brightness, colour chroma, Language of Light

Bachelor of Vocational – Theatre & Stagecraft

SEMESTER - VI

Project

Project Work - Project Seminar

CO1: Work as Off-Screen worker Various Short Films

CO2: Understand how to do research work for Docu-Drama

CO3: Work as an intern at Various Commercial Media Houses

CO4: Work as Professional Technicians in Feature Films, Telefilms & Advertisements

BCCA(CBCS)SEM –I

Paper 1:-Ms-Office(IT)

CO1:- Student will be able to create and manage word documents with required formatting .Students will be able to composed word documents and operate relevant features and tools of Ms-Word.

CO2:- Students will be able to perform operations like creating, storing and formatting data using different excel formatting tools and features.

CO3:- Students will be able to perform calculation using functions and present the data visually using charts and graphs.

CO4:- Students will be able to create and design professional presentation using different features and tools of power point and appraise professional business data and document.

Paper 2:-

Fundamental of Computers

CO1:- Student will be able to understand and use information of various components of computer.

CO2:- Students will be able to use the knowledge of peripheral devices for effective working. Student will be able to perform calculation based on various number system.

CO3:- Students will be able to analysis and differentiate various modes of data transmission and will also be able to decide the choice of communication channel for a given situation.

CO4:- Students will be able to apply the knowledge of system software and application software effectively and will understand the use of information of various functions and features of OS.

Paper 3:

Professional Ethics and Human Values

CO1:- Student will be able to outline the importance of values in life and explain the concept of co-existence of the self and the body.

CO2:- Students will be able to discuss the basics of values in human–human interaction.

CO3:- Students will be able to critically evaluate the different theories of ethics.

CO4:- Students will be able to highlight the role of code conduct in ethical behaviour in professional life and analyse the issues in professional ethics.

BCCA(CBCS)SEM –II

Paper 1:

Principles of Business Management

CO1:- The student will be able to identify different functions of management and management thoughts.

CO2 :-The student will be able to differentiate between management and administration as well as identify the skills required for a manager.

CO3 :-The student will be able to outline and illustrate plans for various activity .

CO4 :-The student will be able to develop competency of decision making while working in a group.

Paper 2:

Database Management System

CO1:- Student will be able to understand and compare database management system with conventional file system and suggest suitable database system for a given situation.

CO2:- Student will be able to design database by analysing different database models for real life Situations

CO3:-Student will be able to reduce redundancy and inconsistency for the given table using normalization.

CO4:- Student will be able to apply various SQL Commands and operator to manage database operations and evaluate different data constraints for maintaining integrity of the given database.

Paper 3 :

E-Commerce and Web Designing

CO1:- Student will be able to illustrate understanding of E-commerce & EDI concepts.

CO2: -Student will be able to select right E-commerce Business model in the given business environment.

CO3 :-Student will be able to deploy online business transaction and E-Payment system in E-commerce .

CO4 :-Student will be able to create a Web page using HTML .

Practical of tally -II (ERP9)

(Management Accounting &Reporting)

CO1 :- Given the details about pay scale, various allowances and deduction application to the employee the student will able to compute gross and taxable salary using tally ERP9.

CO2 :-Given the details about the transaction student will be able to prepare report relatable to financial transaction.

CO3 :- Given the details about the various payment transaction student will be able to prepare TDS report for a specific period .

CO4 : Given the information about the taxable transaction under GST , the student will be able to prepare GST report.

BCCA (CBCS) SEM –III

Paper 1

Environmental Studies

CO1:- Student will be able to understand basics of environmental science and atmospheric science along with the components of environment.

CO2:- Students will be able to explicate the importance of environmental education.

CO3:- Students will be able to understand the ecology and its allied branches.

CO4:- Students will be able to comprehend about population and community ecology.

Paper 2

Business Economics

CO1:- Student will be able to understand various types of economic system.

CO2:- Students will be able to understand socialist economic system.

CO3:- Students will be able to understand the working mechanism of capitalist economy.

CO4:- Students will be able to compare various Indian business models.

Paper 3:-

Visual Basic programming

CO1:- Student will be able to understand the working and basic of VB programming language.

CO2:- Students will be able to Understand the concept of learn concept of arrays, procedures, functions and modules.

CO3:- Students will be able to critically apply the knowledge of designing menus and data base using built in tools.

CO4:- Students will be able to explain the types of Database handling and Error handling

Paper 4

Data Base Management system

CO1:- Student will be able to understand the concept of basic of DBMS.

CO2:- Students will be able to perform the analysis of working with ER models.

CO3:- Students will be able to understand the working of relational model.

CO4:- Students will be able to describe the type of functional dependency and normalization.

BCCA(CBCS)SEM –IV

Paper – I

Statistical Techniques

CO1:- Understand the concept of data collection, tabulation and classification.

CO2:- Student will be able to describe various types of averages.

CO3: -Student will be able learn the various methods of measuring dispersion.

CO4: -Student will be able to use the concept of correlation and regression in practical analysis.

Paper 2

Business Law

CO1:- Develop competency in student to make them employable in the legal firms.

CO2:- Student will be able to develop ethical practices and imbibe values for better legal work.

CO3: -Demonstrate the ability to analyse in detail the companies' act 2013 and other business regulations

CO4: -Student will be able to practice business management and mercantile law.

Paper 3

Core Java

CO1:- Student will be able to Understand the concept of Java programming.

CO2:- Students will be able to apply the knowledge of programming constructs.

CO3:- Students will be able to discuss the various packages, applets, threads and exception handling.

CO4:- Students will be able to perform the analysis of event driven java programming with graphics and controls using AWT toolkit.

Paper 4

PHP & MySQL

CO1:- Student will be able to understand the basic structure of PHP.

CO2:- Students will be able to understand the functions in PHP and its types.

CO3:- Students will be able to understand the concepts of arrays and conversion between arrays and variables.

CO4:- Students will be able to understand the how to examine data from the webpage, database connectivity with PHP and concept of cookies.

BCCA(CBCS)SEM –V

Paper 1

Computerized Accounting using Tally

CO1 :- Given the details about pay scale, various allowances and deduction application to the employee the student will able to compute gross and taxable salary using tally ERP9.

CO2 :-Given the details about the transaction student will be able to prepare report relatable to financial transaction.

CO3 :- Given the details about the various payment transaction student will be able to prepare TDS report for a specific period .

CO4 :- Given the information about the taxable transaction under GST , the student will be able to prepare GST report.

Paper 2

VB.Net

CO1:- Student will be able to Understand the concept of .NET framework and architecture of .NET.

CO2: -Student will be able to Understand the various types of Interface design and implement.

CO3: -Student will be able to understand the Advanced Interface Patterns, Adapter, Delegates and Events.

CO4:- Student will be able to understand the user interface, MDI application and multiple types of forms.

Paper 3

System Analysis & Design

CO1:- Student will be able to able to describe the organizational and business context of systems development.

CO2: -Student will be able to learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.

CO3:-Student will be able to learn to describe, organize and structure the components of system, including decisions about the system's hardware, software and network environment.

CO4:- Student will be able to learn about implementation, software testing, and deployment issues.

Paper 4

Cost and Management Accounting

CO1:- Student will be able to demonstrate the ability to interpret and analyse financial statement.

CO2:- Student will be able to implement traditional and modern strategies and practices of costing, management, auditing and taxation.

CO3:- Develop competency in student to make them employable in the accounting and taxation industry.

CO4:- Student will be able to learn necessary professional knowledge and skills in accountancy and taxation.

BCCA(CBCS)SEM –VI

Paper 1 – C#.Net

CO1:- Student will be able to get knowledge of the structure and model of the programming language.

CO2:- Student will be able to use the programming language C # for various programming technologies

CO3: -Student will be able to learn the use of certain technologies by implementing them in the C # programming language to solve the given problem.

CO4: -Student will be able to learn the concepts of classes and object and use of inheritance.

Paper 2-

Python

CO1: -At the end of this course the students will get the knowledge of Installing python on windows, installing python on Linux, Meeting the interpreter, Students can create their own program.

CO2: -The student will be able to use library functions of python and they can create their own user defined functions

CO3: -The student will get knowledge about Storing functions, performing mathematics, Calculating Decimals, Matching patterns etc.

CO4: -The student will get the knowledge of Accessing files, Reading and writing files, Updating file strings, Pickling data etc.

Paper 3

Company Law and secretary Practice

CO1:- Develop competency in student to make them employable in the corporate world.

CO2:- Student will be able to develop ethical practices and imbibe values for better corporate governance.

CO3: -Demonstrate the ability to analyse in detail the companies' act 2013 and other business regulations

CO4: -Student will be able to practice business management and administration.

B.A. Political Science
Semester 1

CO1- Understand the foundational concepts and principles of political theory, including sovereignty, justice, power, authority, and legitimacy.

CO2- Analyse and evaluate different political ideologies such as liberalism, socialism, feminism.

CO3- Critically examine the historical development of political thought from classical antiquity to contemporary theories.

CO4- Apply theoretical frameworks to analyse real-world political phenomena and events.

CO5- Develop the ability to construct coherent arguments and articulate positions on complex political issues, drawing upon theoretical perspectives.

CO6- Engage with diverse perspectives within political theory, including Western and non-Western traditions, and understand the implications of cultural, social, and historical contexts.

CO7- Evaluate the relationship between political theory and other disciplines such as philosophy, sociology, economics, and law.

CO8- Demonstrate proficiency in textual analysis of primary sources and secondary literature in political theory.

CO9- Enhance critical thinking skills through rigorous examination of theoretical concepts, assumptions, and implications.

C010- Cultivate a deeper awareness of the ethical dimensions of political life and the responsibilities of citizenship in various societal contexts.

B.A SEMESTER II

WESTERN POLITICAL THOUGHT:

CO1: Comprehend the foundational ideas and key concepts of Western political thought, tracing its evolution from ancient Greece to modern times.

CO2: Analyse and evaluate major political theories such as Justice theory, Communism ,etc and understanding their historical contexts and contemporary relevance.

CO3: Critically assess the contributions of key political thinkers including Plato, Aristotle, Karl Marx, and J.S. Mill among others.

CO4: Demonstrate an understanding of the key debates and controversies within Western political thought, including the tension between individual rights and collective responsibilities, the role of the state in society, and the nature of democracy.

CO5: Apply theoretical frameworks and concepts to analyse contemporary political issues and phenomena, drawing connections between historical theories and present-day political realities.

CO6: Develop critical thinking skills through engagement with primary texts, secondary sources, and scholarly debates in the field of political theory.

CO7: Enhance written and oral communication skills through the articulation and defence of coherent arguments and interpretations of political ideas and texts.

CO8: Cultivate an awareness of diverse perspectives within Western political thought, including the contributions of marginalized voices and non-Western critiques of Western political traditions.

CO9: Reflect on the ethical dimensions of political theory, grappling with questions of justice, equality, power, and authority in both theoretical and practical contexts.

B.A SEMESTER III

INDIAN GOVERNMENT AND POLITICS

CO1- Understand the historical development of the Indian political system, including the influences of colonialism, independence movements, and the drafting of the Indian Constitution.

CO2- Analyse the structure and functioning of the Indian political institutions, including the Parliament, President, Prime Minister, and judiciary, and comprehend their roles in governance.

CO3- Evaluate the federal structure of the Indian state, exploring the distribution of powers between the central government and the states, and the mechanisms of intergovernmental relations.

CO4- Critically analyse the socio-economic diversity of India and its implications on governance, including issues of caste, religion, ethnicity, and regionalism.

CO5- Understand the role and functions of the Supreme Court of India within the framework of the Indian Constitution, including its jurisdiction, powers, and responsibilities in upholding the rule of law, protecting fundamental rights, and interpreting legal statutes.

CO6- Develop critical thinking and analytical skills to engage with contemporary debates and issues in Indian politics, and formulate informed opinions on matters of governance, democracy, and development in India

B.A SEMESTER IV

STATE GOVERNMENT AND POLITICS

CO1- Analyse the structure and functions of state governments, including the roles of the executive, legislative, and judicial branches.

CO2- Examine the interplay between state and federal governments, including issues of federalism, states' rights, and interstate cooperation.

CO3- Explore the historical development of state government structures and political institutions, tracing their evolution over time.

CO4- Understand the historical evolution, constitutional framework, and functioning of Panchayati Raj Institutions (PRIs) in India, including their roles, responsibilities, and powers at the local governance level.

CO5- Students will demonstrate a comprehensive understanding of the fundamental principles and objectives of the Right to Information (RTI) Act in India, including its historical context, legal framework, and significance in promoting transparency and accountability in governance.

B.A SEMESTER V

COMPARATIVE GOVERNMENT AND POLITICS

CO1- Students will demonstrate a comprehensive understanding of the various systems of government across different countries and regions, specifically of U.K and U.SA.

CO2- Students will analyse and compare the key political institutions, such as executive, legislative, and judicial branches, in different political systems, identifying similarities, differences, and their impact on governance.

CO3- Students will critically evaluate the role and influence of political parties, interest groups, and electoral systems in shaping political dynamics within different countries.

CO4- Students will examine the impact of historical, cultural, economic, and social factors on the development and functioning of political systems, fostering a deeper understanding of the complexities of governance.

CO5- Students will assess the mechanisms of power distribution and checks and balances within political systems, analysing how they contribute to the stability or instability of governance structures. CO6-Students will develop analytical skills to critically assess comparative methodologies and research techniques used in the study of comparative government and politics.

CO7- Students will demonstrate effective written and oral communication skills, articulating complex ideas and arguments related to comparative government and politics with clarity and coherence.

CO8- Students will apply theoretical frameworks and empirical evidence to propose informed solutions and policy recommendations for addressing political challenges and fostering democratic governance in diverse contexts

B.A SEMESTER VI

INTERNATIONAL RELATIONS

CO1- Understand the key theories and concepts in international relations, including realism, idealism, game theory and others, and analyse their application in global politics.

CO2- Evaluate the historical development of the modern international system, including the role of major powers, international organizations, and non-state actors.

CO3- Analyse the causes and consequences of major international conflicts, including wars, territorial disputes, and humanitarian crises.

CO4- Demonstrate knowledge of key international institutions and agreements, such as the United Nations, World Trade Organization, and international treaties, and assess their effectiveness in addressing global challenges.

CO5- Critically assess the role of international law and human rights in shaping state behaviour and global governance.

CO6- Understand the dynamics of global terrorism and its impact on state sovereignty, economic interdependence, and cultural exchange.

CO7- Analyse the role of diplomacy and negotiation in managing interstate relations and resolving conflicts peacefully. CO8-Critically examine contemporary issues in international relations, such as climate change, terrorism, nuclear proliferation, and migration, and evaluate potential solutions.

B.A

CO 1:

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B.Com1/2.(1Sem to 4 Sem)

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B.A. Economics

1st Semester

Micro Economics

CO 1 The students will be able to write the basic principles of microeconomic theory.

CO 2 The students shall be able to explain efficiency and equity of consumption and production as well as cost and firms' policy in market behaviour.

CO 3 The students will also be able to analyse demand by households and supply of goods and services by business firms.

CO 4 The students will also be able to explain interaction of demand and supply in various market structures.

CO 5 The students will also to illustrate how microeconomic concepts can be applied to analyse the real-life situation.

B.A. 2nd Semester
Macro Economics

CO1 The students will be able to explain various concepts of GDP and relationship between National Income and welfare of people.

CO 2 The students will further be able to write the factors that determine domestic productivity, employment level of prices and interest rates.

CO 3 The students will be able to apply basic concepts to analyses the situations of inflation and business cycles.

CO 4 The students will be able to explain the role of monetary and fiscal policy of Government to fight inflation or to stabilize business cycles.

CO 5 The students will have ability to explain the relationship between consumption function and investment in economy and shall be able to give suggestion for promoting investment.

B.A. IInd Year

3rd Semester

CORE BANKING AND FINANCE

CO 1The students to analyse various trends in Banking and Financial institutions.

CO 2 The students will be able to compare different types of banking institutions for their efficiency in providing finance to the various categories of industries and businesses.

CO 3 The students will be able to write the role of various types of banking and financial institutions and shall be give suggestions for improvement

CO 4 The course will make students to explain the major policy debates on monetary policy and shall be able to give suggestions.

CO 5 To enable the students explain the foundation of Money market and financial markets and its working in economic environment.

B.A. 4th Semester
INDIAN ECONOMY

CO 1 The students would be able to analyse frameworks to review major trends in economic indicates in the India in post-independence period.

CO 2 The Students will be able to examine various paradigm shifts and turning points in policy debates in India.

CO 3 The Students to examine sector-specified policies and their impacts in shaping trends in India. key economic indicators in India and they will be able to give constructive suggestion for further developments

CO 4 The students will be able to highlight major policy debates and evaluate the Indian Empirical evident to update the major changes of Indian Economy

B.A. IIIrd Year

5th Semester

INDIAN ECONOMY-I

Course Outcomes:

CO1: The students would be able to explain the concept the Nature of Indian Economy.

CO2: The students would be able to explain the Impact of Covid 19 on the India Economy.

CO3: The students would be able to write the role of agriculture in Indian economics and sustainable agriculture.

CO4: The students would be able to explain the concept of Rural Development.

CO5: The students would be able to write the role of industrial sector in India.

CO6: The students would be able to explain New Economic policies 1991.

CO7: The students would be able to explain the concept of Employment, Unemployment and Poverty.

CO8: The students would be able to explain the different poverty alleviation programme in India.

B.A. IIIrd Year

6th Semester

INDIAN ECONOMY-II

CO1: The students would be able to explain the concepts of economic growth & development.

CO2: The students would be able to explain the Concept of sustainable development & Inclusive Growth.

CO4: The students would be able to explain India's Economic Planning and Policy.

CO4: The students would be able to explain the Concept of Special Economic Zone.

CO5: The students would be able to explain the concept of Public Finance and Tax structure of India.

CO6: The students would be able to explain the concept of foreign trade & new economic reforms.

CO7: The students would be able to explain foreign trade & its impact on Indian Economy.

CO8: The students would be able to explain the Impact of World Trade Organization on Indian Economy.

Bachelor Of Computer Application (BCA)

SEMESTER - 1

Paper-1

Computer Fundamentals

CO1 Able to explain the meaning and basic components of computer system.

CO2 Define and distinguish hardware and software components of computer systems.

CO3 Gain knowledge about five generations of computer systems.

CO4 Identify the various input and output units and their purpose.

Paper-2

C Programming

CO1 Able to explain develop well-structured programs using C language.

CO2 Able to explain the concept of problem solving and expression of solution through flowchart and algorithm.

CO3 Able to explain the concept of different memory allocation methods.

CO4 Classify the various parts of program -data types, variables, operators, conditional & looping statements, functions, Pointers, Arrays, File handling.

Paper-3

Statistical Methods

CO1 Able to explain the concept of data collection, tabulation and classification.

CO2 Describe various types of averages.

CO3 Discuss the various methods of measuring dispersion.

CO4 Able to explain the concept of correlation and regression.

Paper-4

Discrete Mathematics Structure- I

CO1 Able to explain the concept and working of propositional calculus with elementary formal logic.

CO2 Explain different types of normal forms.

CO3 Be familiar with constructing proofs.

CO4 Able to explain and apply the knowledge of theory of inference.

Paper-5

Operating System

CO1 Able to explain the concept of Operating System.

CO2 Describe the various memory management techniques.

CO3 Perform the analysis of performance comparison and able to explain the concept of deadlock and determine the solution of it.

CO4 Discuss various methods of scheduling.

Paper-6

Office Automation

CO1 Able to explain the concept of Windows Operating System.

CO2 Able to explain the concept and working of MS Word.

CO3 Able to explain the knowledge of MS Excel.

CO4 Able to explain the concept of MS Power-point.

SEMESTER-2

Paper-1

Programming in C++

CO1 Able to explain the Object-Oriented design & program implementation by using OOP language feature.

CO2 Able to explain use the concept of constructor and destructor, operator overloading.

CO3 Able to explain the knowledge of Inheritance and its types.

CO4 Describe the type of Exception handling methods.

Paper-2

System Analysis & Design

CO1 Learn to explain the organizational and business context of systems development.

CO2 Learn to explain and apply system development methodologies, model, tools and techniques for developing quality software.

CO3 Learn to describe, organize and structure the components of system including decisions about the system's hardware, software and network environment.

CO4 Learn about implementation, software testing, and deployment issues.

Paper-3

Numerical Methods

CO1 Determine the solution of algebraic transcendental equations using appropriate Numerical Methods.

CO2 Solve a differential equation using appropriate Numerical methods.

CO3 Solve a linear system of equations using appropriate Numerical methods.

CO4 Calculate a definite integral using an appropriate Numerical method.

Paper-4

Discrete Mathematics Structure II

CO1 Able to explain the concept of set and describe the types of sets.

CO2 Able to explain various properties and operations on sets.

CO3 Able to solve recurrence relations

CO4 Use the concept and apply the knowledge of graphs and trees, relations and functions

Paper-5

Linux Operating Systems

CO1 Able to explain the concept of Linux Operating System its file structure and shell.

CO2 Able to perform the various basic commands.

CO3 Able to explain the working of vi editor.

CO4 Manage user accounts, changing password and access to the files.

Paper-6

E Commerce

CO1 Able to explain the concept of E commerce, E market and value chain models.

CO2 Able to explain the concept of business strategies in IT age.

CO3 Able to explain the working principle of business-to-business Ecommerce.

CO4 Perform the analysis of Business to consumer E commerce.

SEMESTER – 3

Paper-1

Visual Basic Programming

CO1 Able to explain the working with Visual Basic window components and basic programming fundamental.

CO2 Able to explain apply arrays, procedure and functions.

CO3 Able to explain apply menus and concept of database handling.

CO4 Able to explain the use of ADO data control and handling errors.

Paper-2

Database Management System

CO1 Able to explain the basic of Database management system.

CO2 Able to explain the concept of ER-Models, problems on reduction an ER-Scheme to table

CO3 Able to explain use the concept of relational model.

CO4 Able to explain the concept of functional dependencies and normalization.

Paper-3

Data Structure

CO1 Able to explain use the concept of linked list.

CO2 Able to explain the concept of stacks.

CO3 Able to explain the concept of queue and sorting and searching.

CO4 Able to explain the concept of trees and graphs.

Paper-4

Operation Research – I

CO1 Able to explain the concept of operation research origin and development of OR and concept of linear programming.

CO2 Able to explain the concept of linear programming methods.

CO3 Able to solve the transportation problem.

CO4 Able to solve the assignment problem.

Paper-5

Web Technology – I

CO1 Able to explain the concept of Internet and Protocols.

CO2 Able to explain the basic concept of HTML and its tags.

CO3 Able to explain the concept of browser and DHTML.

CO4 Able to explain use of cascading style sheet and its type.

Paper-6

Digital Electronics - I

CO1 Able to explain the concept of Number System and binary code.

CO2 Able to explain the concept of data representation and solve the binary arithmetic.

CO3 Able to explain the concept of logical gates and its types

CO4 Able to explain the concept of various Boolean algebra and solve the logical expression using K map

SEMESTER – 4

Paper-1

software Engineering – I

CO1 Able to explain the concept of software engineering and generic new process.

CO2 Able to explain the concept of process models and software requirements.

CO3 Able to explain the concept of requirement engineering process and system models.

CO4 Able to explain the concept of design engineering.

Paper-2

SQL and PL-SQL

CO1 Able to explain the Codd's rules and types of statement.

CO2 Able to explain the concept of views and PL/SQL programming.

CO3 Able to explain the concept of exception handling, Cursor and Procedure.

CO4 Able to explain the concept of Functions and Triggers.

Paper-3

Theory of Computation

CO1 Able to explain the concept of Finite automation and regular expression.

CO2 Able to explain the concept of properties of regular sets.

CO3 Able to explain the simplification of context free Grammers.

CO4 Able to explain the Push down automata.

Paper-4

Operations Research - II

CO1 Able to explain the concept of Game theory

CO2 Able to explain the network scheduling by CPM/PERT.

CO3 Able to explain the concept of Inventory control.

CO4 Able to explain the concept of Queuing control.

Paper-5

Web Technology - II

CO1 Able to explain the JSP life-cycle and Math object, string object and date object.

CO2 Able to explain the JavaScript objects and JavaScript Security.

CO3 Able to explain the concept of VBScript.

CO4 Able to explain the concept of web services.

Paper-6

Digital Electronics - II

CO1 Able to explain the concept of various combinational circuits.

CO2 Able to explain the concept of various sequential circuits, flip-flops and counters.

CO3 Able to explain the 8086 microprocessor and addressing mode.

CO4 Able to explain perform instruction sets.

SEMESTER - 5

Paper-1

Computer Graphics - I

CO1 Able to introduce what is computer graphics and its primitives.

CO2 Able to explain the concept of output primitives.

CO3 Able to explain the concept of 2-D transformation and 2-D geometrical transformation.

CO4 Able to explain the concept of 2-D views.

Paper-2

Complier Construction

CO1 Able to explain the concept of compiler and translator.

CO2 Able to explain the concept of high-level programming language.

CO3 Able to explain the lexical structure.

CO4 Able to explain the concept of Parsers, Code optimization and code generation.

Paper-3

VB.NET

CO1 Able to explain the concept of .NET framework and architecture of .NET.

CO2 Able to explain the various types of Interface design and implement.

CO3 Able to explain the User Interface, MDI Application and multiple types of forms.

CO4 Able to explain the Advanced Interface Patterns, Adapter, Delegates and Events.

Paper-4

Software Engineering - II

CO1 Able to explain the Software architecture.

CO2 Able to explain the software testing strategies.

CO3 Able to explain the Product metrics and Metrics for process and Products.

CO4 Able to explain the concept of risk management and Quality management.

Paper-5

PHP - I

CO1 Able to explain the basic structure of PHP.

CO2 Able to explain the functions in PHP and its types.

CO3 Able to explain the concept of Arrays and conversion between Arrays and variables.

CO4 Able to explain the how-to reading data in web page and handling buttons.

Paper-6

Data communication and network – I

CO1 Able to explain the concept of Data communication, Data Transition and Data Encoding.

CO2 Able to explain the concept of Digital Data Communication and Data Link Control.

CO3 Able to explain the concept of Circuit switching.

CO4 Able to explain the concept of Packet switching and Topology.

SEMESTER-6

Paper-1

Computer Graphics - II

CO1 Able to explain the concept of 3D transformation.

CO2 Able to explain the concept of 3D Geometric transformation and 3D viewing.

CO3 Able to explain the concept of visible surface detection methods.

CO4 Able to explain the concept of Computer animation.

Paper-2

Programming in Java

CO1 Able to explain the basic structure of Java Programming, Variables, Tokens AND Operators.

CO2 Able to explain the concept of class and subclass, data member, modifiers, access specifiers and Overloading.

CO3 Able to explain the concept of Packages, Applets, Threads and Exception and Errors.

CO4 Able to explain the concept of Event, AWI applications, Components and control, Menus, layout and containers.

Paper-3

ASP.NET

CO1 Able to explain the concept of DTD and XML, CSS with XML.

CO2 Able to explain the concept of Objects and Namespaces.

CO3 Able to explain the validation control.

CO4 Able to explain the database connectivity with front end.

Paper-4

Software Testing

CO1 Able to explain the concept of Testing.

CO2 Able to explain the concept of test case design.

CO3 Able to explain the concept of Level of testing.

CO4 Able to explain the concept of test management.

Paper-5

PHP – II

CO1 Able to explain the concept data validation and PHP browsers – handling power.

CO2 Able to explain the concept of classes and objects.

CO3 Able to explain perform the database connectivity with PHP.

CO4 Able to explain the concept of cookies, FTP and Shell commands.

Paper-6

Data Communication and Network - II

CO1 Able to explain the Communication Architecture and Internet Working.

CO2 Able to explain the concept of transport protocols.

CO3 Able to explain the concept of session service and protocols.

CO4 Able to explain the concept of digital networking.

First Year M.C.A. Semester I(Master in Computer Application) (CBCS)

Paper-1 : Advanced Java Programming

CO1: Understanding the Java and Internet, Features of java
CO 1. Student will able to create the Classes
CO 2. He will be able to create the Exception handling
CO 3. Understanding the concept of Multithreading
CO 4. Understanding and able to compare the Synchronization between the multiple threads or process
CO 5. He/ She will be able to create the Inter thread communication
CO 6. Learning about Applet and will able to crate the embedded web site for local host
CO 7. Design the different Layout Manager for all the desktop-based applications as the user requirement
CO 8. Design the form , web page using the AWT

CO 9. Able to design the application in different style using Swing
CO 10. Illustrate how connect the application with database using the JDBC components
CO 11. Learning the Networking concept to store the data in the database
CO 12. They will understand the concept of TCP/IP to send the data through the internet from source to destination
CO 13. Student will learn the API Remote Method Invocation
CO 14. Design the web page using the Servlet to send the data with internet
CO 15. Illustrate the concept of Java Server Pages.
CO 16. Learn how to create the JavaBeans

Paper-2

Data Communication and Network

CO 1: Student will be able to explain network communication using the layered concept.

CO 2: Student will be able to explain OSI reference model.

CO 3: Student will be able to explain The Physical Layer, Transmission media, Transmission and Switching & ISDN.

CO 4: Student will be able to explain The Data Link Layer, Protocols, Network Layer, Algorithms with its example.

CO 5: Student will be able to explain The Transport Layer, Its Connection management.

CO 6: Student will be able to explain the session layer, its design issues and remote. procedure call.

CO 7: Student will be able to explain The Presentation Layer, data compression techniques, cryptography.

CO 8: Student will be able to explain The Application Layer, file transfer, access and management virtual terminals.

CO 9: Student will be able to explain Network Security Fundamentals, Security Vulnerabilities and Threats.

CO 10: Student will be able to explain Security Services, Cryptography,

CO 11: Student will be able to explain Encryption principles and algorithms.

CO 12: Student will be able to explain CBC, Location of Encryption Devices key Distribution

CO 13: Student will be able to explain Message Digests and Checksums, Message Authentication, Message Digests, Hash Functions.

CO 14: Student will be able to explain public key Systems

CO 15: Student will be able to explain Intruders, Techniques, Detection, Authentication, Authentication Services
CO 16: Student will be able to explain Security, Firewalls, Design Principles, Packet Filtering, Access Control, Trusted Systems, monitoring and management

Paper-3 :

Open-source Web Programming using PHP

CO 1: To understand the language Basics, Data Type, and Variables in PHP.

CO 2: Able to understand Expressions, operations, and Flow-Control statements

CO 3: Embedding PHP in Webpages.

CO 4: Can Install and configure PHP on Windows and Linux Platforms.

CO 5: To become familiar with client-server architecture and able to develop a web application using various technologies.

CO 6: To understand and develop a web-based application using a framework concept

CO 7: To gain the skills and project-based experience needed for entry into web application and development careers

CO 8: Web page development using PHP

CO 9: Can Understand the concept of Classes and Objects.

CO 10: Gathering the development of Graphics on a page.

CO 11: Able to generate Dynamic Buttons, Scaling Images, and Colour Handling.

CO 12: They can have the ability to develop PDF files.

CO 13: Cab able to Generate XML with SLT, and Web Services.

CO 14: They can handle errors and outputs on web pages.

CO 15: Can improve Performance Tuning.

CO 16: Can Handle Security Issues on Developed Website.

Paper-4 :

Advanced DBMS and Administration

CO 1 : Ability to normalize the database & understand the internal data structure.

CO 2 : Have a detailed view Query Processing

CO 3 : Able to design the Methods for Joining Tables.

CO 4 : Student will able to explain Relational Database design

CO 5 : Student will able to illustrate the Transaction Processing & Concurrency Control.

CO 6 : Able to compute and solve the Recovery failure.

CO 7 : Able to explain and construct Client/Server database.

CO 8 : Able to Design, Create Oracle Databases schemes.

CO 9 : Have a detailed view of handling parallel and distributed database

CO 10: Able to handle Recovery Strategies of database.

CO 11: Able to compute and solve Oracle Tuning and Trouble shooting.

CO 12 : Have a detailed view Security issues in database.

CO 13: Can explore efficient method for handling multiple types of data

CO 14: Student will able to explain Log base queries.

Paper-5

Software Engineering

CO1. Students will be able to explain evolving role and changing nature of software.

CO2. Students will be able to explain Process framework.

CO3. Students will be able to explain Different process Models.

CO4. Students will be able to explain Functional and non-functional Requirement.

CO5. Students will be able to explain Requirement Engineering Processes.

CO6. Students will be able to explain different types of System Models.

CO7. Students will be able to explain Design Engineering Process.

CO8. Students will be able to explain Architectural Design and its Patterns.

CO9. Students will be able to explain Object-Oriented Design.

CO10. Students will be able to explain User Interface Design.

CO11. Students will be able to explain Different testing strategies involved in Software Engineering.

CO12. Students will be able to explain Various Product Matrices related to any Software Development Process.

CO13. Students will be able to explain Metrics for Process and Projects.

CO14. Students will be able to explain Variety of risks associated with the software development.

CO15. Students will be able to explain RMMM plan.

CO16. Students will be able to explain Quality Management.

Practical 1 :

CO1**:** Design and program stand-alone Java Applications.

CO 2 : Useful in designing web and desktop applications.

CO 3 : Analyse And Setup Protocol Designing Issues for Communication Networks

CO 4 : Web development using PHP

Practical 2 :

CO 1 : Facilitates in creation of Data Structures and effective management of Database

CO 2 : Ability to normalize the database & understand the internal data structure

CO 3 : To implement Software prototyping for better software development

CO 4 : To acquire skills to think about problems and solution using appropriate method

First Year M.C.A. Semester II

Paper-1 :

C# and ASP .NET

CO 1: Students will be able to understand the origin of the .NET framework.

CO 2: They can operate User and programming interfaces.

CO 3: Can illustrate the concept of CLR.

CO 4: Students get complete knowledge to manage Garbage collection and optimization of data.

CO 5: To study simple C# program structures.

CO 6: Able to understand the concept of Inheritance.

CO 7: To write a C# program for classes, arrays, struct, Enum, and an array of objects.

CO 8: Can Experience File and folder operations, reading and writing text and binary files.

CO 9: Can Install ASP.NET applications and create the virtual directory.

CO 10: To understand ASP.NET structure.

CO 11: Understanding the concept of Namespaces and Assemblies.

CO 12: Can Develop web applications using Web controls, Validation, and Rich controls.

CO 13: Elaborate on the concept of Error handling and tracing and logging Programming.

CO 14: Can understand the concept of Database connectivity and Data Binding.

CO 15: To write ASP.NET Programs and Component-based programming.

CO 16: They Develop a website with Security and Performance tuning.

Paper-2

Cloud Computing

CO1. Student will be able to explain the history of cloud computing, its basic concept and terminology.

CO2. Student will be able to explain cloud characteristics, cloud delivery and deployment models and types of cloud.

CO3. Student will be able to explain cloud enabling technology.

CO4. Student will be able to explain virtualization, hypervisors, virtualization of CPU, memory and input output devices. Virtualization for data- centre automation.

CO5. Student will be able to explain common standards in cloud computing.

CO6. Student will be able to explain standards for application developers in cloud computing.

CO7. Student will be able to explain standards for security of cloud and grid platforms.

CO8. Student will be able to explain programming support of google app, amazon aws and Microsoft azure, moving application to cloud, cloud applications.

CO9. Student will be able to explain threat agents, cloud security threats and attacks.

CO10. Student will be able to explain cloud security mechanisms.

CO11. Student will be able to explain cloud issues.

CO12. Student will be able to explain cloud trends in supporting ubiquitous computing, performance of distributed systems and the cloud.

CO13. Student will be able to explain enabling technologies for the internet of things, innovative applications of the internet of things.

CO14. Student will be able to explain online social and professional networking, how the cloud will change operating systems, location-aware applications.

CO15. Student will be able to explain intelligent fabrics, paints, and more, the future of cloud tv, future of cloud-based smart devices faster time to market for software applications, home-based cloud computing.

CO16. Student will be able to explain mobile cloud, autonomic cloud engine, multimedia cloud, energy aware cloud computing, jungle computing and docker at a glance.

Paper-3 :

Computer Graphics

CO 1: Student will able to illustrate the computer Graphics applications

CO 2: Able to explain Overview of Graphics systems

CO 3: Able to demonstrate the construction of display device.

CO 4 : Able to describe the Input output devices.

CO 5 : Illustrate the different Line drawing algorithms

CO 6 : Examine the algorithms for circle, ellipse, polygon etc.

CO 7 : Able to describe the boundary filling algorithms.

CO 8 : Describe Basic transformation's

CO 9: Able to explain Two-dimensional viewing, Two-dimensional clipping, Line, Polygon, Curve, Text

CO 10 : Three-dimensional graphic algorithm is incorporated in various streams to better simulate complex interactions

CO 11 : 3-d transformations, b-spline surfaces, curves, and hidden surfaces can be explored

CO 12 : Hardware devices and algorithms which are necessary for improving the effectiveness, realism, and speed of picture generation

CO 13 : Describe Colour models

CO 14 : Describe and illustrate Shading algorithms.

Paper-4 :

Cyber Forensics

CO1. Students will be able to explain overview of System Vulnerability Scanning.

CO2. Students will be able to explain Open Port / Service Identification and Banner / Version Check.

CO3. Students will be able to describe Traffic Prob and vulnerability Prob.

CO4. Students will be able to explain different Vulnerability Scanning tools.

CO5. Students will be able to describe various Ports and Services tools.

CO6. Students will be able to describe Network Sniffing and Injection tools.

CO7. Students will be able to explain various Network Défense Tools.

CO8. Students will be able to explain Network Address Translation (NTA) and Port Forwarding.

CO9. Students will be able to explain Web Application Tools Scanning for Web Vulnerabilities Tools.

CO10. Students will be able to explain Various Application Inspection Tools.

CO11. Students will be able to explain Different Password cracking and Brute-Force Tools.

CO12. Students will be able to explain the Cyber Crime and its types.

CO13. Students will be able to explain Cyberspace and Criminal Behaviour.

CO14. Students will be able to explain Incident Response and Digital Forensics.

CO15. Students will be able to explain Indian IT Act 2000.

CO16. Students will be able to explain How to Investigate the Cyber Crime.

CO17. Students will be able to explain Key loggers, Spyware, Virus and Worms.

CO18. Students will be able to explain Steganography, DoS, DDoS Attacks.

CO19. Students will be able to explain SQL Injection Buffer Overflow.

CO20. Students will be able to explain Attack on Wireless Networks.

Paper-5 :

Android Programming

CO 1. Student will describe and Getting an Overview of Android
CO 2. Will be able to learn The Manifest File & Installing Android
CO 3. Define the Create the DDMS Perspective project
CO 4. Create the Command-Line Tools to run the application
CO 5. Learn how to create Activities in android for user purpose
CO 6. Design the concept to create an application using the Fragments
CO 7. Learn how to categorised the data using the Intents
CO 8. Describe the Built-in Application in android studio
CO 9. How to working with the User Interface to create an application
CO 10. Describe the Views, View Groups to create an android application
CO 11. Describe the Handling UI Events & Specialized Fragments in an application
CO 12. Student will be able to Creating Menus
CO 13. Student will be able to Handling Pictures and Menus with Views
CO 14. Create the android application using Image Views
CO 15. Create the Notifying the User tab
CO 16. Student will be able to Storing the Data Persistently, Introducing the Data Storage Options
CO 17. Describe in detail the Internal Storage & External Storage
CO 18. Create the SQLite Database for application
CO 19. Create the Content Providers
CO 20. Student will be able to explain the Emailing and Networking, Checking Network in Android

Practical 1 :

CO1 : To write C# program for classes, arrays, struct, array of objects

CO2 : To write ASP.NET Programs and Component based programming

CO3 : Study the common elements in user interfaces, data visualization, television commercials, motion pictures, and many other applications

CO4 : Explore the algorithms necessary for basic transformation with respect to computer graphics

Practical 2 :

CO1 : Would gain the knowledge about inside of computer

CO2 : Transportation problem, LPP problem, Inventory problem

CO3 : To develop apps based on different types of menus

CO4 : Design and develop mobile applications work with internet applications

Project :

CO1 : Select the topic for software development

CO2 : Analysis and design of proposed system

CO3 : Apply the known language for project programs

CO4 : Combine the small program to make the integrated software

Second Year M.C.A. Semester III(Master in Computer Application) (CBCS)

Paper-1 : Big Data Analytics

CO 1: Getting an Overview of Big Data

CO 2 : Describing Technologies for Handling Big data

CO 3 : Understanding Hadoop Ecosystem

CO 4 : Understanding MapReduce Fundamentals and HBase

CO 5 : Understanding Big Data Technology Foundation

CO 6 : Describing the storing Data in Data Bases and Data Warehouses

CO 7 : To understand the big data technology foundation, Storing data in databases and data warehouses

CO 8 : To get a basic understanding of R

CO 9 : Compute various ways to create scripts and programs in R.

CO 10 : Understand some of the key constructs in R for data handling

CO 11 : Performing Graphical Analysis in R

CO 12 : Able to explain Data Visualization

CO 13 : Evaluate Social Media Analytics and Text Mining

CO 14 : Able to explain Mobile Analytics

Paper-2 :

Data Mining

CO 1. Describe the Data Mining in detail
CO 2. Student will be able to explain the Data in detail
CO 3. Describe the Data Pre-processing
CO 4. Describe the Variable Transformation
CO 5. Student will be able to Exploring Data
CO 6. Visualization Techniques in detail
CO 7. Student will be able to Classification
CO 8. Explain Model Evaluation
CO 9. Evaluate the Decision Tree Induction in detail

CO 10. Evaluate the Classification in detail
CO 11. Student will be able to Alternative Techniques n in detail
CO 12. Illustrate Association Analysis
CO 13. Student will be able to Rule Generation
CO 14. Illustrate FP-Growth Algorithm in detail
CO 15. Evaluate the Cluster Analysis
CO 16. Student will be able to Types of Clusters in detail
CO 17. Evaluate the Clustering Algorithms in detail
CO 18. Student will be able to Anomaly Detection in detail
CO 19. Illustrate Clustering-Based Techniques

Paper-3 :

Python Programming

CO 1: Learn the concept of data types and structures in python.

CO 2: Clear ideas related to Components of a python programming.

CO 3: Able to learn Basic operators in Python.

CO 4: Web development using Python.

CO 5: Ideas related to Built-in Functions.

CO 6: Able to learn Multithreading concept.

CO 7: Basic knowledge related to Modules.

CO 8: They can perform Manipulation on numbers and Text.

CO 9: Able to perform Input Output operations using Files.

CO 10: Can work on Graphics Modules and Audio Modules.

CO 11: Able to work on RAD Tool.

CO 12: Can able to Manipulating file paths and Setting File Permission.

CO 13: Able to work on Objects, Modules, Classes and Instances.

CO 14: Can work on Python Web Tools.

CO 15: Able to Handle Errors and Exceptions.

CO 16: Ability to learn object-oriented programming concepts and write programs in python.
CO 3: Ability to design and develop database applications

Paper-4 :

Artificial Intelligence

CO1. Students will able to solve the AI Problems.
CO2. Students will able to describe AI techniques.
CO3. Students will able to use various search techniques.
CO4. Students will able to explain the algorithms used in search techniques.
CO5. Students will able to explain the knowledge representation in AI.
CO6. Students will able to explain the predicate logic.
CO7. Students will able to solve the logical problems.
CO8. Students will able to explain the reasoning matching and control knowledge.
CO9. Students will able to solve the game playing problems.
CO10. Students will able to explain the game playing algorithms.
CO11. Students will able to describe the planning in AI.
CO12. Students will able to explain the various types of planning in AI.
CO13. Students will able to explain Constraint satisfaction, Natural Language Processing, Syntactic Processing.
CO14. Students will able to explain Unification grammars, Semantic Analysis.
CO15. Students will able to explain Parallel and Distributed AI.
CO16. Students will able to explain Psychological Modelling, Distributed Reasoning Systems.

Paper-5 :

Soft Computing

CO1. Students will be able to differentiate between soft computing and Hard computing.

CO2. Students will be able to Compare different Searching Algorithms.

CO3. Students will be able to describe various game playing algorithms.

CO4. Students will be able to explain Probability, Bayes theorem and Dempster Shafer theorem.

CO5. Students will be able to analyse Neural network and Structure of brain.

CO6. Students will be able to describe different learning methodologies.

CO7. Students will be able to critically analyse the Perceptron Learning techniques.

CO8. Students will be able to explain different activation function and back propagation network.

CO9. Students will be able to explain unsupervised learning in neural network.

CO10. Students will be able to describe architecture, functioning and characteristics of counter propagation network.

CO11. Students will be able to analyse adaptive resonance theory in detail like its architecture , classification , implementation and training.

CO12. Students will be able to describe Kohanan's Self organization map in detail.

CO13. Students will be able to describe Fuzzy system in detail.

CO14. Students will be able to differentiate between Crisp set and Fuzzy set.

CO15. Students will be able to explain Fuzzy rule base system.

CO16. Students will be able to summarize the fuzzy decision making and its applications.

Practical 1 :

CO1 : Programs in R for data analysis and visualization

CO2 : Programming on classification, association and clustering algorithm

CO3 : Programming in python to design and develop database applications

CO4 : Programming in python for Web development

Practical 2 :

CO1 : Programming for AI search techniques

CO2 : Programs on Mobile Computing

CO3 : Programs on Neural Network

CO4 : Programs on Fuzzification and defuzzification

Second Year M.C.A. Semester IV

Project Work - Full Time

CO1 : To use the working knowledge in industry.

CO2 : To develop software in industry for various clients

CO3 : To gain awareness about ethical aspects and development work.

CO4 : Ability to plan and use adequate methods for software development

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Bachelor of Business Administration (BBA)

Semester – I

Evolution of Business

CO 1: relate the reasons of World War and its effect on the global business environment.

CO2 describe Cold war and OPEC crisis on International Business

CO3 differentiate the Indian Business structure between Pre and Post Independence

CO4 analyse the contribution of various sectors in Indian Business

APTITUDE DEVELOPMENT

CO1 practices effective communication in real life situations.

CO2 infer logical reasoning and problem-solving techniques

CO3 explain and infer data analytical techniques

CO4 prepare for various competitive exams and different placement aptitude tests.

Basics of MS Excel

CO1 perform operations using Excel tabs and tools effectively.

CO2 reorganize the data with the help of Excel and compute various statistical parameters using Formulas and Functions

CO3 demonstrate ability to work effectively on data sheet with the knowledge of Excel

CO4 demonstrate the ability to present data in charts and graphs using Excel skills

Foundation of Managerial Effectiveness

CO1 to relate the concept of skill development with managerial skills

CO2 to interpret the problem-solving technique with the help of Johari Window

CO3 analyse group behaviour and explain of SWOT Analysis

CO4 to point out the effective managerial traits and ways to improve them.

English

CO1 To be well versed in all the four language skills- Listening, Speaking, Reading and Writing.

CO2 To familiarize the students with Business Communication skills and soft skills.

CO3 To develop insight and critical thinking through the prescribed prose and poems.

CO4 To develop creativity through the ideas and activities in the text.

Semester – II

Fundamentals of Business Management

CO1 to identify different functions of management and management thoughts.

CO2 to differentiate between Management and Administration as well as identify the skills required for a manager.

CO3 to Outline and illustrate plans for various activities.

CO4 to develop competency of decision making while working in a group.

Cost and Management Accounting

CO1 to classify the elements of cost and also able to prepare a cost sheet, tender/Quotation for various business proposals.

CO2 to compute the cost of each process, total cost of product and also able to compute the Value of abnormal loss and abnormal gain.

CO3 To Compute of Break Even Point, Profit Volume Ratio, Margin of Safety etc

CO4 To prepare budgets for forecasting cost structure at various production capacities and cash positions for a specific duration.

Environmental Studies (AECC)

CO1 to recognise the importance of environmental studies and various natural resources

CO2 to illustrate various types of pollution and its causes and their control measures

CO3 point out the reasons for population growth and its impact on the environment.

CO4 to identify and explain the social issues affecting the environment

Hospitality and Tourism

CO1 to classify different types of hotels and hotel rooms

CO2 to identify different departments in hospitality industry and their functions

CO3 to formulate various travel plans and have knowledge of travel preparations.

CO4 The students will be able to plan his / her career as a tour operator or travel agent

English

CO1 to listen and comprehend the English Language through the prescribed poems and prose.

CO2 to read with comprehension a fairly complex English text.

CO3 to speak, converse, deliver a speech, narrate and describe in English.

CO4 to express their emotions and ideas in English in spoken and written form.

SEMESTER-III

Paper : Principles of Financial Management

CO1 apply the knowledge of business finance

CO2 describe the types of various long term and short-term sources of finance

CO3 classify various costs and leverages

CO4 understand the concept of working capital and its management

Basic Statistical Techniques

CO1 understand the basics of statistics and its role in business

CO2 understand the working principle of Mean, Median and Mode

CO3 understand various methods of measuring dispersion

CO4 Make them aware with the concept of Correlation and probable errors.

Evolution of Business and Commercial Geography

CO1 understand the concept of evolution of business and industrial revolution with the impact of First World War and Second World War

CO2 Explain the concept of business in post WWII scenario

CO3 Understand the concept of commercial geography and its relation with commerce
CO4 To familiarize the students with the concept of industries and the role of industries in economic development.

Environment Management

CO1 understand the concept of environment management and to apply the knowledge of renewable and non-renewable resources,

CO2 explain the types of pollution, their causes, effects and solution,

CO3 determine the solution of population explosion, causes and impact, and concept of family welfare program,

CO4 Apply knowledge of environmental ethics and need for gender equality.

SEMESTER-IV

Paper : Principles of Human Resource Management

CO1 Understand the basic concept of Human Resource Management.

CO2 Explain the Job analysis and job design in Human resource management.

CO3 Explain Factors influencing of Human resource planning and concepts of Recruitment and selection.

CO4 Understand the process of Induction, Placement and Training programs

Money, Banking and Finance

CO1 Understand the concept and functions of Money

CO2 Understand the working principle of Central Bank and Commercial Banks

CO3 Determine the methods of measuring National income, and concept of Inflation and Deflation

CO4 Understand the concept and instruments of Monetary and Fiscal Policy.

Introduction to Sociology and Psychology

CO1 understand the concept of Sociology, Socialization and Culture,

CO2 describe the types of social structures and social change,

CO3 apply the knowledge of psychology including behaviour and nervous system,

CO4 Discuss the various methods of studying social behaviour and socialization.

Business Legislations

CO1 -understand the legal aspects of business in India,

CO2- understand the concept and working of Contract Act (1872),

CO3- explain the types of companies, its provisions for formation till liquidation in Company Act (1956)

CO4- Understand the working of Consumer Protection act (1986).

Semester – V

BB 17 – Entrepreneurship Development

CO1 Understand the evolution of the concept of Entrepreneurship & Entrepreneurship

CO2 Understand the concept of Economic & non-economic factors and Entrepreneurship Development Programs (EDP)

CO3 To familiarize the students with the concept of small-scale Industry & Project Identification and Selection (PIS)

CO4 Discuss the various Industrial & financial support to Entrepreneurs

Principles of Operations Management

CO1 Understand the concept of Operations Management

CO2 To Familiarize the students with the concept of Production Planning and product Layout

CO3 understand the concept of Inventory Management

CO4 Explain the concept of Quality Management and Productivity

International Business Environment

CO1 Explain the concepts in international business with respect to foreign trade/international business.
CO2 Compare and contrast cultures and societies globally using socioeconomic and cultural frameworks, and develop entry strategy
CO3 To understand the concepts of Global Trading & Investment Environment
CO4 Have knowledge regarding the International Economic Institutions and Agreements to manage and regulate the World Economy.

Research Methodology

CO1 Explain the concept of Research and Research Methodology and its process

CO2 To Understand the concept of Sample Design and Hypothesis

CO3 To familiarize the students with the concept of Measurement and Scaling Techniques

CO4 Have the knowledge regarding the various method of Data Collection

Semester – VI

Financial Management

Fundamentals of Business Finance

CO1 Understand the concept of Time Value of Money

CO2 Get an idea about Premises of Capital Budgeting Decisions and its tools

CO3 Understand the mechanism of Dividend Decisions by Corporate and factors affecting these decisions,

CO4 Understand Corporate Restructuring at loss making times of a company and in general.

Advanced Financial Management

CO1 Explain the concept of Banking Services and its operations

CO2 To understand Concept of insurance and Different type of insurance products

CO3 Get an idea about the Organization Structure of Mutual Fund and its types

CO4 Explain the concept of Capital Market

Elective B–Human Resource Management

Paper 1

Fundamentals of Human Resource Management

CO1 Understand the basic concept of Human Resource Management.

CO2 Explain the concept of Induction & Performance appraisal

CO3 Explain the concept of Job Evaluation and Wage & salary administration

CO4 Understand the value of legal aspects

Paper 2

Advanced Human Resource Management

CO1 Explain the Job analysis and job design in Human resource management.

CO2 Explain Performance Appraisal & Discuss HR formats

CO3 Explain Industrial relations and Trade unions

CO4 Discuss on Ancillary Topics

Elective C–Marketing Management

Paper 1

Fundamentals of Marketing Management

CO1 familiarize with the concept of Integrated marketing Communication Mix

CO2 Make them aware with the concept of Digital Marketing

CO3 Having the knowledge of Sales Organization and its different types

CO4 Get an idea on services and distribution methods of services

Paper 2: Advance Marketing Management

CO1 Explain the concept of sales Management and their relationships with Executives

CO2 Make them aware with the concept of distribution Network

CO3 Having the knowledge of Service Quality

CO4 Get an idea about consumer behaviour their relationship with them

Department of Economics

Course Outcomes

B.A. 1st Semester

Micro Economics

Course Outcomes:

1) The students will be able to write the basic principles of microeconomic theory.

2) The students shall be able to explain efficiency and equity of consumption and production as well as cost and firms' policy in market behaviour.

3) The students will also be able to analyse demand by households and supply of goods and services by business firms.

4) The students will also be able to explain interaction of demand and supply in various market structures.

5) The students will also to illustrate how microeconomic concepts can be applied to analyse the real-life situation.

B.A. 2nd Semester
Macro Economics
Course Outcomes:

1) The students will be able to explain various concepts of GDP and relationship between National Income and welfare of people.

2) The students will further be able to write the factors that determine domestic productivity, employment level of prices and interest rates.

3) The students will be able to apply basic concepts to analyses the situations of inflation and business cycles.

4) The students will be able to explain the role of monetary and fiscal policy of Government to fight inflation or to stabilize business cycles.

5) The students will have ability to explain the relationship between consumption function and investment in economy and shall be able to give suggestion for promoting investment.

B.A. IInd Year
3rd Semester
CORE BANKING AND FINANCE
Course Outcomes:

1) The students to analyse various trends in Banking and Financial institutions.

2) The students will be able to compare different types of banking institutions for their efficiency in

Providing finance to the various categories of industries and businesses.

3) The students will be able to write the role of various types of banking and financial institutions and

shall be give suggestions for improvement

4) The course will make students to explain the major policy debates on monetary policy and shall be able

to give suggestions.

5) To enable the students, explain the foundation of Money market and financial markets and its working

in economic environment.

B.A. 4th Semester
INDIAN ECONOMY
Course Outcomes:

1) The students would be able to analyse frameworks to review major trends in economic indicates in the India in post-independence period.

2) The students will be able to examine various paradigm shifts and turning points in policy debates in India.

3) The students to examine sector specified policies and their impacts in shaping trends in India. key economic indicators in India and they will be able to give constructive suggestion for further developments

4) The students will be able to highlight major policy debates and evaluate the Indian Empirical evident to update the major changes of Indian Economy

B.A. IIIrd Year

5th Semester

INDIAN ECONOMY-I

Course Outcomes:

CO1: The students would be able to explain the concept the Nature of Indian Economy.

CO2: The students would be able to explain the Impact of Covid 19 on the India Economy.

CO3: The students would be able to write the role of agriculture in Indian economics and sustainable agriculture.

CO4: The students would be able to explain the concept of Rural Development.

CO5: The students would be able to write the role of industrial sector in India.

CO6: The students would be able to explain New Economic policies 1991.

CO7: The students would be able to explain the concept of Employment, Unemployment and Poverty.

CO8: The students would be able to explain the different poverty alleviation programme in India.

B.A. IIIrd Year

6th Semester

INDIAN ECONOMY-II

Course Outcomes:

CO1: The students would be able to explain the concepts of economic Growth & development.

CO2: The students would be able to explain the Concept of sustainable development & Inclusive Growth.

CO4: The students would be able to explain India's Economic Planning and Policy.
CO4: The students would be able to explain the Concept of Special Economic Zone.
CO5: The students would be able to explain the concept of Public Finance and Tax structure of India.
CO6: The students would be able to explain the concept of foreign trade & new economic reforms.
CO7: The students would be able to explain foreign trade & its impact on Indian Economy.
CO8: The students would be able to explain the Impact of World Trade Organization on Indian Economy.

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M.A. Economics Ist Year Semester I

1) Micro-Economic Theory - I

CO1: The knowledge of consumer behaviour enables the students in recommending rational buying decisions and will also help to suggest firm to design suitable marketing strategies.

CO2: Students get equipped with knowledge and skill in suggesting effective decisions under uncertain market situations.

CO3: Students understand the importance of time application and household management.

CO4: The students will develop the skill for converting technical information into economic relationship between input and output.

CO5: The students will develop skill to identify homogeneity level in production function and be able to estimate production function and shall be able to estimate level of output.

CO6: The course will help students to give recommendations on allocation of quantities of different factors of production to achieve economies of production and use of learning curves.

CO7: The students will learn about maintain existence of firm in markets and shall be able to recommend to earn profit.

2) Macro-Economic Theory - I

CO1: To demonstrate a good understanding of macro-economic principles, concepts and theories

CO2: To demonstrate an understanding of implications of Macro-economic decisions and shall be able to form model macro-economic theory.

CO3: To integrate theoretical knowledge to analyse trade-off in deployment of resources to alternate ends the implications them on society.

CO4: To make predictions on the happening of different economic things in the different phases of trade cycle and shall be able to derive suggestions.

3) Indian Economy - Issues & Policies

CO1: Students develop skills in formulating of suggestion for measures on current economic situations.

CO2: They will be able to derive suggestions on the searching of remedies under different situation for national level.

CO3: Students will develop understanding to learn the institutional arrangements in society to overcome asymmetric information and develop skill in designing incentive mechanisms.

CO4: It will make to understand students to the basic process of income generation and distribution as well as their sources. It will also enable to know national share of each category of citizens.

CO5: It will also help in knowing dynamics of capital market.

CO6: students will be taken to the philosophical level of equity and justice.

4) Industrial Economics

CO1: The knowledge of Industrial organizations shall enable the students to analyse locational factors of industry and it will enable them to draw suggestions for new proposals of industry.

CO2: It may promote them to undertake start up schemes on basis local resources and global market. It may enable them to be employment given, rather them employment demanders.

CO3: The study of industrial financing, accounting and risk analysis will be helpful for students to catch up the opportunities in the field of finance and insurance, where their ample scope for work.

CO4: Understanding about industrial combination and integration will make them able to analyse public policy and give fruitful suggestions.

CO5: The students learn about the reasons for existence and expansion of firm and shall be able to analyse efficiency of firms, to offer constructive suggestions.

5) Skill Based Programmes

CO1: On completion of program, the post-graduates will apply knowledge and skill in the field of Economics, research, statistics, mathematics and will be able to have the employability in these areas. As well as ready for working in the Economic world like banking, industries, Education, etc.

M.A. Economics Ist Year Semester II

1) Micro-Economic Theory-II

CO1: Students will enable to know the rational level of the remuneration of factors of production students shall become able to draw suggestions on remuneration of facts of production.

CO2: Students will become able to understand, collect and process the economic information.

CO3: Students will be able to comment on present equilibrium status at Micro Level and General Level.

CO4: The Knowledge of economic welfare will make students able to judge the rational of economic activities.

2) Macro-Economic Theory - II

CO1: It will enable students to handle macroeconomics theories and related macroeconomics issues.

CO2: It will enable students to understand the effects of macroeconomic decisions taken by Governments.

CO3: This study will enable students to collect the data on macroeconomics level and analyse it and draw the suggestions, over macroeconomic problems.

CO4: This study shall enable to compare economic conditions of various countries and also of various regions among the country.

CO5: The knowledge multiplier theory shall be useful to guide investments.

3) Economics of Micro-finance

CO1: Students will develop the skill for covering technical information into economics relationship between inputs and output of micro-finance activities.

CO2: The students will understand the importance of allocation of funds to finance MSME, through general budget of country.

CO3: The students will enable to evaluate the activities of micro-finance agencies and shall be able to draw suggestion took improvement.

CO4: The students will be able to understand the micro implication of disbursement and bad debts occurred in economy due to micro-finance activities, and financial pressures created on finance institutions and public exchequer.

4) Statistics for Economics

CO1: The students will develop the knowledge to interpret the complex statistical tables in graphs given in publish media.

CO2: The regressions technique shall enable students to predict the future values up to certain time limits.

CO3: The statistical help in compression and confirm the sample results into population result.

5) Skill Based Programmes

I. ECONOMIC SYSTEMS

II. GENDER ECONOMICS

CO1: It will develop to understand the interdependence and complexity of economic systems.

CO2: They will help in understanding adjustment for economic system to entrepreneur.

CO3: Students will enable to ascertain women economic rights and can desire suggestions for action programme.

CO4: The students will understand functioning of good governance for female equality provided in Constitutions of India.

GENERAL GUIDELINES FOR PROJECT WORK

CO1: To provide an opportunity for students to apply theoretical concept in real life situations.

CO2: To enable students to manage resources, work under deadlines, identify and carry out specific goal-oriented tasks.

M.A. Economics IInd Year Semester III

3T1: Economics of Growth & Development-1

CO1:To understand conceptualizing development.

CO2:To understand various issues in economic development.

CO3:To understand the theories of economic development.

C04:To understand the classical & Neo-classical models of growth.

3T2: International Trade & Finance-1

CO1:To understand theories of National & International trade.

CO2:To understand recent development in international trade theories.

CO3:To understand gains from international trade & their measurements.

CO4:To understand effects of growth on trade.

T5:-Labour Economics

CO1:To understand the concept of labour market & labour problem in India.

CO2:To understand various aspects of employment & unemployment schemes & its applicability.

CO3:To understand wage theory & its determination & labour market discrimination.

CO4:To understand concept of Industrial relation & labour trade unions in India.

3T5: -Research Methodology-1

C01:To understand various aspects of research in social science & its different types

C02:To understand the concept of research methodology & hypothesis & its applicability.

C03:To understand concept of research design & sample designing

C04:To understand methods of data collection & analysis.

M.A Economics 11 Year Semester-IV

4T1: -Economics of Growth & Development-II

C01:To understand various concept of domestic measures for economic development.

C02:To understand various aspect of domestic & International measures for economic development.

C03:To understand the concept of development of planning, its applicability & problems

CO4:To understand structure of five-year planning in India & role of NITI Aayog.

12-International Trade & Finance-II

C01:To understand concept of trade restrictions in India.

C02:To understand economic integration & intonational organizations like- UNCTAD, IMF, and WTO.

C03:To understand concept of Balance of payment & foreign exchange system.

C04:To understand foreign capital & trade policies in India.

4T6: -Rural Development

CO1: To understand concept, nature & scope of rural development in India,

CO2: To understand problems of rural development like- poverty, unemployment, & small & cottage industries

C03:To understand concept of rural financial structure.

C04:To understand rural development strategies and programme.

4T10: - Research Methodology-II

CO1: To understand cottice of data processing and statistical analysis.

CO2: To understand concepts of hypothesis testing methods.

CO3: To understand contents of report writing.

CO4:To understand ethical issues, arise in conducting economic research and strategies for