COURSE OUTCOME, PROGRAMME OUTCOME & PROGRAMME SPECIFIC OUTCOME (CO'S, PO'S & PSO'S)

Department of Computer Science

Objective of the programme:

The objectivesof the computer sciences department is to prepare students for graduate training in some specialized area of computer science, to prepare students for jobs in industry, business or government, and to provide support courses for students of commerce, management and science to acquire the computing skills.

The College follows Hemchand Yadav University, Durg Syllabus of Bachelors in Computer Application (BCA), B.Sc.(Computer Science), B.Com.(with Computer Application), BBA (Computer Fundamentals and MIS). The objectives of prescribed course are:

- Demonstrate proficiency in problem-solving techniques using the computer
- Demonstrate proficiency in at least two high-level programming languages and two operating systems
- Demonstrate proficiency in the analysis of complex problems and the synthesis of solutions to those problems
- Demonstrate comprehension of modern software engineering principles
- Demonstrate a breadth and depth of knowledge in the discipline of computer science

B.C.A.
Year-First, Second, Third

Programme Outcome:

Students of Computer Application will possess:

- An ability to apply knowledge of computing and mathematics appropriate to the discipline
- An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
- An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs
- An ability to function effectively on teams to accomplish a common goal
- An understanding of professional, ethical, and social responsibilities
- An ability to communicate effectively
- An ability to analyze the impact of computing on individuals, organizations, and society, including ethical, legal, security, and global policy issues
- Recognition of the need for and an ability to engage in continuing professional development
- An ability to use current techniques, skills, and tools necessary for computing practice
- An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
- An ability to apply design and development principles in the construction of software systems of varying complexity.

Course Outcome

- **Produce knowledgeable and skilled** human resources which is employable in IT field.
- **An ability to enhance** not only comprehensive understanding of the theory but its application too in diverse field.
- **Impart knowledge** required for planning, designing and building Complex Application Software Systems as well as provide support to automated systems or application.

- **Programmer:** The program prepares the young professional for a range of computer applications, computer organization, computer networking, and software engineering, Web Designing, JAVA, Linux, Oracle and Android Programming.
- **Project Development:** Introduced the concept of project development in different language/technology learnt during semester, in order to enhance programming skills of the students.
- **Produce entrepreneurs** who can develop customized solutions for small and medium Enterprises.

Programme Specific Outcome

PSO of BCA Courses is divided into three different years:-

SCHEME OF EXAMINATION 2019-2020

BCA PART- I

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
						L	T	P
		Max. (A)	Min. (B)	Max. (C)	Min. (D)			
BCA101	Discrete Mathematics	80	27	20	8	4	2	-
BCA102	Computer Fundamentals	80	27	20	8	4	2	-
BCA103	Programming in 'C' language	80	27	20	8	4	2	-
BCA104	PC Software and Multimedia	80	27	20	8	4	2	-
BCA105	Web Technology and E-Commerce	80	27	20	8	4	2	-
BCA106	Communication skills	80	27	20	8	4	2	-
BCA107	LAB I: Programming Lab in "C"	100	50	40	16	-	-	3x2
BCA108	LAB II: PC Software Lab	100	50	40	16	-	-	2x2
BCA109	LAB III: Web Technology Lab	100	50	20	8	-	-	1x2
TOTAL		780	312	220	88			
GRAND TOTAL	(PAPER + INTERNAL)	(A+C) 1000		(B+D) 400				

Year: I Year

PSO 01 Course Title :-(Paper Code –BCA102) **Computer Fundamentals**

Students will be able to:

- Bridge the fundamental concepts of computers with the present level of knowledge.
- Understand binary, hexadecimal and octal number system and their arithmetic conversions.
- Familiarize with operating systems, programming languages, peripherals.
- Choose commands and features of operating systems and application software.

Year: I Year

PSO 02 Course Title :-(Paper Code - BCA103) **Programming in 'C' Language**

- Explore algorithmic approaches to problem solving.
- Ability to analyze a problem and devise an algorithm to solve it.
- Able to formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Ability to implement algorithms in the 'C' language.
- Develop modular programs using control structures and arrays in 'C'.

PRACTICAL WORK:-

BCA I

BCA-107 LAB I: Programming Lab in 'C'

Max Marks: 100 Min. Marks: 50

Scheme of Examination- Practical examination will be three programs. It will be of 3 hours duration. All programs must carry flow charts & algorithms. The distribution of practical marks will be as follows –

Program 1	20
Program 2	20
Program 3	20
Viva	25
Practical Record	15
Total	**100**

Year: I Year

PSO 03 Course Title :- (Paper Code - BCA104) **PC Software and Multimedia**

Students will be able to:

- Maintain their documents in digital Format.
- Understand and use attractive Presentation for business and personal purpose.
- Analyze report with excel and directly formulate it according to the requirement.
- It also features experimental and survey articles
- Helps to design and develop attractive tools
- Development and system support tools as well as case studies of multimedia applications.

PRACTICAL WORK: -

BCA I

BCA-108 LAB II: PC Software Lab

Max Marks: 100 Min Marks: 50

Scheme of Examination:

Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:

Program 1	-	15
Program 2	-	15
Program3	-	15
Program4	-	15
Viva	-	25
Practical Record	-	15
Total	-	**100**

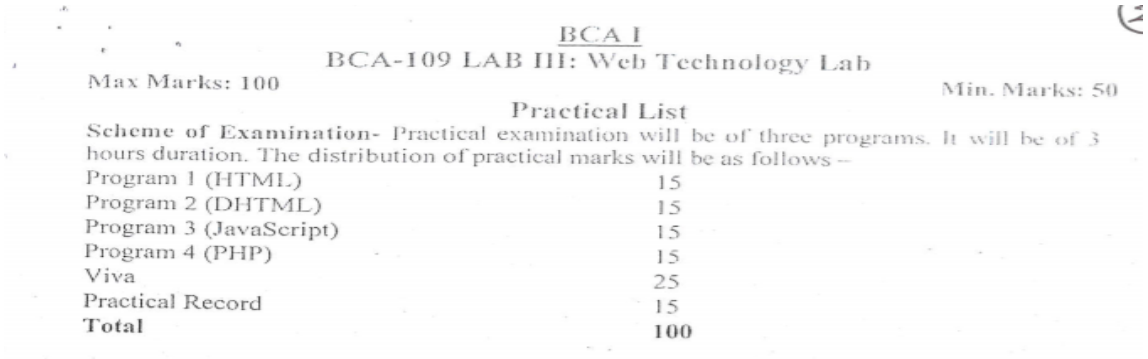
Year: I Year

PSO 04 Course Title: -(Paper Code - BCA105) **Web Technology and E-Commerce**

Students will be able to:

- Develop a dynamic webpage by the use of java script.
- Able to develop a web application using PHP.
- Students will gain the skills and project-based experience needed for entry into web application and development careers.
- To know about E-Commerce
- To understand E-Payment, E-Banking, E-Governance, etc

PRACTICAL WORK: -



BCA I

BCA-109 LAB III: Web Technology Lab

Max Marks: 100 Min. Marks: 50

Practical List

Scheme of Examination- Practical examination will be of three programs. It will be of 3 hours duration. The distribution of practical marks will be as follows –

Program 1 (HTML)	15
Program 2 (DHTML)	15
Program 3 (JavaScript)	15
Program 4 (PHP)	15
Viva	25
Practical Record	15
Total	**100**

BCA-II

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
		Max.(A	)Min.(B	)Max.	(C)Min.	(D)	L	T
P								
BCA201	**Part I** Numerical Analysis	50		-	-	2	-	
	Part II Differentiation & Integration	50	60	-	-	2	-	-
	Part III Data Structures	50		-	-	2	-	-
BCA202	DBMS (Oracle, SQL)	100	40	50	30	4	2	-
BCA203	Programming in C++ & Visual C++	100	40	50	30	4	2	-
BCA204	Computer Networking & Internet Technology	100	40	50	30	4	2	-
BCA205	A. Shell Programming in Unix/Linux	50	20	-	-	2	2	-
	B. Practical based on course 205A	50	20	-	-	-	-	2x2
BCA206	A. Principles of Management	50	40	-	-	2	-	-
	B. Foundation Course	50		-	-	2	-	-
BCA207	Practical Based on Course-202 Mini Project (Visual Basic & Oracle/ Access	100	50	-	-	-	-	3x2
BCA208	Practical Based on Course-203							
	TOTAL	850	360	150	90			
GRAND TOTAL (PAPER+INTERNAL)		**(A+C)**			**(B+D)**			
		1000			**450**			

Year: II Year

PSO 01 Course Title: -(Paper Code – BCA201) **Data Structures**

Students will be able to:

- Develop efficient algorithms for solving a problem.
- Use the various construct of programming language viz., conditional, iteration and recursion.
- Implement the algorithm in programming language.
- Use simple data structure like array, stacks and linked list in solving problems.

Year: II Year

PSO 02 Course Title: -(Paper Code – BCA202) **Database Management System**

Students will be able to:

- To design and build a simple database system.
- Demonstrate competences with fundamental task involved with modeling, designing, and implementing a DBMS.
- Design E-R diagrams for given problems.
- To understand and use data manipulation language to query, update and manage a database.

PRACTICAL WORK

BCA-207 DBMS (Oracle, SQL)

Scheme of Examination: -

Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:

Programme 1 (Oracle)	-	10
Programme 2 (Oracle)	-	10
Viva (Oracle + project)	-	25
[Practical Copy + Practical Sessional]	-	15
Project Completeness	-	15
Project Report	-	15
Project Presentation	-	10
Total	**-**	**100**

Year: II Year

PSO 03 Course Title: -(Paper Code – BCA203) **Programming in C++ and Visual C++**

Students will be able to:

- Understand object oriented programming, difference between object oriented programming and procedural programming.
- Able to build program using C++ features such as Class, objects, operator overloads, dynamic memory allocation, inheritance and polymorphism, file I/O, exception handling, etc.
- Able to build C++classes using appropriate encapsulation and design principles.
- Improve problem solving skills by applying object oriented or non-object oriented techniques.

PRACTICAL WORK BCA II BCA-208

Programming in C++ and Visual C++

Scheme of Examination: -

Practical examination will be of 3 hours' duration. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Visual C++	-	10
Viva	-	25

[Practical copy+ Internal Record]- 100

Year: II Year

PSO 04 Course Title: -(Paper Code – BCA204) **Computer Network and Internet Technology**

Students will be able to:

- Understand basic computer network technology.
- Understand Data Communications System and its components.
- Enumerate the layers of the OSI model and TCP/IP reference model.
- Able to identify the different types of network devices, their functions within a network and their applications.

Year: II Year

PSO 05 Course Title: -(Paper Code – BCA205) **Linux**

Students will be able to:

- Use basic Linux commands and Linux documentation
- Write shell scripts.
- Analyze the structure of LinuxOS
- Understand basic architectural components involved in Linux OS design.

PRACTICAL WORK

BCA-205(B) Shell Programming in Linux/Unix

Scheme of Examination: -

Practical examination will be of 3 hours' duration. The distribution of practical marks will be as follows:

Programme 1	-	10
Programme 2	-	10
Viva	-	15
[Practical Copy + Internal Record]	-	15
Total	-	**50**

Year: -BCA-II

PSO 06 Course Title: - (**Paper Code-BCA 207**) Practical Based on Course-202 Mini Project 100 (Visual Basic & Oracle/ Access)

Students will be able to:

- Demonstrate a sound technical knowledge of their selected project topic.
- Undertake problem identification, formulation and solution.
- Design engineering solutions to complex problems utilizing a systems approach.
- Conduct an engineering project.

- Knowledge of basic SW engineering methods and practices, and their appropriate application.
- Knowledge and application of collaborative tools for SW development.

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BCA-III

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
						L	T	P
		Max. (A)	Min. (B)	Max. (C)	Min. (D)			
*BCA301	Part I- Calculus & Geometry	50	60	-	-	2	-	-
	Part II-Differential Equation & Fourier Series	50		-	-	2	-	-
	Part III- Computer System Architect	50		-	-	2	-	-
BCA302	Java	100	40	50	30	4	2	-
BCA303	Operating System	100	40	50	30	4	2	-
BCA304	Software Engineering	100	40	50	30	4	2	-
BCA305	1MULTIMEDIA TOOLS AND APPLICATIONS B. Practical based on course 305A	50 50	20 20	- -	- -	2	2 -	- 2x2
BCA306	A. Financial Management & Accountancy B. Foundation Course	50 50	40	- -	- -	2 2	- -	- -
BCA307	Practical Based on Course-302	100	50	-	-	-	-	3x2
BCA308	Project	100	50	-	-	-	-	1x2
TOTAL		850	360	150	90			
GRAND TOTAL	(PAPER + INTERNAL)	(A+C) 1000		(B+D) 450				

Year: III Year
PSO 01 Course Title: -(Paper Code – BCA301) **Computer System Architecture**

Students will be able to:

- Get concepts of the basics organizational and architectural issues of a digital computer.
- Analyze performance issues in processor and memory design of a digital computer.
- Understand various data transfer techniques in digital computer.
- Explain block diagram of CPU, Memory and types of I/O transfers

Year: III Year
PSO 02 Course Title: -(Paper Code – BCA302) **Programming in Java**

Students will be able to:

- Design the programs in Java Applet.
- Can invoke methods using class libraries etc.
- Able to handle abnormal termination of a program using exception handling
- Will able to use the Java SDK environment to create, debug and run simple Java program.
- Understanding the fundamentals of object- oriented programming concept in Java, including defining of classes.

PRACTICALWORK:-BCA-307 JAVA

Scheme of Examination:-Practical examination will be of 3hours duration. The distribution of practical marks will be as follows

Programme1	-	20
Programme2	-	20
Programme3	-	20
Viva	-	25
[Practical Copy+ Internal Record]	-	15
Total	-	100

Year: III Year
PSO 03 Course Title: -(Paper Code – BCA303) **Operating System**

Students will be able to:

- Identify the need to create the special purpose operating system.
- Identify use and evaluate the storage management policies with respect to different storage management technologies
- Demonstrate understanding of the concepts, structure and design of operating Systems
- Demonstrate understanding of operating system design and its impact on application, system design and performance
- Demonstrate competence in recognizing and using operating system features.
- Describe the important computer system resources and the role of operating system in their management policies and algorithms.

Year: III Year
PSO 04 Course Title: -(Paper Code – BCA304) **Software Engineering**
Students will be able to:

- Get Basic knowledge and understanding of the analysis and design of complex systems.
- Ability to apply software engineering principles and techniques.
- Ability to develop, maintain and evaluate large-scale software systems.
- Produce efficient, reliable, robust and cost-effective software solutions.

Year: III Year
PSO 05Course Title: -(Paper Code – BCA305) **Multimedia Tools and Application.**
Students will be able to:

- Perform experimental and survey articles
- Helps to design and develop attractive tools
- Development and system support tools as well as case studies of multimedia applications.

PRACTICALWORK:-BCA-305(MULTIMEDIA TOOLS AND APPLICATIONS)

Scheme of Examination: -Practical examination will be of 3hours duration. The distribution of practical marks will be as follows

Programme1	-	10
Programme2	-	10
Viva	-	15
[Practical Copy+ Internal Record]	-	15
Total	**-**	**50**

Year: -BCA-III

PSO 06 Course Title: - (Paper Code-BCA 308) Project

Students will be able to:

- Demonstrate a sound technical knowledge of their selected project topic.
- Undertake problem identification, formulation and solution.
- Design engineering solutions to complex problems utilizing a systems approach.
- Share knowledge of basic SW engineering methods and practices, and their appropriate application.
- Share knowledge and application of collaborative tools for SW development.
- Implement teamwork behaviour and policies in a large class project.
- Demonstrate a breadth of knowledge in computer science, as exemplified in the areas of systems, theory and software development.
- Show ability to conduct a research or applied Computer Science project which requires writing and presentation skills that exemplify scholarly style in computer science.

PRACTICAL WORK:- BCA-308 Project Work

Scheme of Examination: -The Project should be done by individual student**.** Practical examination will be of 3hour's duration. The distribution of practical marks will be as follows

Software Demonstration	-	40
ProjectReport(HardCopy+SoftCopy)	-	20
ProjectDemonstration/Presentation	-	20
ProjectViva	-	20
Total	-	**100**

B.SC. (Computer Science)
Year-First, Second, Third

Programme Outcome

- Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- To prepare students to undertake careers involving problem solving using computer science and technologies.
- Develop ability to pursue advanced studies and research in computer science.
- To produce entrepreneurs who can innovate and develop software product.

Course Outcome

A student after completing his/her B.Sc. (Computer Science) degree will equipped with:

- **An awareness** of how computer science impacts our society and environment and the benefits it offers the technical society
- **Gain proficiency** in the handling of various hardware instruments, software's etc.
- **Develop basic scientific concepts** of programming which will help in rationale thinking and better understanding of various IT problems.
- **Exhibit excellent problem** solving ability by critical thinking and integrating various ideas learned during laboratory experiments or class lectures.
- **Participate in scientific debates** or arguments with confidence and will be able to convince the audience by logical presentation.

- **Undertake project** work for IT Sector, industry or NGOs regarding software engineering, Software testing, data analysis etc.
- **Develop research aptitude**in the various fields of computer for example fuzzy logic, cloud computing, internet technology.

Programme Specific Outcome

PSO of B.Sc. Courses in Computer Science divided into three different years: -

Year: I Year

PSO 01 Course Title :-(Paper Code - 0806) **Programming in 'C'**

Students will be able to:

- Explore algorithmic approaches to problem solving.
- Analyze a problem and devise an algorithm to solve it.
- Formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Implement algorithms in the 'C' language.
- Develop modular programs using control structures and arrays in 'C'.

PRACTICAL WORK:-

Scheme of Examination: -Practical examination will be of three hours duration. The distribution of practical marks will be as follows

Programme1	-	10
Programme2	-	10
Viva	-	15
[Practical Copy+ Internal Record]	-	15
Total	**-**	**50**

Year: I Year

PSO02 Course Title :-(Paper Code - 0805) **Fundamentals of Computer**

Students will be able to:

- Bridge the fundamental concepts of computers with the present level of knowledge.
- Understand binary, hexadecimal and octal number system and their arithmetic conversions.
- Familiarize with operating systems, programming languages, peripherals.
- Choose commands and features of operating systems and application software.

Year: II Year

PSO03 Course Title: -(Paper Code – 0855) **Computer Hardware**

Students will be able:

- To introduce the overall organization of micro processor
- To introduce the common peripheral devices used in computers
- To introduce the hardware component, use of microprocessor and function of various chip used in microcomputer
- To describe Program design, software development and used of operating system.

Year: II Year
PSO04 Course Title: -(Paper Code – 0856) **Computer Software**
Students will be able:

- To introduce the internet and web related technology
- To learn the intricacies of web page designing using HTML
- To introduce the OOP's concept using C++ language.
- To introduce the problem solving methodology using the C++ programming features.

PRACTICAL WORK:-
Scheme of Examination: -Practical examination will be of 3hours duration. The distribution of practical marks will be as follows

Programme1	-	10
Programme2	-	10
Viva	-	15
[Practical Copy+ Internal Record]	-	15
Total	**-**	**50**

Year: III Year
PSO05 Course Title: -(Paper Code – 0909) **Computer Hardware**
Students will be able:

- To introduce the overall organization of the microcomputer and the operating system.
- To introduce the interaction of common devices used with computers with operating system, excluding the assembly languages with special reference to DOS/WINDOWS.
- To introduce the working of hardware components, microprocessor and various chips used in microcomputer by operating system, without the use of electronic circuitry.
- To introduce the use of operating system, architecture with IBM-PC and clones, excluding assembly language, with form an important part of hardware.

Year: III Year
PSO 06CourseTitle: -(Paper Code – 0910) **Computer Software**

- To introduce database management system concepts.
- To introduce the relational database management system and relational database design
- To introduce the RDBMS Software and Utility of Query language
- To introduce basic concept of GUI programming and database connectivity using Visual Basic.

PRACTICAL WORK:-
Scheme of Examination: -Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:-

Programme1	-	10
Programme2	-	10
Viva	-	15
[Practical Copy+ Internal Record]	-	15
Total	**-**	**50**

B.Com. (with Computer Application) as an Additional Subject
Year-First, Second, Third

Programme Outcome

- Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- To prepare students to undertake careers involving problem solving using computer science and technologies.
- Develop ability to pursue advanced studies and research in computer science.
- To produce entrepreneurs who can innovate and develop software product.
- After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
- Capability of the students to make decisions at personal and professional level will increase after completion of this course.

Course Outcome

A student after completing his/her (B.Com. with Computer Application) degree will be able to:

- **Understand** the concepts of basic Computing and organization of computerized document.
- **Enrich programming**, teamwork, Professional and leadership skill sets of students.
- **Integrate knowledge**, skill and aptitude of ICT that will help the student's creativity with an assurance for good careers with a basic B.Com. Degree.
- **Lend manpower** needs of companies in Computerized Accounting, Taxation, Auditing, Financial Analysis and digital management.
- **Create Computerized Analysis** the economic, social and environmental issues related to business.
- **Work** in technical teams with enhanced inter-personal skills.

Program Specific Outcome

PSO of B.Sc. Courses in Computer Application is divided into three different years:-

Year: I Year

PSO 01 Course Title :- (Paper Code –I) **Computer Fundamentals**

Students will be able to:

- Bridge the fundamental concepts of computers with the present level of knowledge.
- Understand binary, hexadecimal and octal number system and their arithmetic conversions.
- Familiarize with operating systems, programming languages, peripherals.
- Choose commands and features of operating systems and application software.

Year: I Year

PSO 02 Course Title :- (Paper Code –II) **Personal Computer Software and Multimedia**

Students will be able to:

- Maintain their documents in digital Format.
- Understand and use attractive Presentation for business and personal purpose.
- Analyze report with excel and directly formulate it according to the requirement.
- Design and develop attractive tools
- Develop system support tools as well as case studies of multimedia applications.

Scheme of Examination: -Practical examination will be of three hours duration. The distribution of practical marks will be as follows:-

Viva	-	10
[Practical Copy+ Internal Record]	-	15
Practical	-	25
Total	**-**	**50**

Year: II Year

PSO 01 Course Title :- (Paper Code –1139) **Internet Application and E-Commerce**

Students will be able:

- To make students familiar with environment of HTML.
- To introduce students with web browsers and web pages developed by HTML.
- To develop skill and knowledge among students in applications of internet in education of commerce
- To create web pages and web portals using HTML and hosting it on the internet.
- To know about E-Commerce
- To understand E-Payment, E-Banking, E-Governance, etc.

Year: II Year

PSO 02 Course Title :- (Paper Code –1140) **Relational Database Management System**

Students will be able to:

- Understand fundamental concepts of RDBMS (PL/Pgsql)
- Understand functioning of database management systems as well as associated tools and techniques
- Develop a good database design and normalization techniques to normalize a database.
- Write Procedure, Function, Cursor and Trigger using PL/Pgsql.

PRACTICAL WORK:-

Scheme of Examination: -Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Viva	-	10
[Practical Copy+ Internal Record]	-	15
Practical	-	25
Total	**-**	**50**

Year: III Year

PSO 01 Course Title :- (Paper Code –1165) **Programming in Visual Basic**

Students will be able to:

- Explore algorithmic approaches to problem solving.
- Analyze a problem and devise an algorithm to solve it.
- Formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Implement algorithms in the programming in VB.
- Develop modular programs using control structures and arrays in VB.

PRACTICAL WORK:-

Scheme of Examination: -Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows:-

Viva	-	10
[Practical Copy+ Internal Record]	-	15
Practical	-	25
Total	**-**	**50**

Year: III Year

PSO 02 Course Title :- (Paper Code –1166) **System, Analysis, Design & MIS**

Students will be able:

- To learn the different system concepts used in Software Engineering.
- To understand the different types applications of Software Engineering.
- To be acquainted with the facts about Software Development
- Will enable students to understand system concepts and its application in Software development.
- Will understand the SDLC phases

Year: -B.Com -III

PSO 02 Course Title: - (Paper Code-B.Com.) Project Work

Students will be able to:

- Demonstrate a sound technical knowledge of their selected project topic.
- Undertake problem identification, formulation and solution.
- Design engineering solutions to complex problems utilizing a systems approach.
- Knowledge of basic SW engineering methods and practices, and their appropriate application.
- Knowledge and application of collaborative tools for SW development.
- Successful implementation of teamwork behavior and policies in a large class project.
- Students will demonstrate a breadth of knowledge in computer science, as exemplified in the areas of systems, theory and software development.
- Students will demonstrate ability to conduct a research or applied computer science project, requiring writing and presentation skills which exemplify scholarly style in computer science.

B.B.A. First and Third Semester
(Course Title: Computer Application & Management Information System)

Programme Outcome

- Develop ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- To prepare students to undertake careers involving problem solving using computer science and technologies.
- Develop ability to pursue advanced studies and research in computer science.
- To produce entrepreneurs who can innovate and develop software product.
- After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.
- Capability of the students to make decisions at personal & professional level will increase after completion of this course.

Course Outcome-

- Students will acquire knowledge in basic management skill and business applications
- The students can seek employment in various public and private sectors
- The course make industry ready human resource and will also impart computerized entrepreneurship skills
- Developed sound academic base for advanced career in Computer Application.
- Acquired hands –on us of computers in business application.
- The program helps students to explore the area of specialization in Computer Application

Semester: I Semester
PSO 01 Course Title :- (Paper Code –102) **Computer Application**
Students will be able to:

- Bridge the fundamental concepts of computers with the present level of knowledge.
- Understand binary, hexadecimal and octal number system and their arithmetic conversions.
- Familiarize with operating systems, programming languages, peripherals.
- Choose commands and features of operating systems and application software.

Semester: III Semester
PSO 02 Course Title :- (Paper Code –115) **Management Information System**
Students will be able to:

- Know about the concept, nature, scope, importance and characteristics of MIS.
- Describe the function of MIS
- Identify and distinguish among the different types of computers
- Explain the classification of MIS and to understand the concept of structure of MIS
- Understand the concept of decision making and identify the categories of specific decision you make.

Department of Computer Science

Objective of the Programme:

The objectives of the computer and information sciences department are to prepare students for graduate training in some specialized area of computer science, to prepare students for jobs in industry, business or government, and to provide support courses for students in the fields requiring computing skills.

The College follows Hemchand Yadav University, Durg Syllabus for M.Sc. (Computer Science) and PG Diploma in Computer Application. The objectives of prescribed course are:

- Demonstrate proficiency in problem-solving techniques using the computer.
- Demonstrate proficiency in at least two high-level programming languages and two operating systems.
- Demonstrate proficiency in the analysis of complex problems and the synthesis of solutions to those problems.
- Demonstrate comprehension of modern software engineering principles.
- Demonstrate a breadth and depth of knowledge in the discipline of computer science.

M.Sc. (Computer Science)
Semester- First, Second, Third, fourth

Programme Outcome

- Provides technology-oriented students with the knowledge and ability to develop creative solutions.
- Develop skills to learn new technology.
- Apply computer science theory and software development concepts to construct computing-based solutions.
- Design and develop computer programs/computer-based systems in the areas related to algorithms, networking, web design, Artificial Intelligence, Mobile applications.

Course Outcome

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

- Master programme which aims to impart a sound understanding of the advanced principles of Computer Science.
- Provide sufficient depth and breadth of experience in up-to-date methodologies.
- Provide an exhaustive treatment of selected research-based topics, to significantly advance a student's career prospects within the IT industry, and/or equip the student to undertake research in Computer Science.
- Provide theory, elective, practical, research paper, Industrial Plant Training and software project courses as a core courses.
- Provide a technology trend platform for the students to learn and equip the latest updates in the information technology field from the computer science magazines as a self-study paper.
- Advanced learners can pursue short term online certificate courses from SWAYAM, NPTEL based on their interest and latest market demands.

Programme Specific Outcome

PSO of Master's in Computer Science is divided into four different semesters:-

MASTER OF SCIENCE IN COMPUTER SCIENCE

FIRST SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit L+ (T+P)/2	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P		Th	Ses	Pr	Total	Th	Ses	Pr	Tot
Paper 1	Mathematical Foundation of Computer Science	3	2	-	4	100	50	-	150	40	30		70
Paper II	Advance Operating System	3	2	-	4	100	50	-	150	40	30		70
Paper III	Data Structure through algorithms using 'C'	3	2	-	4	100	50	-	150	40	30		70
Paper IV	Object Oriented Programming using 'C++'	3	2	-	4	100	50	-	150	40	30		70
Paper V	Computer System Architecture	3	2	-	4	100	50	-	150	40	30		70
Practical I	Programming Lab Based on Paper III			3x2	3		25	100	125		15	50	65
Practical II	Programming Lab Based on Paper- IV	-	-	3x2	3	-	25	100	125	-	15	50	65
TOTAL		15	10	12	26	500	300	200	**1000**	200	180	100	480

Semester: I Sem.

PSO 01 Course Title: -(Paper- I) **Mathematical Foundation of Computer Science**

Student will be able to-

- Understand the concepts of Digital Electronics.
- Apply the concept of Automata Theory
- Solve the problems with Optimization Methods
- Use the hypothetical testing
- Familiar with the graph theory and its applications

Semester: I Sem.

PSO02 Course Title: -(Paper- II) **Advance Operating System**

Student will be able to-

- Design and understand the following OS components: System calls, Schedulers, Memory management systems, Virtual Memory and Paging systems.
- Evaluate, and compare OS components through instrumentation for performance analysis.
- Analyze the various device and resource management techniques for timesharing and distributed systems.
- Develop and analyze simple concurrent programs using transactional memory and message passing, and to understand the trade-offs and implementation decision.

Semester: I Sem.

PSO 03Course Title: -(Paper- III) **Data Structure through Algorithms Using 'C'**

Students will be able to:

- Develop efficient algorithms for solving a problem.
- Use the various construct of programming language viz., conditional, iteration and recursion.
- Implement the algorithm in programming language.
- Use simple data structure like array, stacks and linked list in solving problems.

M.Sc. (CS) - I: Practical Based on Paper III (Data Structure through Algorithms Using 'C')

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of three hours duration. All programme with flowchart and algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: I Sem.

PSO 04 Course Title: -(Paper- IV) **Object Oriented Programming Using 'C++'**

Students will be able to:

- Understand object oriented programming, difference between object oriented programming and procedural programming.
- Build program using C++ features such as Class, objects, operator overloads, dynamic memory allocation, inheritance and polymorphism, file I/O, exception handling, etc.
- Build C++classes using appropriate encapsulation and design principles.
- Improve problem solving skills by applying object oriented or non-object oriented techniques

M.Sc.(CS) - I : Practical Based on Paper IV(Object Oriented Programming Using 'C++ ')

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart & algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: I Sem.
PSO 05 Course Title: -(Paper - V) **Computer System Architecture**

Students will be able to:

- Get concepts of the basics organizational and architectural issues of a digital computer.
- Analyze performance issues in processor and memory design of a digital computer.
- Understand various data transfer techniques in digital computer.
- Explain block diagram of CPU, Memory and types of I/O transfers

MASTER OF SCIENCE IN COMPUTER SCIENCE

SECOND SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P	L+ (T+P)/2	Th	Ses	Pr	Total	Th	Ses	Pr	Tot
Paper 1	RDBMS (SQL Programming with Oracle)	3	2	-	4	100	50	-	150	40	30		70
Paper II	Advanced Computer Networks	3	2	-	4	100	50	-	150	40	30		70
Paper III	Programming in Visual Basic	3	2	-	4	100	50	-	150	40	30		70
Paper IV	Principles of Compiler Design	3	2	-	4	100	50	-	150	40	30		70
Paper V	Numerical Analysis	3	2	-	4	100	50	-	150	40	30		70
Practical I	Practical Based on Paper I			3x2	3		25	100	125		15	50	65
Practical II	Practical Based on Paper III	-	-	3x2	3	-	25	100	125	-	15	50	65
TOTAL		15	10	26	26	500	300	200	**1000**	200	180	100	480

Semester: II Sem.
PSO 01 Course Title:-(Paper - I) **RDBMS (SQL Programming with Oracle)**
Students will be able to:

- Establish a basic understanding of the process of Database Development and Administration using MySQL.
- Implement the concepts of both Operating Systems & Database Administration skills.
- Understand fundamental concepts of RDBMS (PL/Pgsql)
- Understand functioning of database management systems as well as associated tools and techniques
- Develop a good database design and normalization techniques to normalize a database.
- Write Procedure, Function, Cursor and Trigger using PL/Pgsql.

M.Sc.(CS) - II : Practical Based on Paper I(SQL Programming with Oracle)

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart and algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: II Sem.

PSO 02 Course Title: -(Paper - II) **Advanced Computer Network**

Students will be able to:

- Understand basic computer network technology.
- Understand Data Communications System and its components.
- Enumerate the layers of the OSI model and TCP/IP reference model.
- Identify the different types of network devices, their functions within a network and their applications.

Semester: II Sem.

PSO 03 Course Title: -(Paper - III) **Programming in Visual Basic**

Students will be able to:

- Explore algorithmic approaches to problem solving.
- Analyze a problem and devise an algorithm to solve it.
- Formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Implement algorithms in the programming in VB.
- Develop a modular programs using control structures and arrays in VB.

M.Sc.(CS) - II : Practical Based on Paper III(Programming in Visual Basic)

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart and algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	100

Semester: II Sem.

PSO 04 Course Title: -(Paper - IV) **Principles of Compiler Design**

Students will be able to:

- Specify and analyze the lexical, syntactic and semantic structures of advanced language features
- Separate the lexical, syntactic and semantic analysis into meaningful phases for a compiler to undertake language translation

- Write a scanner, parser, and semantic analyzer without the aid of automatic generators
- Turn fully processed source code for a novel language into machine code for a novel computer
- Describe techniques for intermediate code and machine code optimization
- Design the structures and support required for compiling advanced language features.

Semester: II Sem.
PSO 05 Course Title: -(Paper - V) **Numerical Analysis**
Students will learn:

- Root finding for nonlinear equations,
- Interpolation and approximation of functions by simpler computational building blocks (for example - polynomials and splines).
- Numerical differentiation and divided differences
- Numerical quadrature and integration,
- Numerical solutions of ordinary differential equations and boundary value problems;

MASTER OF SCIENCE IN COMPUTER SCIENCE

THIRD SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P	L+ (T+P)/2	Th	Ses	Pr	Total	Th	Ses	Pr	Tot
Paper 1	Programming in Java	3	2	-	4	100	50	-	150	40	30		70
Paper II	Computer Graphics	3	2	-	4	100	50	-	150	40	30		70
Paper III	LINUX	3	2	-	4	100	50	-	150	40	30		70
Paper IV	Image processing	3	2	-	4	100	50	-	150	40	30		70
Paper V	Object Oriented Analysis and Design	3	2	-	4	100	50	-	150	40	30		70
Practical I	Practical Based on Paper I			3x2	3		25	100	125		15	50	65
Practical II	Practical Based on Paper III	-	-	3x2	3	-	25	100	125	-	15	50	65
TOTAL		15	10	12	26	500	300	200	**1000**	200	180	100	480

Semester: III Sem.
PSO 01 Course Title :- (Paper - I) **Programming in Java**

Students will be able to:

- Develop Applet Programming with various techniques.
- Develop applications using AWT.
- Work with Graphics ,Color and Font
- Work with JDBC Classes(Database Operations- Create, Insert, Delete, Update, Select)
- Handle Result Set and Statements.
- Generate Jasper Report
- Work with Servlet and JDBC
- Handle Client/Server Networking
- Develop Java Server Pages applications using JSP Tags.
- Work with Java Collections.

M.Sc.(CS) - III : Practical Based on Paper I (Java)

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart & algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: III Sem.
PSO 02 Course Title: -(Paper - II) **Computer Graphics**

Students will be able to:

- Have an appreciation of the history and evolution of computer graphics, both hardware and software. Assessed by written homework assignment.
- Have an understanding of 2D graphics and algorithms including: line drawing, polygon filling, clipping, and transformations. They will be able to implement these. Assessed by tests and programming assignments.
- Understand the concepts of and techniques used in 3D computer graphics, including viewing transformations, hierarchical modeling, color, lighting and texture mapping. Students will be exposed to current computer graphics research areas. Assessed by tests, homework and programming assignments.
- Use a current graphics API (OpenGL). Assessed by programming assignments.
- Introduced to algorithms and techniques fundamental to 3D computer graphics and will understand the relationship between the 2D and 3D versions of such algorithms. Students will be able to reason about and apply these algorithms and techniques in new situations. Assessed by tests and programming assignments.

Semester: III Sem.

PSO 03 Course Title: -(Paper - III) **Linux**

Students will be able to:

- Find the latest version of a distribution of Linux
- Install, configure and use Linux to run as a server or a desktop
- Use CLI to perform many administrative functions on Linux either server or desktop
- Find, install, configure and update software on a Linux server or desktop
- Manage users' accounts, permissions and authorization on a Linux server or a desktop
- Manage file systems on a Linux server or desktop
- Run desktop virtualization on a wide variety of operating systems including Windows and Linux
- Setup Linux to provide a service depending on what the needs are ie., DNS, DHCP, WWW, email, file and print

M.Sc.(CS) - III : Practical Based on Paper III (Linux)

Scheme of Examination:-

Practical examination will be two programs and a project demonstration. It will be of 3 hours duration. All programme with flowchart & algorithms. The distribution of practical marks will be as follows

Programme 1	-	20
Programme 2	-	20
Programme 3	-	20
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: III Sem.

PSO 04 Course Title :- (Paper - IV) **Image Processing**

Students will be able to:

- Study the image fundamentals and mathematical transforms necessary for image processing.
- Study the image enhancement techniques
- Study image restoration procedures.
- Review the fundamental concepts of a digital image processing system.
- Analyze images in the frequency domain using various transforms.
- Evaluate the techniques for image enhancement and image restoration.
- Categorize various compression techniques.
- Interpret Image compression standards.
- Interpret image segmentation and representation techniques.

Semester: III Sem.

PSO 05 Course Title: -(Paper - V) **Object Oriented Analysis and Design**

Students will be able to:

- Use an object-oriented method for analysis and design
- Analyse information systems in real-world settings and to conduct methods such as interviews and observations
- Have a general understanding of a variety of approaches and perspectives of systems development, and to evaluate other IS development methods and techniques
- Know techniques aimed to achieve the objective and expected results of a systems development process
- Know different types of prototyping
- Know how to use UML for notation

MASTER OF SCIENCE IN COMPUTER SCIENCE
FORTH SEMESTER

Subject Code	SUBJECTS	Teaching Load Per Week			Credit	Examination Marks							
						Max. Marks				Min. Marks			
		L	T	P	L+ (T+P)/2	Th	Ses	Pr	Total	Th	Ses	Pr	Total
Paper 1	Software Engineering	3	2	-	4	100	50	-	150	40	30		70
Paper II	Artificial intelligence and Expert System	3	2	-	4	100	50	-	150	40	30		70
Paper III	Elective : 1. Data Mining & Data Warehousing 2. Advanced Computer Architecture	3	2	-	4	100	50	-	150	40	30		70
Project	Major Project Paper Publication (recommended)	-	-	6x2	6	-	50	300	350		30	150	180
TOTAL		09	06	15	18	300	200	300	**800**	120	120	150	390

Semester: IV Sem.

PSO 01 Course Title :- (Paper - I) **Software Engineering**

Students will be able to:

- Research the state-of-the-art, and apply their findings to software testing and quality assurance;
- Analyze different approaches to software testing and quality assurance, and select optimal solutions for different situations and projects;
- Conduct independent research in software testing and quality assurance and apply that knowledge in their future research and practice;
- Evaluate the work of peers constructively by following proven methods of peer-review, and by using the principles of research ethics.

Semester: IV Sem.

PSO 02 Course Title: -(Paper - II) **Artificial Intelligence and Expert System**

Students will be able to:

- Analyze and formalize the problem as a state space, graph, design heuristics.
- Represent solutions for various real-life problem domains using logic based techniques.
- Understand the numerous applications and huge possibilities in the field of AI.
- Express the ideas in AI research and programming language related to emerging technology.

Semester: IV Sem.

PSO03 Course Title: -(Paper - III) **Data Mining and Data Warehouse (Elective)**

Students will be able to:

- Examine all the chaotic and repetitive noise in your data.
- Understand what is relevant and then make good use of that information to assess likely outcomes.
- Accelerate the pace of making informed decisions.

Semester: IV Sem.

PSO04 Course Title: - (Paper - IV) **Project**

Students will be able to:

- Demonstrate a sound technical knowledge of their selected project topic.
- Undertake problem identification, formulation and solution.
- Design engineering solutions to complex problems utilizing a systems approach.
- Communicate with engineers and the community at large in written or oral forms.
- Demonstrate the knowledge, skills and attitudes of a professional engineer.
- Project-based learning connects students to the real world.
- Prepares students to accept and meet challenges in the real world, mirroring what professionals do every day.

Scheme of Examination: - The Project should be done by individual student.

Practical examination will be of 3 hours duration. The distribution of practical marks will be as follows

Software Demonstration	-	120
Project Report (Hard Copy + Soft Copy)	-	60
Project Demonstration/Presentation	-	60
Project Viva	-	60
Total	-	**300**

(Post Graduate Diploma in Computer Application)
PGDCA
Semester- First, Second

Programme Outcome

- The Goal of the Programme is to prepare for all computer Knowledge and Languages in one year.
- Analyze the System and maintain the relationship.
- Different hardware and software Specification which will be computer.
- Understanding application of Different software needed for rural areas development.
- To identify , software engineering, networking, hardware knowledge,
- To utilize the techniques, skills and modern programming tools, software development practice.
- Effective Computer Skills and development personality.

Course Outcome

- **Software knowledge** - apply knowledge of basic concept for developing software with different from traditional software development concept.
- **Problem analysis** – By using concept of entity relationship diagram and basic concept, feasibility study will be operational and technical feasible.
- **Design and development of system** - by using concept of entity relationship diagram and basic concept of computer and developing software.
- **Modern toolset uses** - create, select and apply appropriate techniques resources like 4G, OOP.
- **Testing** - After analysis and design of new system can perform testing of error for error free software.
- **Social responsibility** - study will conducted which will concern with operation of system and effect of system on society which called as social feasibility.
- **Ethics** - In this integrated one year course ethical principal and commits to professional ethics and responsibility and norm of software engineering practice

Programme Specific Outcome

PSO of PG Diploma in Computer Application is divided into two different semesters:-

Semester: I Semester
PSO01 Course Title: (Paper Code- PGDCA101) Introduction to Software Organization
Students will be able to:

- Bridge the fundamental concepts of computers with the present level of knowledge.
- Understand binary, hexadecimal and octal number system and their arithmetic conversions.
- Familiarize with operating systems, programming languages, peripherals.
- Choose commands and features of operating systems and application software.

Semester: I Semester
PSO 02 Course Title :-(Paper Code- PGDCA102) Programming in "C"
Students will be able to:

- Explore algorithmic approaches to problem solving.
- Analyze a problem and devise an algorithm to solve it.
- Formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Implement algorithms in the 'C' language.
- Develop modular programs using control structures and arrays in 'C'.

PGDCA-105: Practical based on PGDCA-102

Scheme of Practical Examination: -

Practical examination will be of three hours duration. All programme with flowchart and algorithms. The distribution of practical marks is as follows:-

Question 1 (with flowchart & algorithms)	-	20
Question 2 (with flowchart & algorithms)	-	20
Question 3 (with flowchart & algorithms)	-	20
Viva-Voice	-	25
[Practical Copy + Internal Record]	-	15
Total	-	**100**

Semester: I Semester

PSO03 Course Title: -(Paper Code- PGDCA 103) Office Automation and Tally

Students will be able to:

- Maintain their documents in digital Format.
- Understand and use attractive presentation for business and personal purpose.
- Analyze report with excel and directly formulate it according to the requirement.
- Feature experimental and survey articles
- Maintain their accounting details in digital Format

PGDCA-104: Practical based on PGDCA-103

Scheme of Examination: -

Practical examination will be of three hours duration. The distribution of practical marks is as follows:

Question1(Word)	-	15
Question 2 (Excel/ Power point)	-	15
Question3(Access)	-	15
Question4(Tally)	-	15
Viva-Voice	-	20
[Practical Copy +Internal Record]	-	20
Total	-	**100**

Semester: II Semester

PSO01 Course Title: -(Paper Code- PGDCA106) GUI- Programming in Visual Basic

Students will be able to:

- Explore algorithmic approaches to problem solving.
- Analyze a problem and devise an algorithm to solve it.
- Formulate algorithms, pseudo codes and flowcharts for arithmetic and logical problems.
- Implement algorithms in the programming in VB.
- Develop modular programs using control structures and arrays in VB.

Semester: II Semester

PSO02 Course Title :- (Paper Code- PGDCA107) Database Management System

Students will be able to:

- Design and build a simple database system.
- Demonstrate competences with fundamental task involved with modeling, designing, and implementing a DBMS.
- Design E-R diagrams for given problems.
- Understand and use data manipulation language to query, update and manage a database.

Semester: II Semester

PSO03 Course Title :- (Paper Code- PGDCA 108) Essential of E-Commerce

Students will be able:

- To make students familiar with environment of HTML.
- To introduce students with web browsers and web pages developed by HTML.
- To develop skill and knowledge among students in applications of internet in education of commerce
- To learn to create web pages and web portals using HTML and hosting it on the internet.
- To know about E-Commerce
- To understand E-Payment, E-Banking, E-Governance, etc.

PGDCA-109: Practical based on PGDCA106, PGDCA107 and PGDCA108

Scheme of Examination: -Practical examination will be of three hours duration. The distribution of practical marks will be as follows

Question 1(VB)	-	15
Question 2(VB)	-	15
Question 3(SQL)	-	15
Question 4(HTML/Web Design)	-	15
Viva	-	25
[Practical Copy + Internal Record]	-	15
Total	-	100

Semester: II Semester

PSO 04 Course Title :- (Paper Code- PGDCA110) Project Work

Students will be able to:

- Demonstrate a sound technical knowledge of their selected project topic.
- Undertake problem identification, formulation and solution.
- Design engineering solutions to complex problems utilizing a systems approach.
- Conduct an engineering project.
- Communicate with engineers and the community at large in written or oral forms.
- Demonstrate the knowledge, skills and attitudes of a professional engineer.
- Implement Simple SQL programs to solve simple problems.
- Understand the process of designing and implementing applications using SQL.

Scheme of Examination: -

The Project Work should be done by individual student.

Practical examination will be of three hours duration. The distribution of practical marks will be as follows:-

Software Demonstration	-	40
Project Report (Hard Copy + Soft Copy)	-	20
Project Demonstration/Presentation	-	20
Project Viva	-	20
Total	-	**100**

DEPARTMENT OF PHYSICS & ELECTRONICS
(B.Sc. I, II, III YEAR)

OBJECTIVES OF THE PROGRAMME:

The main objective of the course is to provide quality education with basic concepts in Physics and Electronics and to prepare the students for University as well as national level PG entrance and competitive examinations and to impart quality education to our students with best available facilities. It is our greatest objective to obtain consistent and excellent results. The college follows Hemchand Yadav University, Durg syllabus for Bachelor of Science in Physics and Electronics.

PROGRAMME OUTCOME:

PO - 1 Eligibility and Employability Main outcome of the programme is that after the course graduates become essentially eligible for employment in government as well as private sectors, create capability to acquire any repute professional career in country and abroad. They will attain eligibility to successfully pursue their career objectives in advanced education, scientific career in government or industry, a teaching career in the education systems.

PO- 2 Logical and Analytic Thinking Ability The graduate will acquire scientific temperament to analyze any problem he comes across by demonstrating logical and analytic thinking ability. The graduate will analyze situations, search for the truth and extract information, formulate and solve problems in a systematic and logical way. Become able to identify assumptions and checking out the degree to which these assumptions are accurate and valid. The assumptions are framed to learn thinking and actions.

PO-3 Communication efficiency The graduate will work and communicate efficiently in inter-disciplinary environment, either independently or in a team, and demonstrate leadership quality. Bachelors will speak, read, write and listen clearly in person and trough electronic media in English and in one Indian language, and make meaning of the world by connecting people, ideas, books, media and technology.

PO-4 Life-Long Learning The graduate will understand the impact of science on society; will engage in life-long learning and professional development through self-study, continuing education or professional and doctoral level studies. The graduate will acquire proficiency in the acquisition of data using a variety of laboratory instruments and in the analysis and interpretation of such data.

COURSE OUTCOME:

On the completion of the course the student will be able to:

CO1:- Explain the concept of Gravitation and planetary motion with rotational motion of rigid body and moment of inertia and concept of linear and angular momentum.

CO2:- Understand basic network theorems and construction and working of different instruments through different circuits.

CO3:- Understand semiconductor physics and devices like diode LED, FET, OP-AMP, with the study of special theory of relativity.

CO4:- Understand geometrical optics, theory of interference of light, diffraction of light with the concept of polarisation of light.

CO5:- Understand failures of classical mechanic through the study of quantum mechanics.

CO6:- Understand the concept of Microprocessor and Integrated Circuit

CO7:- Understand the concept of Television

CO8:- Understand the Concept of Combinational and Sequential circuit

The successful candidates shall be placed in divisions on the following basis:

- An aggregate of 60% or above – I Division
- An aggregate of 48% or above – II Division
- An aggregate of 33% or above – III Division

Marking Scheme for First/Second/Third year

Class	Paper No	Title of the Paper	Marks Allotted in Theory	Marks Allotted in Practical	Marks Allotted in Internal Assessment
B.Sc. I (Physics)	1	Mechanics Oscillation and Properties of Matter	50	50	10
B.Sc. I (Physics)	2	Electricity, Magnetism and Electromagnetic Theory	50		10
B.Sc. II (Physics)	1	Thermodynamics , Kinetic Theory and Statistical Physics	50	50	10
B.Sc. II (Physics)	2	Waves Acoustics and Optics	50		10
B.Sc. III (Physics)	1	Relativity, Quantum Mechanics Atomic Molecular and Nuclear Physics	50	50	10
B.Sc. III (Physics)	2	Solid State Physics, Solid State Devices and Electronics	50		10
B.Sc. I (Electronics)	1	Network analysis and Analog Electronics	50	50	10
B.Sc. I (Electronics)	2	Linear and Digital Integrated Circuit	50		10
B.Sc. II (Electronics)	1	Digital Electronics	50	50	10
B.Sc. II (Electronics)	2	Electronics Instrument	50		10
B.Sc. III (Electronics)	1	Power Electronics, Microprocessor and IT	50	50	10
B.Sc. III (Electronics)	2	Communication System	50		10

PROGRAMME SPECIFIC OUTCOME:

The course of Physics and Electronics has been divided into two papers.

PSO 01: B.Sc. I year (Physics I) Mechanics Oscillation and Properties of Matter

The paper aims at imparting knowledge to:

- Understand the concepts of Frame of Reference of different coordinates
- Understand laws and apply them in calculations of the motion of simple and oscillation systems
- Understanding the Cathode Ray Oscilloscope theory
- Understand the concepts of friction and the concepts of elasticity, fluid mechanics and be able to perform calculations using them

PSO 02: B.Sc. I year (Physics II) Electricity, Magnetism and Electromagnetic Theory

- the concepts of Circuit theory
- knowledge regarding Electricity, Dielectric medium
- Magnetisation and Electromagnetic behaviour
- Demonstrating quantitative problem solving skills in all the topics covered

PSO 03: B.Sc. II year (Physics I) Thermodynamics, Kinetic Theory and Statistical Physics

The paper covers the topic related to thermodynamics, kinetic theory and Statistical physics

- Comprehend the basic concepts of thermodynamics and its applications in physical situation
- Learn about situations in low temperature

- Understand the concepts of Thermal and the concepts Statistical mechanics and be able to perform calculations using them
- Understand the concepts of Statistical system and its impact on surrounding
- Understand the Particle behaviour and its consequences according to the Statistical Physics
- Demonstrate quantitative problem solving skills in all the topics covered

PSO 04: B.Sc. II year (Physics II) Waves Acoustics and Optics

- Students will appreciate the role of Physics in 'interdisciplinary areas related to materials, Acoustics etc.
- It will understand the concepts of lens system and interference
- To apply the laws of light to formulate the relations necessary to analyse lens Formulae
- To study about LASER and its applications
- To demonstrate quantitative problem solving skills in all the topics covered

PSO 05: B.Sc. III year (Physics I) Relativity, Quantum Mechanics Atomic Molecular and Nuclear Physics

- Understand laws and apply them in atomic Physics
- Understand the concepts Molecular Physics
- Understand laws and apply them in Nuclear Physics
- Understand the concepts in Nuclear Physics
- Understand laws and apply them in Relativity
- Demonstrate quantitative problem solving skills in all the topics covered

PSO 06: B.Sc. III year (Physics II) Solid State Physics, Solid State Devices and Electronics

- Understand the concepts of Solid State Systems
- Understand the concepts of Statistical system in Solid State System and its impact on surrounding
- Demonstrate quantitative problem solving skills in all the topics covered
- Understand the basics of transistor biasing and their applications

PSO 07: B.Sc. I year (Electronics I) Network Analysis and Analog Electronics

- Understand the concept of Circuit theory
- Elaborate the knowledge of diode and its application
- Understand the basics of transistor biasing, operational amplifiers, their applications

PSO 08: B.Sc. I year (Electronics II) Linear and Digital Integrated circuit

- Understand the basic knowledge of Operational Amplifier
- Comprehend the basic concepts of Number system
- Understand the concept of Combinational and Sequential Logic Circuit
- Students will appreciate the role of digital to analog and analog to digital conversion in our daily day life

PSO 09: B.Sc. II Year (Electronics I) Digital Electronics

- Acquired knowledge about solving problem related to number system and Boolean algebra.
- Know the working and applications of one bit memory (flip flop).
- Understand the working of various components of digital system like; registers, counters, converters and op-amp etc.
- Understand the role of each component of microprocessor 8085.
- Acquired knowledge about basic digital electronics

PSO 10: B.Sc. II Year (Electronics II) Electronics Instrument

- Understand the working of various Regulator Power supply
- Understanding the Cathode Ray Oscilloscope theory
- Understand the role of each component of IC555 and 8038
- Acquired knowledge about Q meter and Wattmeter
- Understand the concept of Digital multi-meter and voltmeter and its use

PSO 11: B.Sc. III Year (Electronics I) Power Electronics, Microprocessor and IT

- Acquired knowledge about Power diodes and transistor
- Understand the role of each component of microprocessor and its interfacing

PSO 12: B.Sc. III Year (Electronics II) Communication System

- Understand the basic knowledge of Passive filter
- Students will appreciate the role of Modulation in our daily life
- Understand the working of Television

B.Sc. (Subject - Chemistry)

COURSE OUTCOME

The purpose of the B.Sc. programme at Shri Shankaracharya Mahavidyalaya Junwani, Bhilai is to provide the key knowledge, base and laboratory resources to prepare students for achieving their career goals as professionals in the field of chemistry and related fields. They will be able to work as chemists, technicians in different laboratories and can pursue M. Sc. in Chemistry or may go for research work.

SCHEME OF EXAMINATION

Subject	Paper	Max. Mark	Total Marks	Min. Marks	
Environmental Studies		**75**	**100**	**33**	
Field Work		**25**			
Foundation Course					
Hindi Language	I	75	75	26	
English Language	I	75	75	26	
नोट– प्रत्येक खंड में से 2 दो प्रश्न हल करने होंगे। सभी प्रश्नपत्र समान अंक के होगें।					
Three Elective Subject:					
1. Physics	I		50		
	II		50	100	33
	Practical			50	17
2. Chemistry	I		33		
	II		33	100	33
	III		34		

PROGRAMME OUTCOME

- Students will have a basic knowledge of fundamentals and application of current chemical and scientific theories.
- Students will be able to record and analyze the results of experiments.
- Students will be skilled in problem solving, critical thinking and analytical.
- Students will understand the central role of chemistry in our society.
- Students will become aware of the ethical behavior in issues facing chemists.

PROGRAMME SPECIFIC OUTCOME

B.Sc. I year (Subject - CHEMISTRY)

PAPER - 1 (Inorganic Chemistry)

Unit 1- Students will develop an understanding about the atomic structures and their rules.

Unit 2 - Students will have an insight look about V.B.T. and types of hybridization.

Unit 3 - Students will be able to understand about different characteristics of ionic solids, semiconductors and band theories.

Unit 4 - Students will have an insight comparative study of s-block elements.

Unit 5 - Students will understand about different properties & structures of p-block elements and inorganic chemical radicals.

PAPER - 2 (Organic Chemistry)

Unit 1- Students will be able to develop an understanding about electronic structure bonding & mechanism.
Unit 2 - They will be able to learn about stereochemistry of organic compounds.
Unit 3 - Students will have an idea about alliphatic and aromatic ring compounds.
Unit 4 - Students will be able to perform chemical reactions, structures, substitution reactions of alkenes, dienes and alkynes.
Unit 5 - Students will develop an understanding about the mechanism and substitution reactions of alkyl and aryl halides.

PAPER - 3 (Physical Chemistry)
Unit 1 - Students will be able to perform mathematical concept for chemist and computers.
Unit 2 - Students will be able to understand the concept of Maxwell's law and J-T effect.
Unit 3 - Students will have a basic idea about Roults law and Van't Hoff factor of liquids.
Unit 4 - Students will have an insight view about classification, structures and applications of liquid crystals, colloidal and solid state.
Unit 5 - Students will study the about chemical kinetics & catalysis.

LABORATORY COURSE
Student will learn calibration, determination of physical properties of compound and qualitative analysis.

B.Sc. II year (Subject - CHEMISTRY)
PAPER - 1 (Inorganic Chemistry)
Unit 1- Deals with basic property like complexion, colour transition and various in oxidation state of elements of 3d series.
Unit 2- Student will learn about the similarities of between 4d and 5d series into various aspects like magnetic property la/Ac contraction and spectral phenomenome.
Unit 3- In this unit various theories like VBT, MOT, LFT has been elaborated which is to co-ordination complexes and their spectral characteristics.
Unit 4- This unit deals with various isolation processes for the separation of La and Ac also complex formation and variation in oxidation state has been studied in detail.
Unit 5- Various proposed method for acid and bases has been studied in detail which is useful in various chemical reaction as well as basics of organic and inorganic chemistry.

PAPER - 2 (Organic Chemistry)
Unit 1- Method of preparation, physical and chemical properties of alcohols, phenols, ethers and epoxides has been studied in detail.
Unit 2 - Important synthesis methods and chemical reactions and oxidising nature of aliphatic and aromatic aldehyde and ketones has been studied.
Unit 3 - Acidic property, effect of substituents of carboxylic acid and chemical and physical properties of their derivatives explain in detail
Unit 4 - Chemical reaction, effect of substituents on aliphatic and aromatic nitrogen containing compound has been studied
Unit 5 - Important reaction, mechanism and synthesis of heterocyclic compounds and their role in drugs synthesis. Role of Amino acids in biological process and end group analysis of amino acids has been explained.

PAPER - 3 (Physical Chemistry)
Unit 1 - This unit states with first law of thermodynamics and calculation of various mathematical expression related to ideal gases.
Unit 2- Second and third law of thermodynamics studied in detail with the basic concepts of entropy, pressure and temperature

Unit 3 - Various theories including nernest equation, lee chateliers equation and principle and gibbs phase rule and explain their importance; explain in detail.

Unit 4 - Principles and theories which explain the electrolytic solution and their conductivity has been explained

Unit 5 - Redox, EMF, electrode reaction and concentration cells and their importance explain in brief.

LABORATORY COURSE

Students will learn calibration, volumetric analysis, chromatography, qualitative analysis and thermochemistry.

B.Sc. III year (Subject - CHEMISTRY)

PAPER - 1 (Inorganic Chemistry)

Unit 1 - This unit give important information about metal-ligand bonding in transition metal complexes and types of ligand.

Unit 2 - Student gains important information about ionic bond also this unit explains crystal field theory and its applications.

Unit 3 - Students gains the knowledge of organometallic compounds and their chemical reactions.

Unit 4 - Important elements and their important role in chemistry discussed in this unit.

Unit 5 - In this unit concept of acid and base are discussed and the forms in which compounds occur in nature is explained.

PAPER - 2 (Organic Chemistry)

Unit 1 - Units give the knowledge of different organometallic compounds and organic synthesis via enolates.

Unit 2 - Students the knowledge of biomolecules and their important roles in chemistry and daily life.

Unit 3 - Students gains the knowledge of polymers, types of biopolymers, formation, their properties and uses.

Unit 4 - This unit gives information about mass, infrared and UV/Visible spectroscopy. Students gains knowledge of basic principles of these spectroscopy.

Unit 5 - Students gains knowledge about NMR ^{13}C Spectroscopy their principle and applications.

PAPER - 3 (Physical Chemistry)

Unit 1 - Students will know about the structure of atom, orbitals and importance of quantum mechanics in chemistry.

Unit 2 - From this unit students gain the knowledge about applications of quantum mechanics.

Unit 3 - Spectroscopy plays a very important role in determination of molecular and atomic structure. This unit gives basic knowledge about spectroscopy subject.

Unit 4 - Students gains the knowledge about orientation of magnetic properties in substances.

Unit 5 - This unit gives knowledge of third law thermodynamics.

LABORATORY COURSE

Students will understand preparation of complex, synthesis and analysis of organic compound, qualitative analysis and handling of instruments.

- Know about TLC method for determination of few drug.

Department of Mathematics
(Bachelor of Science)

OBJECTIVES OF THE PROGRAMME:

The college follows Hemchand Yadav University, Durg syllabus for B.Sc. course. The objectives of the prescribed course are:

- **Knowledge and Theory –**
  Apply their board knowledge of science across a range of fields, with in depth knowledge in at least one area of study. While demonstrating an understanding of the local and global contexts in which science is practiced.
- **Application-**
  Apply appropriate methods of research, investigation and design.
- **Proficiency in Technology-**
  Recognize the need for information employs highly developed conceptual, analytical, quantitative and technical skills and are adept with a range of technologies.
- **Professional and Ethical Behaviour-**
  Demonstrative personal and professional integrity by respecting diverse point of view and the intellectual contribution of others.
- **Problem Solving and Critical Thinking-**
  Critically evaluate ideas and arguments by gathering relevant information, assessing its credibility and synthesizing evidence to formulate a position.
- **Environment Sensitivity –** To sensitize young ones towards environment and sustainability and significance of sustainable development.

COURSE OUTCOME:

On the completion of the course, students will be able to:-

- Develop the knowledge of algebraic skill essential for the study of systems of matrix algebra, linear equations, Eigen values and Eigen vectors.
- Apply mathematical methods involving arithmetic, algebra, geometry and graphs to solve problems.
- Develop the knowledge for applying the concept and principles of Differential and integrals to solve problems.
- Develop the skill of computation of integral using Gauss's, Divergence and Stoke's theorems.
- Integrate functions of several variables over curves and surface.
- Demonstrate the knowledge of the basic concepts of Geometry.
- Solve algebraic equations of up to degree four.
- Develop the knowledge of the fundamental tools of calculus such as limit, sequence, continuity and differentiability of functions of two variables.
- Identify a general method for constructing solutions of homogeneous linear differential equations with constant coefficients.
- Distinguish between partial differential equation and ordinary differential equation.
- Solve problems of motion of a particle in rough and smooth plane.
- Develop the knowledge of Kepler's Law of motion.
- Understand the concept of vector space and inner product space.
- Develop the knowledge of fundamental concepts of complex variables.
- Understand improper integrals.
- Understand the basic principle of Fourier series and Riemann Integral
- Describe computer programs in formal mathematical manner.
- Develop the knowledge of numerical method for approximating the solution of problems of Mathematics.

MARKING SCHEME

SCHEME OF EXAMINATION				
Subject	**Paper**	**Max. Marks**	**Total Marks**	**Min. Mark**
Mathematics	I	50	150	50
	II	50		
	III	50		

PROGRAMME OUTCOME

On completion of this programme, students will be able to:-

- Create, interpret and analyse graphical representation of functions and equations.
- Develop the knowledge of create Mathematical models to solve real-world problems.
- Understand the basic concepts, fundamental principles and Mathematical theories related to various mathematical phenomena and their relevance in day-to-day life.
- Develop the knowledge and understanding of axiomatic approaches in pure and applied Mathematics.
- Develop mathematical skill to solve problems.

PROGRAMME SPECIFIC OUTCOMES

The course of B.Sc. First Mathematics has been divided into Three papers:

PSO: 01- Paper-I: Algebra and Trigonometry

- Gain knowledge of Elementary operation on Matrices, Inverse of Metrics.
- Able to solve Application of Matrices to a System of Linear Equation.
- Solve Mapping, Equivalence Relation & Partition.
- Develop the knowledge for applying the concept of Group ,Ring & Fields
- Solve various problems on De-Moivre's Theorem and its Application.

PSO:02- Paper- II- Calculus

- Verify the values of limit and Continuity of a function .Understand the Successive Differentiation, Leibnitz's Theorem, Macluarin and Taylor's Series Expansion.
- Learn the method and properties of Asymptotes and Curvature.
- Students will be familiar with the techniques of Integral Calculus.
- Identify types of differential equations and solve differential equations such as Exact, homogeneous, non-homogeneous, and linear and Bernoulli differential equations etc.
- Solve various problems on Ordinary Differential Equation.

PSO: 03-Paper- III- Vector Analysis and Geometry

- Understand basic notions of Scalar and Vector Product of three Vector.
- Able to solve Application of Green, Gauss and Stokes Theorem.
- Students will be familiar with the techniques of integral Calculus.
- Identify types of differential equations and solve differential equations such as Exact, homogeneous, non-homogeneous, and linear and Bernoulli differential equations etc.
- Solve various problems on Ordinary Differential Equation.

The course of B.Sc. Second Mathematics has been divided into Three papers:

PSO: 04-Paper-I- Advanced Calculus

- Solve the Convergence of Series and Sequences with Different Tests.
- Identify and apply the intermediate value theorem, Mean value theorem.
- Verify the values of limit of a function of Two Variable, Homogeneous Function and Taylor's Theorem for Function of two variables.
- Identify the Maxima and Minima of Function of Two and Three Variables.
- Learn the method and properties of Beta and Gamma Function, Double and Triple Integrals.

PSO: 05-Paper-II – Differential Equation

- Students develop knowledge in the Bessel's and Legendre's Differential Equation.
- Learn the methods and properties of Laplace transform and Inverse Laplace Transform, apply them to solve Linear Differential Equations.
- Identify partial differential equations of the First order, Lagrange's Method and Charpit's Method.
- Solve the partial Differential Equation of second and higher Order.
- Problem solving of Variational with fixed boundaries.

PSO: 06-Paper-III – Mechanics

- Solve the Analytics Condition of Equilibrium and virtual work, Catenary.
- Understand the force in three Dimensions, Null Lines and Dynamics.
- Solve various problems on Simple Harmonic Motion, Elastic Strings, Projectile and central orbits.
- Problem solving Kepler's Law of Motion, Velocity and acceleration in tangential.
- Learn the Motion in a resisting medium .motion of particles of mass.

The course of B.Sc. Third Mathematics has been divided into Three papers:

PSO: 07-Paper-I- Analysis

- Solve the Series of arbitrary terms. Convergence, divergence and Oscillation. Abel's and Dirichlet's test. Multiplication of series.
- Determine the Riemann integrability, Intergrability of continuous and monotonic functions with Different Tests.
- Understand Complex numbers as ordered pairs. Geometric representation of Complex numbers.
- Understand the Metric spaces, Neighbourhoods, Limit points, Interior points, Open and closed sets, Closure and interior.
- Learn the Dense subsets. Baire Category theorem. Separable, second countable and first countable spaces. Continuous functions. Extension theorem. Uniform continuity.

PSO: 08-Paper-II- Abstract Algebra

- Students develop knowledge of Group-automorphisms, inner automorphism. Automorphism groups and their computations, Conjugacy relation, Normaliser, Counting principle and Sylow's theorems, Sylow subgroup, Structure theorem for finite Abelian groups.
- Analyze and demonstrate examples of ideals and quotient rings and Use the concept of isomorphism and homomorphism for rings.
- Understand the vector spaces. Subspaces. Sum and direct sum of subspaces, linear span. Linear dependence, independence and their basic properties.
- Solve the Linear transformations and their representation as matrices.

- Solve the Inner Product Spaces-Cauchy-Schwarz inequality and Bessel's inequality for finite dimensional spaces. Gram-Schmidt Orthogonalization process.

PSO: 09-Paper-III-Programming in 'C' and Numerical Analysis

- Understand the Programmer's model of a computer. Algorithms. Flow Charts. Data Types.
- Solve the Solution of Equation Bisection, Secant, Regula Falsi, Newton's Method and Roots of Polynomials.
- Problem solving Linear Equations: Direct Methods for Solving. Systems of Linear Equations and the Algebraic Eigenvalue problem.
- Problem solving Ordinary Differential Equations: Euler, Single-step, Runge-Kutta’s, Multi-step, Milne-Simpson Methods based on Numerical Integration and Approximation.
- Solve the Monte Carlo Methods Random number generation, congruential generators, and statistical tests of pseudo-random numbers.

Department of Mathematics
Master of Science (Mathematics)

OBJECTIVES OF THE PROGRAMME:

The college follows Hemchand Yadav University, Durg syllabus for M.Sc. course. The objectives of the prescribed course are:

Mastery of the Knowledge-
In their fields and the ability to apply their expertise to novel and emerging problems.

Effective researches-
Able to state a research problem, apply research methods, tools for data collection, analyze and interpret research data.

Demonstrate critical thinking-
Apply analytical models and critical, reasoning propellers to calculate evidence, select among alternatives and generate creative options.

Possess effective communication skills-
Student can communicate their research clearly and professionally in both written and oral forms appropriate to the field through publications, conference papers, seminars etc.

Demonstrate teamwork and leadership skill-
Specifically function in a variety of work groups.

COURSE OUTCOME

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

- Identify the concept of Normal groups and Quotients groups.
- Concentrate on a particular Euclidean ring and other forms of Polynomial rings.
- Study in detail the Mean value theorem and Taylor's theorem.
- Locate Sequence and Series comprising convergence sequences, upper and lower limits.
- Understand Local properties of Analytic functions.
- Analyze Analytic functions and exponential functions.
- Discuss and understand the importance of the concepts Graph and Lattice, Algebraic Structure.
- Study the properties of trees and connectivity.
- Understand the elements of Galois Theory.
- Discuss connected spaces, the components of a space and totally disconnected spaces.
- Study Continuous linear transformations and the Hahn-Banach theorem.
- Understand the Open Mapping Theorem and its applications.
- Apply Duality to solve problems in Linear Programming.
- Study Assignment Problem and its applications.

M.Sc. (MATHEMATICS)
Semester-I

There shall be five papers. Each paper shall have 100 marks. Overall tally of marks will be 500.

Papers	Description	Theory	Sessional	Practical	Total Marks
I	**Advanced Abstract Algebra (I)**	80	20	-	100
II	**Real Analysis (I)**	80	20	-	100
III	**Topology**	80	20	-	100
IV	**Advanced Complex Analysis (I)**	80	20	-	100
V	**Advanced Discrete Mathematics (I)**	80	20	-	100

Semester-II

There shall be five papers. Each paper shall have 100 marks. Overall tally of marks will be 500.

Papers	Description	Theory	Sessional	Practical	Total Marks
I	**Advanced Abstract Algebra (II)**	80	20	-	100
II	**Real Analysis (II)**	80	20	-	100
III	**General and Algebraic Topology(II)**	80	20	-	100
IV	**Advanced Complex Analysis (II)**	80	20	-	100
V	**Advanced Discrete Mathematics (II)**	80	20	-	100

Semester-III

There shall be five papers. Each paper shall have 100 marks. Overall tally of marks will be 500.

Papers	Description	Theory	Sessional	Practical	Total Marks
I	**Integration Theory and Functional Analysis (I)**	80	20	--	100
II	**Partial Differential Equations & Mechanics (I)**	80	20	--	100
III	**General Relativity and Cosmology (I)**	80	20	--	100
IV	**Operations Research (I)**	80	20	--	100
V	**Programming in C (with ANSI Features) (I)**	70	-	30	100

Semester-IV

There shall be five papers. Each paper shall have 100 marks. Overall tally of marks will be 500.

Papers	Description	Theory	Sessional	Practical	Total Marks
I	**Integration Theory and Functional Analysis (I)**	80	20	-	100
II	**Partial Differential Equations & Mechanics (I)**	80	20	-	100
III	**General Relativity and Cosmology (I)**	80	20	-	100
IV	**Operations Research (I)**	80	20	-	100
V	**Programming in C (with ANSI Features) (I)**	70	-	30	100

PROGRAMME OUTCOME

On completion of the programme, the student will be able to:-

- Investigate and solve unfamiliar math problem.
- Develop the Knowledge of create Mathematical models to solve real world problem.
- Apply mathematical problems and solutions in a variety of contexts related to science, technology, business and industry, and illustrate these solutions using symbolic, numeric, or graphical methods.
- Demonstrate basic manipulative skills in algebra, operation Research, real analysis and functional analysis.
- Develop mathematical skill to solve problems

PROGRAMME SPECIFIC OUTCOMES

The course of M.Sc.(Mathematics) Semester-I has been divided into five papers:

PSO-01: Advanced Abstract Algebra (I)

- Gain Knowledge in Groups - Normal and Subnormal series.
- Study about Field theory- Extension fields, Algebraic and transcendental extensions.
- Gain Knowledge about Perfect fields, Finite fields and algebraically closed fields.
- Study about Automorphisms of extensions and Galois extensions.
- Solve polynomial equations by radicals and Insolvability of the general equation of degree 5 by radicals.

PSO-02: Real Analysis (I)

- Gain knowledge regarding Sequences and series and uniform convergence.
- Study the uniqueness theorem for power series, Abel's and Tauber's theorems.
- Solve functions of several variables and linear transformations.
- Learn the concept Jacobians, extremum problems with constraints and Lagrange's multiplier method.
- Solve Partitions of unity, Differential forms and Stoke's theorem.

PSO-03: Topology (I)

- Understand Bases and sub-bases, Subspaces and relative topology.
- Gains knowledge regarding First and Second Countable spaces.
- Study Separation axiom their Characterizations and basic properties.
- Gain knowledge in the concept of Local compactness and one point compactification.
- Study Compactness in metric spaces and Equivalence of compactness.

PSO-04: Complex Analysis (I)

- Understand Complex integration, Cauchy-Goursat and Higher order derivatives, Morera's Theorem.
- Learns about the Maximum modulus principle, Schwarz lemma and the argument principle, Rouche's theorem Inverse function theorem.
- Study will be Cauchy's residue theorem, Evaluation of integrals and branches of many valued functions.
- Knowledge gain about the bilinear transformations, their properties and classifications, Definitions and examples of conformal mappings.
- Solve Spaces of analytic functions, Hurwitz's theorem and Montel's theorem Riemann mapping theorem.

PSO-05: Advanced Discrete Mathematics (I)

- Students about the concept of Formal Logic-Statements and Symbolic Representation and Tautologies.
- Gains knowledge in the concepts of Homomorphism of semigroups and monoids, Congruence relation and Quotient Semigroups.
- Identify types of Lattices-Lattices as partially ordered sets, their properties, Lattices as Algebraic Systems, Sublattices, Direct products, and Homomorphisms.
- Solve Applications of Boolean Algebra to Switching Theory (using AND, OR and NOT gates) and The Karnaugh Map Method.
- Learns about the Grammars and Languages-Phrase-Structure Grammars and Rewriting Rules, Derivations, Sentential Forms, Language generated by a Grammar.

The course of M.Sc. (Mathematics) Semester-II has been divided into five papers:

PSO-06: Advanced Abstract Algebra (II)

- Gain knowledge Modules - Cyclic modules, Simple modules, Semi-simple modules and Schuler's Lemma.
- Study about the concept of Linear Transformations - Algebra of linear transformation.
- Learns the Canonical Forms - Similarity of linear transformations and Invariant subspaces.
- Understand Fundamental structure theorem for finitely generated modules over a Principal ideal domain.
- Study about the concept Rational canonical from and generalised Jordan form over any field.

PSO-07: Real Analysis (II)

- Learns about the definition and existence of Riemann-Stieltjes integral and Properties of the Integral.
- Learns about the Lebesgue outer measure.
- Solve uniqueness of Extension, Integration with respect to a measure, Reimann and Lebesgue Integrals.
- Solve the four derivatives, Lebesgue Differentiation Theorem and Differentiation and Integration.
- Study the Functions of Bounded variation. The L -spaces. Convex functions.

PSO-08: General and Algebraic Topology (II)

- Study the Tychonoff product topology in terms of standard sub-base and its characterizations.
- Gain Knowledge Product spaces, Connectedness and product spaces.
- Study about the Embedding and metrization, The Nagata-Smirnov metrization theorem.
- Identify types of Nets and filter. Topology and convergence of nets. Hausdorffness and nets.
- Learns the concept of the fundamental group and covering spaces-Homotopy of paths.

PSO-09: Advanced Complex Analysis (II)

- Study about the Weierstrass' factorisation theorem, Gamma function and its properties and Riemann Zeta function.
- Learns the methods and properties analytic Continuation, Uniqueness of direct analytic continuation and Uniqueness of analytic continuation along a curve.
- Solve Harmonic functions on a disk, Harnack's inequality and theorem and Dirichlet Problem.
- Learns the concept of Canonical products, Jensen's formula and Poisson-Jensen formula.
- Student will be the range of an analytic function, Bloch's theorem and The Little Picard theorem.

PSO-10: Advanced Discrete Mathematics (II)

- Gain knowledge Graph Theory-Definition of (Undirected) Graphs, Paths, Circuits, Cycles, and Subgraphs and Induced Subgraphs.
- Verify the Spanning Trees, Cut-sets, Fundamental Cut -sets, Cycle. Minimal Spanning Trees and Kruskal's Algorithm.
- Solve directed Graphs, In degree and Out degree of a Vertex, Weighted undirected Graphs and Dijkstra's Traversals.
- Understand Introductory Computability Theory-Finite State Machines and their Transition Table Diagrams.
- Able to solve finite Automata, Acceptors, Non-deterministic Finite Automata and equivalence of its power to that of Deterministic Finite Automata.

The course of M.Sc. (Mathematics) Semester-III has been divided into five papers:

PSO-11: Integration Theory and Functional Analysis (I)

- Solve Signed measure, Hahn decomposition theorem, mutually singular measures. Radon-Nikodym theorem.
- Study about the Lebesgue-Stieltjes integral, product measures, Fubini's theorem, Differentiation and Integration.
- Identify types of Baire sets, Baire measure, continuous functions with compact support.
- Learns the method Riesz Lemma, basic properties of finite dimensional normed linear spaces and compactness.
- Gain knowledge normed linear spaces of bounded linear transformations, dual spaces with examples.

PSO-12: Partial Differential Equations and Mechanics (I)

- Study about the concept of Mean Value Formulas, Properties of Harmonic Functions, Green's Function, energy Methods.
- Gain knowledge Heat Equation-Fundamental Solution, Mean Value Formula, Properties of Solutions and Energy Methods.
- Solve Energy equation for conservative fields and Hamilton's variables.
- Solve Poisson's Bracket, Poisson's Identity and Jacobi-Poisson Theorem.
- Solve Laplace and Poisson equations, Work done by self attracting systems.

PSO-13: General Relativity and Cosmology (I)

- Understand General Relativity-Transformation of coordinates and Tensors, Algebra of Tensors.
- Solve Riemann Christoffel curvature tensor and its symmetry properties, Bianchi identities and Einstein tensor.
- Study about Einstein's field equations and its Newtonian approximation.
- Gain knowledge advance of perihelion of a planet, bending of light rays in a gravitational field.
- Learns the concept of Energy-momentum tensor of a perfect fluid. Schwarzschild internal solution.

PSO-14: Operations Research (I)

- Gain knowledge in advance Operations Research and its Scope, Necessity of Operations Research in Industry and Linear Programming-Simplex Method.
- Solve Other Algorithms for Linear Programming-Dual Simplex Method.
- Students will be familiar with the techniques Parametric Linear Programming.
- Solve Transportation and Assignment Problems.
- Study about the Minimum Cost Flow Problem, Network Simplex Method, Project Planning and Control I with PERT and CPM.

PSO-15: Programming in C (with ANSI features) Theory and Practical (I)

- Solve Expressions, Assignment Statements, Formatting Source Files, Continuation Character and The Pre-processor.
- Study about Scalar Data Types-Declarations, Different Types of Integers and Different kinds of Integer Constants.
- Gain knowledge the break and continue Statements. The goto statement. Infinite Loops.

- Understand basic notions Binary Arithmetic Operators, Arithmetic Assignment Operators, Increment and Decrement Operators.
- Identify types Arrays -Declaring an Array, Arrays and Memory, Initializing Arrays, Encryption and Decryption.

The course of M.Sc. (Mathematics) Semester-IV has been divided into five papers:-

PSO-16: Functional Analysis (II)

- Gain Knowledge Uniform boundedness theorem and some its consequences, Open mapping and closed graph theorems.
- Develop the knowledge Solvability of linear equations in Banach spaces and the closed Range Theorem.
- Learns the method Complete orthonormal sets and Parseval's identity.
- Identify types of Adjoint of an operator on a Hilbert space and Reflexivity of Hilbert spaces.
- Abstract variational boundary-value problem and the generalized Lax-Milgram theorem.

PSO-17: Partial Differential Equations and Mechanics (II)

- Understand Non-linear First Order PDE-Complete Integrals, Envelopes, Characteristics, Hamilton Jacobi Equations.
- Solve Fourier and Laplace Transform, Hopf-Cole Transform, Hodograph and Legendre Transforms, Potential Functions.
- Learns about Asymptotics (Singular Perturbations, Laplace's Method, Geometric Optics, Stationary Phase, Homogenization).
- Solve Jacobi's equations, Lee Hwa Chung's theorem, canonical transformations and properties of generating functions.
- Gain Knowledge Lagrange Brackets, and Condition of canonical character of a transformation in terms of Lagrange brackets and Poisson brackets.

PSO-18: Cosmology (II)

- Study Cosmology-Mach's principle, Einstein modified field equations with cosmological term.
- Students learns about Static Cosmological models of Einstein and De-Sitter, their derivation, properties and comparison with the actual universe.
- Gain knowledge about Hubble's law, Cosmological principles, Weyl's postulate and Derivation of Robertson-Walker metric.
- Understand Friedmann models, Fundamental equations of dynamical cosmology and Critical density.
- Study Einstein-deSitter model, particle and even horizons.

PSO-19: Operations Research (II)

- Understand Dynamic Programming-Deterministic and Probabilistic Dynamic programming.
- Solve Game Theory-Two-Person, Zero-Sum Games. Games with Mixed Strategies.
- Gain knowledge about Integer Programming-Branch and Bound Technique.
- Learns the basic concept of Applications to Industrial Problems-Optimal product mix and activity levels.
- Study Nonlinear Programming-One/and Multi-Variable Unconstrained Optimization, Kuhn-Tucker Conditions for Constrained Optimization.

PSO-20: Programming in C (with ANSI features) (II) Theory and Practical

- Study Storage Classes-Fixed vs, Automatic Duration, Scope, Global variables.
- Learns the basic concept of Pointers Pointer Arithmetic. Passing Pointers as Function Arguments
- Gain knowledge in Functions-Passing Arguments. Declarations and Calls. Pointers to Functions.
- Students learns about Structures and Unions-Structures, Dynamic Memory Allocation, Linked Lists.
- Gain knowledge in the concept of Input and Output-Streams, Buffering. The Header File, Error Handling, Opening and Closing a File, Reading and Writing Data, Selecting an I/O Method.

Department of Mathematics
Bachelor of Computer Application

Objective of Course:

The objective of department is to provide quality education to the students in the field of computer science. At the same time, department also supports the students to do versatile projects which helps them in their future research. Department also tries to form a bridge between Computer technology and institute.

The faculties of department actively participate in all activities of college and encourage students to increase their participation as well. The department provides academic and non-academic support to the students. The department tries to penetrate the scientific principles of mathematics in the students as well as provides them complete placement assistance.

Course Outcome (CO):

- **To develop** in the students, the ability to acquire knowledge of Mathematics, Science and computer technology
- **An ability** to analyze a problem, and identify and define the computing requirements appropriate to its solution.
- **An ability** to design, implements, and evaluate a computer-based system, process, component, or program to meet desired needs.
- **An ability** to function effectively on teams to accomplish a common goal.
- **An understanding** of professional, ethical, legal, security and social issues and responsibilities. An ability to communicate effectively with a wide range of audiences.
- **An ability** to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline.
- After studying one will be able to find a root of a given equation and will be able to find a numerical solution for a given differential equation.

SCHEME OF EXAMINATION 2019-2020

BCA PART- I

Subject Code	Subject Paper	Theory Marks		Internal Marks		Teaching Load per Week		
						L	T	P
		Max. (A)	Min. (B)	Max. (C)	Min. (D)			
BCA101	Discrete Mathematics	80	27	20	8	4	2	-
BCA102	Computer Fundamentals	80	27	20	8	4	2	-
BCA103	Programming in 'C' language	80	27	20	8	4	2	-
BCA104	PC Software and Multimedia	80	27	20	8	4	2	-
BCA105	Web Technology and E-Commerce	80	27	20	8	4	2	-
BCA106	Communication skills	80	27	20	8	4	2	-
BCA107	LAB I: Programming Lab in 'C'	100	50	40	16	-	-	3x2
BCA108	LAB II: PC Software Lab	100	50	40	16	-	-	2x2
BCA109	LAB III: Web Technology Lab	100	50	20	8	-	-	1x2
TOTAL		780	312	220	88			
GRAND TOTAL	(PAPER + INTERNAL)	(A+C) 1000		(B+D) 400				

- Student will have to pass individually in all theory, practical and sessional.

Programme Outcomes (POs):

Program outcomes describe what students are expected to know and would be able to do by the time of graduation. These relate to the skills, knowledge, and behaviour that students acquire as they progress through the program.

Students will establish themselves as effective professionals by solving real problems through the use of computer science knowledge and with attention to team work, effective communication, critical thinking and problem solving skills. Students will develop professional skills that prepare them for immediate employment and for life-long learning in advanced areas of computer science and related fields.

Programme Specific Outcome (PSO):

- Enabling students to develop a positive attitude towards mathematics as an interesting and valuable subject of study.
- A student should get a relational understanding of mathematical concepts and concerned structures, and should be able to follow the patterns involved, mathematical reasoning.
- Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution.
- Introduction to various courses like group theory, ring theory, field theory, metric spaces, number theory.
- Enhancing students' overall development and to equip them with mathematical modelling abilities, problem solving skills, creative talent and power of communication necessary for various kinds of employment.
- Ability to pursue advanced studies and research in pure and applied mathematical science.

PSO: 01 BCA-101: Discrete Mathematics

Student will be able to:

- Demonstrate the abilities to design and develop algorithms and implement them as programs, with analysis and interpretation of data.
- Inculcate knowledge on understand the notation of mathematical thinking, mathematical proofs, and algorithmic thinking
- Apply them in problem solving.
- Understand logical concepts and to show logical equivalences by using truth tables and rules in logics.
- Learn concepts related to counting.
- Introduce to advanced counting

PSO: 02 BCA-201(I): Numerical Analysis

Student will be able:

- To inculcate knowledge on algebraic equations solved by Numerical Methods.
- To apply appropriate numerical methods to solve the problem with most accuracy.
- To using appropriate numerical methods determine approximate solution of ODE and system of linear equation.
- To compare different methods in numerical analysis w.r.to accuracy and efficiency of solution.

PSO: 03 BCA-201(II): Differentiation and Integration

Student will be able to:

- Differentiation and integration are basic mathematical operations with a wide range of applications in many areas of science.
- Measure the position of a car every minute via a GPS (Global Positioning System) unit, and we want to compute its speed.
- Solve both when it comes to integrals that cannot be determined by the usual methods, and functions that are only known at isolated points, is to use approximate methods of differentiation and integration
- Use the same general strategy for deriving both numerical integration and numerical differentiation methods.

PSO: 04 BCA-301(I): Differential Equation and Fourier Series

Student will be able to:

- Inculcate knowledge on solving of first and second order algebraic equations.
- Solve first order differential equations utilizing the standard techniques for separable, exact, linear, homogeneous, or Bernoulli cases.
- Find the complete solution of a non homogeneous differential equation as a linear combination of the complementary function and a particular solution.
- Have a working knowledge of basic application problems described by second order linear differential equations with constant coefficients.
- Find the expansion of a given function by Fourier series and Fourier transform of the function.
- Find a corresponding partial differential Equation for an unknown function with many independent variables and to find their solution

PSO: 05 BCA-301(II): Calculus and Geometry

Student will be able:

- To inculcate knowledge on the ability to find the effects of changing conditions on a system.
- To gain knowledge of fundamental concepts of real numbers. Verify the value of the limit of a function at a point using the definition of the limit
- To introduction to sequence and series.
- To learn to check function is continuous and understand the consequences of the intermediate value theorem for continuous functions.

PSO : Bridge Course for BCA (Only for Non Mathematics Students)

- To inculcate knowledge on Partial fraction, Arithmetic and Geometric progression, determinant and matrices and Inverse matrix.
- Using appropriate methods to solve permutation combination, method of induction, Binomial Theorem for positive integral index, Exponential and logarithmic series.
- Learn concepts, properties and applications related to Trigonometry, Geometry and Statistics.

Scheme of Marks:-

Max. Marks: 50 Minimum Pass Marks: 17

Department of Botany
(Bachelor of Science)

OBJECTIVES OF THE PROGRAMME:

The college follows Hem Chand Yadav University, Durg syllabus for Bachelor of Science (Botany). The objectives of the prescribed course is:

- To discuss the course in such a manner that it can attract, enthuse, sustain and promote the interest of learners for selecting plant science and allied disciplines as their career and make them realize that their choice is intellectually rewarding.
- To provide for mobility of students among institution and different disciplines.
- To increase the awareness of young learners about the abuse to which plants have been subjected by human greed and train them in exploration, identification and evaluation of plants, conservation of nature and natural resources and in the protection of endangered plant species and other biota dependent on them.
- To make provision for improvement in the quality of laboratory and field work for want of which the students are not able to appreciate the beauty and variety of form, structure, function and ecological significance of plants and their biological services.

Course Outcome (CO):

Upon completion of this course students will be able:

- To acquire knowledge relevant to microbes and lower plants with practical knowledge.
- To make aware the application of these studies to become entrepreneur.
- To become employee of related scientific industries such as supplier of classwork material, slides, specimen etc.
- To become a taxonomist.
- To acquire knowledge relevant to structure, development and reproduction in flowering plants with practical knowledge.
- To become employee of biotechnology and genetic engineering related industries.
- To appear different competitive examination conducted at national and state level.
- To become a teacher in an educational institution.
- To appear different in competitive examination conducted at national and state level.
- To become a laboratory technician.
- **SCHEME OF EXAMINATION**

  Botany:- Paper I 50 Marks Time -3 Hours
  Paper II 50 Marks Time -3 Hours
  Practical 50 marks Time - 4 Hours

Name of Programme	Program Outcome(PO)	Program Specific Outcome(PSO)
	B. Sc. Part-I	
B. Sc. Subject-Botany	• To study structural organization and economic importance of microbes including Bacteria, Viruses, Mycoplasma, Cyanobacteria. • To study the structural, developmental and	**B. Sc. Part-I (Paper-I-Bacteria, Viruses, Fungi, Lichens, and Algae)** • Understanding the basic microbial characteristics, structure, reproduction and economic importance of Bacteria, Virus, Mycoplasma and Cyanobacteria. • Know the classification, characteristic features, life history and economic importance of algae with practical knowledge.

	economic importance of lower plants including Algae, Fungi, with practical knowledge.	• Know the General account, classification, characteristic features, structure, life history and economic importance of fungi with practical knowledge.
	• To study the structural, developmental and economic importance of lower plants including Bryophytes and Pteridophytes with practical knowledge. • To study the structural, developmental and economic aspects of Gymnosperms.	**B. Sc. Part-I (Paper-II-Bryophytes, Pteridophytes, Gymnosperms and Plaeobotany)** • Know the classification, characteristic features, structure and life cycle of Bryophytes with practical knowledge. • Know the classification, characteristic features, structure and life cycle of Pteridophytes with practical knowledge.
	B. Sc. Part-II	
	• To study the structural, developmental and economic aspects of Gymnosperms as well as Angiosperms. • The outcome of this programme as to identify the plants according to taxonomy. • To study the anatomical structure and development of flowering plants.	**B. Sc. Part-II (Paper-I- Diversity of Seed Plants and The Systematics)** • Understanding the characteristics, origin, evolution and diversity of seeded plants. • Know the classification, characteristic features, structure and life cycle of gymnosperms with practical knowledge. • Understand the principles and rules of taxonomy of angiosperms. • Knowing the salient features of classification of angiosperms. • Understanding the diversity of flowering plants of different families.
	• To study basic body plan of plant. • To study the shoot and root system. • To study the structure, development and reproduction in flowering plants.	**B. Sc. Part-II Paper-II- (Structure, Development and Reproduction in Flowering Plants)** • Understanding the basic body plan, growth and diversity in plants. • Understanding the shoot system and root system in detail with practical knowledge. • Knowing the morphological and anatomical structure of leaves according to adaptation with practical knowledge. • Understand the structure, development of flower and reproduction in flowering plants in detail with practical knowledge. • Significance of seeds.
	B. Sc. Part-III	
	• To study the physiology of plants. • To study the growth and development in plants. • To study the principles, techniques and application of genetic engineering and biotechnology.	**B. Sc. Part-III (Paper-I- Plant Physiology, Biochemistry and Biotechnology)** • Know the complete physiology of plants including plant water relationship, transpiration, transport of organic substance, respiration, photosynthesis. • Understand the properties, structure and mechanism of action of enzymes. • Understand the metabolism of nitrogen and lipids.

		• Knowing the growth and development process in plants including knowledge of structure and function of plant hormone. • Understanding the principles, techniques and application of genetic engineering and biotechnology.
	• To study plant and environment. • To study the ecology and ecosystem with the practical Knowledge. • To study the utilization of plants	**B. Sc. Part-III(Paper-II Ecology and Utilization of Plants)** • Understand the environment along with water, light, soil, temperature. • Understand the morphological, anatomical and physiological changes in plants responses to environment with practical knowledge. • Knowledge of ecology, ecosystem, ecological pyramids, flow of energy with practicals. • Understand the utilization of plants as food, fibres, oils, spices, medicine, beverages and rubber with practical knowledge.

DEPARMENT OF ZOOLOGY

(Bachelor of Science)

B.Sc. in Zoology is an undergraduate Program in Zoology. Zoology is the branch of science which deals with the study of the theoretical part of the general principles of classical as well as modern zoology. The program provides the student with an introduction to the recent advances in zoology in the areas of systematic, evolution, reproduction, development, animal diversity, biochemistry, cytology and animal ecology. This course is offered for candidates who are interested in the study of animals. The Academic functioning of the department was started in 2005. The department has well equipped laboratory to meet the practical as per the latest syllabus of the university. The minimum time required to complete the course is three years.

Objectives: Imparting quality education in Zoology has been the focus of the department right from its inception. Emphasis is given on education both within and outside the classroom.

The Department is dedicated to fulfill the following objectives through the curricular and co-curricular activities:

- ♣ To provide students with knowledge of fundamental principles in zoology that will provide a foundation for their later advanced course in more specific biological subjects.
- ♣ To make students ability to apply basic zoological principles and get knowledge of animal classification schemes.
- ♣ To elaborate the laboratory and lecture sections of the course.
- ♣ To provide quality education for self-employment in applied branches of zoology and offering skill based programs.
- ♣ To inculcate the value based education and entrepreneurial skills among the students.
- ♣ To create awareness on environmental issues through various activities.

PROGRAMME OUTCOME -

1. Develop competence in basic sciences and in the content of the specific courses that constitute the principal knowledge of their degree.
2. Compare and contrast the characteristics of animals that differentiate them from other forms of life.
3. Acquire the skills in handling scientific instruments, planning and performing in laboratory experiments.
4. Understand and be aware of relevant theories, paradigms, concepts and principles of zoology.
5. Understand the structure and functions of cell types
6. Acquire time management and self-management skills.
7. Relate the various abiotic factors with health of living forms and ecosystems.
8. Understand the role of various biomolecules in living systems
9. Apply the knowledge of Zoology to understand the complex life Processes and phenomena.
10. Recognize the need for, and have the preparation and ability to engage in independent and life-long learning.

COURSE OUTCOME -

1. Students familiar with Morphology, Anatomy, and Physiology of different groups of animals.
2. Students develop interest in the field of Taxonomy procedure and nomenclature, which is the basic requirement for classification of different animals, due to diversity among them.
3. Students develops concern regarding environment degradation and takes initiative to Protect and conserve it.
4. Students develop skill and basic knowledge in the Practical work.
5. Students development and impart their knowledge in the field of Applied Zoology.
6. Further opportunities after Graduation the students can opt for Masters in endless career opportunities such as: Masters in Health care sciences, applied zoology and Forensic Sciences.

7. Endless job opportunities: Ecologist, Environmental consultant, Field trails officer, Nature conservation officer, Biomedical Scientists, Research scientists in life sciences.

PROGRAMME SPECIFIC OUTCOME -

The college follows Hem Chand Yadav Vishwavidyalaya, Durg syllabus for Zoology. And each paper carries 50 Marks. The prescribed course is as follows:

PSO-01

B Sc. Part -I

Paper-1 Cell Biology and Non Chordates

1. To understand the structure of the Cell and its functions.
2. To recognize the taxonomy of Non chordates.
3. To identify animals of higher group in Non-chordates.
4. To study the immunity and related health problems.
5. To illustrate the type study in various Non-chordates.

PSO-02

B Sc. Part -I

Paper-2 Chordate and Embryology

1. To study and understand the various system, adaptation and development.
2. To identify animals of higher group in Chordate.
3. To illustrate the types of eggs and cleavage.
4. To gain the concept of fertilization.
5. To study the Parental Care in higher Vertebrate.

PSO-03

B Sc. Part -II

Paper-1 Anatomy and Physiology

1. Comparative Knowledge of physiology of vertebrate organ system.
2. To illustrate the histology of endocrine gland.
3. Gain Concepts of comparative biology to explain evolution and success to live in varied environment.
4. To study the physiology of Heart, Cardiac cycle and ECG.
5. To illustrate the structure and Function of Ear and Eye.

PSO-04

B Sc. Part -II

Paper-II Vertebrate Endocrinology, Reproductive Biology, Behaviour, Evolution and Applied Zoology

1. To understand the social life of different culture and their behavior.
2. To get of medicinal values of honey and economic uses of fishes and various fauna through project work and educational tours.
3. To illustrate physiological adaptations, development, reproduction and behavior of different forms of life.
4. To aware of the development process and reproductive techniques.
5. To develop the concept of evolution of life and experimental evidences.

PSO-05

B Sc. Part -III

Paper-I Ecology, environmental biology, toxicology, microbiology and medical zoology

1. To understand various clinical tests.
2. To study of some common bacterial and viral diseases of man.
3. To aware the knowledge of natural resources, causes of their depletion and their conservation.
4. To apply the knowledge on the human welfare.
5. To illustrate the exposures to toxins and Toxicants.

PSO-06

B Sc. Part -III

Paper-II Genetics, cell physiology, biochemistry, biotechnology and Bio techniques.

1. To develop information in the genomic study.
2. To identify the instruments and their uses.
3. To develop the concept and regulation of metabolism.
4. Knowledge of various techniques used in hematology.
5. To study of Recombinant DNA technology.

DEPARTMENT OF MICROBIOLOGY
(Bachelor of Science)

OBJECTIVES OF THE PROGRAMME:

- A detailed knowledge of structure, function and application of microorganisms.
- Skills in handling microorganisms in the laboratory.
- An understanding of applications of microorganisms in the industry, health-care, environmental protection, food agriculture and research.
- Understanding current trends in microbiology and critically appraising published work.
- The undergraduate program of microbiology is designed to provide knowledge about cellular arrangement, role and functions, metabolic activities, and other various aspects of micro-organisms.
- The living organisms like bacteria, algae, virus, protozoa, etc. are studied under the course of B.Sc. microbiology.
- Not only this, course is designed for making student capable of applying the knowledge of microbiology in related fields like biotechnology, medicine, agriculture etc.

PROGRAMME OUTCOME

The programme of the Bachelors of Science in Microbiology consists of:

- B.Sc. course in Microbiology was introduced during the session 2005-2006. Applied microbiology is among the various subdivisions of microbiology.
- It encompasses a wide area of study, consisting of immunology, epidemiology, microbial metabolism, virology, pathogenic bacteriology, mycology, metabolism, Industrial, Food, Agricultural and Medical microbiology.
- It has many scientific applications in research fields. This exciting programme provides a launch pad into a career that involves working knowledge of scientific research and academics, health clinics and industries.
- This course is aimed at improving the problem solving, critical thinking and analytical reasoning of the students as needed in the case of scientific problems.
- The students are taught to develop the solution to a problem by the application of the correct techniques.

COURSE OUTCOME

Students who graduate with BSc. in (Microbiology) will:

- Have a significant knowledge on various aspects of Microbiology.
- Define/explain within multiple microbiology disciplines the core theories and practices;
- Describe/explain the processes used by microorganisms for their replication, survival, and interaction with their environment, hosts, and host populations;
- Explain the theoretical basis of the tools, technologies and methods common to microbiology; and
- Demonstrate practical skills in the use of tools, technologies and methods common to microbiology, and apply the scientific method and hypothesis testing in the design and execution of experiments.
- **Career options** after B.Sc. Microbiology: Pharmaceutical Industries Universities, Laboratories, Private Hospitals, Research Organizations, Environmental Agencies, Food Industry, Beverage Industry, Chemical Industries, Agriculture Department.

In B.Sc. Microbiology total marking scheme is 150 which is divided in to two paper (Paper-I and Paper-II) and Practical in the following manner:

S.No.	Paper	Marks
1.	Paper I	50 Marks
2.	Paper II	50 Marks
3.	Practical	50 Marks

PROGRAMME SPECIFIC OUTCOME

B.Sc. First Year- It is divided into two papers:

Papers	Title of the paper	Outcomes
Paper-I	**General Microbiology and Basic Technique**	• Understand the contributions of various scientist in microbiology and scope of various branches of it. • Understand the contributions of eminent scientists in the development of microbiology. • Understand and describe various kinds of prokaryotic and eukaryotic microbes and their positive negative interactions. • Study of beneficial and harmful microbes. • Understand the basic nutritional requirements of bacteria. • Describe various types of nutrient media for cultivation and isolation of bacteria • Understand and classify various micro-organisms such as bacteria, viruses, fungi, algae, protozoans, cyanobacteria etc. • Explain and describe importance of organic compounds and its chemistry found in living cells • Understand and explain the concept of disease development, spread, control and eradication in crops.
Paper-II	**Biochemistry and Physiology**	• Understand the classification and chemistry of different kinds of carbohydrates, Proteins, Amino acids and Lipids. • Compare DNA and RNA. • Understand the mechanism of enzyme. • Study of major pathways like Glycolysis, TCA cycle, Urea cycle etc. • Understand biosynthesis and oxidation of fatty acids. • Study of Bacterial Cell Division. • Study of Genome replication • Explain typical growth curve of bacteria. • Analyze Bacterial photosynthesis.

B.Sc. Second Year- It is divided into two papers:

Papers	Title of the paper	Outcomes
Paper-I	**Microbial Physiology and Genetics**	• Study of Plasma Membrane and transport across membrane. • Explain typical growth curve of bacteria. • Understand the factors that responsible for bacterial growth. • Understand the Bacterial Cell Division. • Explain and describe the process of replication of DNA. • Describe prokaryotic replication. • Explain fine structure of gene. • Describe prokaryotic transcription. • Describe prokaryotic translation. • Explain mutations and mutagens
Paper-II	**Principles of Bioinstrumentation and Technique**	• Understand and explain the principles, methodology and application of various bio instruments like Microscope, Spectrophotometer, Electrophoresis, Chromatography, and Centrifuge etc. • Study of Principle and Requirement of Tissue Culture Technique. • Sequencing of Protein and Nucleic acid. • Understand Radioisotope Technique. • To learn Enzyme purification and essay technique.

B.Sc. Third Year- It is divided into two papers:

Papers	Title of the paper	Outcomes
Paper-I	**Molecular Biology and Genetic Engineering**	• Understand the Model system, concept and Ethical Issues of Molecular Biology and Genetic Engineering. • Study of mutations and mutagens. • Understand the process of replication of DNA and enzyme involved in it. • Understand the regulation of Gene Expression. • Study of DNA repair and restriction. • Understand the Biology of Plasmids. • Study of Plasmids and Phage vectors.
Paper-II	**Environmental and Medical Microbiology**	• Study of Aerobiology. • Understand various Soil types. • Study of Bio-fertilizers and understand the Biological Nitrogen Fixation. • Understand and explain the stages of infectious diseases. • Describe various modes by which infections spread. • Describe various methods that can be adopted to control spread of infection in community. • Understand and explain various food-borne, air-borne and water-borne diseases. • Study of Food Spoilage. • Understand Waste treatment, Ex- solid and liquid waste.

M.Sc. MICROBIOLOGY
(First, Second, Third and Fourth Semester)

Objectives of the programme:

- A detailed knowledge of structure, function and application of microorganisms.
- Skills in handling microorganisms in the laboratory.
- An understanding of applications of microorganisms in the industry, health-care, environmental protection, food agriculture and research.
- Understanding current trends in microbiology and critically appraising published work.

PROGRAMME OUT COME

The programme of the Master's specialization in Microbiology consists of:

M.Sc. Course in Microbiology was introduced from the session 2009-2010. It encompasses a wide area of study, consisting of immunology, epidemiology, microbial metabolism, virology, pathogenic bacteriology, mycology, metabolism, Industrial, Food, Agricultural and Medical microbiology. It has many scientific applications in research fields. This exciting programme provides a launch pad into a career that involves working knowledge of scientific research and academics, health clinics and industries.

COURSE OUTCOME

Students who graduate with MSc. (Microbiology):

1. Have significant knowledge on various aspects of Microbiology.
2. Be well-trained in laboratory techniques of basic microbiology, especially with regard to isolation, characterization and biochemical identification of the microbes.
3. Have deeper insights into the various aspects of immunology and medical microbiology and grasp the scientific basis for the diagnosis, prevention, control and treatment of infectious disease.
4. Develop good understanding of the role of microorganisms in industry, health and environment.
5. Acquire technical skills especially in regard to industrially important metabolites and their production.
6. Be enabled to plan and execute experiments as well as to analyze and interpret data for a research problem.
7. **Career options** after M.Sc. Microbiology: Pharmaceutical Industries
   Universities, Laboratories, Private Hospitals, Research Organizations, Environmental Agencies, Food Industry, Beverage Industry, Chemical Industries, Agriculture Department.

M. SC. MICROBIOLOGY
Scheme of Examination and Syllabus

July 2019 – December 2019

	Paper No.	Title of Paper	Marks (External)	Marks (Internal)**	Credit
FIRST Semester	I*	Cell Biology	80	20	4
	II	Biomolecules	80	20	4
	III	Microbiology	80	20	4
	IV	Biology of Immune System	80	20	4
	LC-I	Lab Course I (Based on paper I & II)	80	20	2
	LC-II	Lab Course II (Based on paper III & IV)	80	20	2
		Total		600	

January 2020 – June 2020

	Paper No.	Title of Paper	Marks (External)	Marks (Internal)	
SECOND Semester	I	Genetics and Molecular Biology	80	20	4
	II	Bioenergetics & Metabolism	80	20	4
	III	Instrumentation and Molecular Techniques	80	20	4
	IV	Biometry, Computer and Scientometry	80	20	4
	LC-I	Lab Course I (Based on paper I & II)	80	20	2
	LC-II	Lab Course II (Based on paper III & IV)	80	20	2
		Total		600	

July 2020 – December 2020

	Paper No.	Title of Paper	Marks (External)	Marks (Internal)	
THIRD Semester	I	Microbial Physiology	80	20	4
	II	Fermentation Technology	80	20	4
	III	Environmental Microbiology	80	20	4
	IV	Medical Microbiology	80	20	4
	LC-I	Lab Course I (Based on paper I & II)	80	20	2
	LC-II	Lab Course II (Based on paper III & IV)	80	20	2
		Total		600	

January 2021 – June 2021

	Paper No.	Title of Paper	(External)	(Internal)	
FOURTH Semester	I	Microbial Biotechnology	80	20	4
	II	Advanced Immunology, diagnostics and prophylaxis	80	20	4
	III	**Special Paper-A:** Food Microbiology **Special Paper-B:** Microbial Ecology	80	20	4
	IV	**Special Paper-A:** Agricultural Microbiology **Special Paper-B:** Industrial Microbiology	80	20	4
	LC-I	Lab Course I (Based on paper I & II)	80	20	2
	LC-II	Lab Course II (Based on paper III & IV)	80	20	2
		Total		600	
	OR				
		Project Work* **			
		Dissertation	240	60	11
		Seminar based on project	160	40	06
		Viva-voce	80	20	03
		Total		600	
		Grand Total		**2400**	

*Each theory paper will have 5 questions of equal marks. First question will be based on complete syllabus with no internal choice, whereas rest questions will be unit wise.

** Each student will be evaluated continuously throughout the semester. There will be a class test based on each theory paper. The full marks will be 10 for each paper. There will be a poster/oral presentation based on each theory paper. The full marks will be 10 for each presentation. Each student will be required to submit a brief write-up (not more than 10 pages) on his/her poster/oral presentation.

***A student of IV semester will have the choice to opt for project work in lieu of four theory papers and two lab courses provided he/she secures at least **65%** or more marks in aggregate in semester I and II. The project has to be carried out in recognized national laboratories or UGC recognized universities. No student will be allowed to carry out project work in private laboratories/ college/ institutions, excluding the colleges recognized as research centers by the RDC of Pt. Ravishankar Shukla University, Raipur. The valuation of all the projects will be carried out by an external examiner and HoD of UTD or its nominee at the UTD Centre.

Scheme for Lab Course (for each Semester)	**Maximum Mark 100**	
1	Major Exercise based on paper 1	20
2	Minor Exercise based on paper 1	10
3	Major Exercise based on paper 2	20
4	Minor Exercise based on paper 2	10
5	Spotting/ Interpretation****	10
6	*Viva- voce*	10
	Sub Total	80
	Sessional (Internal)	20
	Total	100

****A student will be required to interpret on the displayed item/material

PROGRAMME SPECIFIC OUTCOME

M.Sc. first semester- It is divided in to four papers:

Papers	**Title of the paper**	**Outcomes**
Paper- I	Cell Biology	Understand and utilize the scientific vocabulary used in communicating information in cell. Describe and discuss the various molecular organization of membrane of lipids, proteins and carbohydrate. Outline the processes that control eukaryotic cell cycle and cell-death. Understand the transport of protein and vesicles across membrane. Explain the structure of membrane and intra-cellular compartments and relate the functions. Study of Cell signaling via G-Protein and enzyme linked cell surface Discuss various Tumor cells Understand various organization and patterns of chromosomes.
Paper-II	Biomolecules	• Describe the reducing action of sugars. • Explain the structure and function of carbohydrate. • Classify lipids with example. • Classify proteins with functions. • Describe the denaturation of proteins. • Combine the structure and functions of lipids. • Identify the structure of amino acids. • Illustrate the structure of proteins.

		• Discuss the structure of DNA. • Discuss the structure and function of RNA • Classify Enzymes and study of Enzyme kinetics, enzyme inhibition, Allosteric Enzyme, Ribozyme, Multi-enzyme complexes. • Study the chemistry of Porphyrins. • Structural and biological roles of Animal Hormone. • Structural and Biological role of soluble Vitamins.
Paper-III	Microbiology	• Understand concepts of growth and reproduction of various micro-organisms. • Know the structure and properties of Cell membrane. • Know mechanism of Gene transfer. • Study of Plasmids. • Understood Nutritional types and growth. • Discuss Batch and Continuous Culture. • Classify Bacteria, Viruses, fungi and Algae. • General overview of Bacterial Virus. • General account of Plant and Animal Virus.
Paper-IV	Biology of Immune System	Demonstrate an understanding of key concepts in immunology. • Understand the overall organization of the immune system • Properties of immune cells and immune system • Principles of various immunological techniques and their application in diagnoses of diseases • Various concepts related to types of antigen and antibodies and their role • Development of cell mediated and humoral immune response • Mechanism of hypersensitive, autoimmune, immune-deficiency reactions and immune response to tumors.
Lab Course-I	Based on Paper- I & II	
Lab Course-II	Based on Paper- III & IV	

M.Sc. Second Semester- It is divided in to four papers:

Papers	Title of the paper	Outcomes
Paper- I	Genetics and Molecular Biology	• Know the terms and terminologies related to molecular biology and genetics • Understand the properties, structure and function of genes in living organisms at the molecular level • Explain the significance of central dogma of gene action • Have a conceptual knowledge about DNA as a genetic material, enzymology, and replication strategies • Understand the molecular mechanisms involved in transcription and translation • Discuss the molecular mechanisms underlying mutations detection of mutations and DNA damage and repair mechanisms. • Understand the RNA synthesis and Processing.

		• Understand the Protein synthesis and Processing.
Paper-II	Bioenergetics and Metabolism	• Understand the law of Thermodynamics. • Study the Concept of Free Energy. • To learn knowledge of Carbohydrate Metabolism and its regulation • The structure and function of specialised proteins and enzymes.
Paper-III	Instrumentation & Molecular Techniques	• Principles of biophysical chemistry • Methods of separation techniques • Radio-labeling techniques • Microscopic techniques for electron microscopy • Molecular Techniques
Paper-IV	Biometry, Computer and Scientometry	• Different computational methods used in basic biostatistics • Multivariate analysis in biostatistics • Select from, use and interpret results of descriptive statistical methods effectively. • Demonstrate an understanding of the central concepts of modern statistical theory and their probabilistic foundation. • Select from, use, and interpret results of, the principal methods of statistical inference and design. • Communicate the results of statistical analyses accurately and effectively. • Familiarise operating systems, programming languages, peripheral devices, networking, multimedia and internet. • Bridge the fundamental concept of computer with the present knowledge of the students.
Lab Course-I	Based on Paper- I & II	
Lab Course-II	Based on Paper- III & IV	

M.Sc. Third Semester- It is divided into four papers:

Papers	**Title of the paper**	**Outcomes**
Paper- I	Microbial Physiology	• Understand the basic nutritional requirement of bacteria. • Describe various types of nutrient media for cultivation and isolation of bacteria. • Explain typical growth curve of bacteria • Understand the factor responsible for bacterial growth.
Paper-II	Fermentation Technology	• Ability to integrate biological and chemical processes to quality and stability of fermented foods, and to critique and effectively communicate the relationships among processing of fermented foods, nutrition, and food safety. • Understand various Bioreactor. • Discipline specific knowledge of the skills and competencies needed in fermentation science and technology. Examples include knowledge of food chemistry, sensory evaluation of fermented products, brewing processes, refining and packaging technology, food production management, and fermentation microbiology. • Understanding of classification, production, financial aspects, consumption, and service of controlled beverages, including effective management of facilities and people with emphasis

		on safe service training and management. • Competent application of science, history, culture, safety, health, and nutrition dimensions of fermented foods and beverages.
Paper-III	Environmental Microbiology	• Appreciate the diversity of microorganism and microbial communities inhabiting a multitude of habitats and occupying a wide range of ecological habitats. • Learn the occurrence, abundance and distribution of microorganism in the environment and their role in the environment and also learn different methods for their detection and characterization • Competently explain various aspects of environmental microbiology and microbial ecology and to become familiar with current research in environmental microbiology. • Understand various biogeochemical cycles – carbon, nitrogen, Phosphorus cycles etc. and microbes involved • Understand various plant microbes interactions especially rhizosphere, phyllosphere and mycorrhizae and their applications especially the bio-fertilizers and their production techniques • Understand the basic principles of environment microbiology and be able to apply these principles to understanding and solving environmental problems – waste water treatment and bioremediation. • Know the Microorganisms responsible for water pollution especially Water-borne pathogenic microorganisms and their transmission
Paper-IV	Medical Microbiology	• Knowledge on clinical lab techniques and control measures of diseases. • Study of various microbial diseases.
Lab Course-I	Based on Paper- I & II	
Lab Course-II	Based on Paper- III & IV	

M.Sc. Fourth Semester- It is divided into four papers in which two papers have optional subject:

Papers	Title of the paper	Outcomes
Paper- I	Microbial Biotechnology	• Various aspects of biotechnology and its applications in different fields • The strategies to clone genes and to produce recombinant protein • The application of biotechnology for product development. • Intellectual property rights, regulatory procedures and good manufacturing practices
Paper-II	Advanced Immunology, Diagnostics and porphylaxis	• Learn how "clonal selection" allows for the expansion of a limited number of antigen-recognizing lymphocytes in response to an specific antigenic stimulus • Begin to appreciate the significance of maintaining a state of immune tolerance sufficient to prevent the emergence of

		autoimmunity. • To understand about Tumor Immunology and help the students to understand its immune prophylaxis and immune therapy. • To make them understand the salient features of antigen antibody reaction & its uses in diagnostics and various other studies
Paper-III	Special Paper-A: Food Microbiology	• Understand the beneficial role of microorganisms in fermented foods and in food processing and the microbiology of different types of fermented food products – dairy, pickles, Legume and cereal based food products. • Understand the significance and activities of microorganisms in food and role of intrinsic and extrinsic factors on growth and survival of microorganisms in foods • Know the spoilage mechanisms in foods and thus identify methods to control deterioration and spoilage • Recognize and describe the characteristics of important pathogens and spoilage microorganisms in foods.
	Special Paper-B: Microbial Ecology	• The subject of this course is the ecological interactions between microorganisms. • Understand the relationships between the microbial food web, biodiversity, the physical/chemical environment (CO2, light, micro/macro-nutrients), and biogeochemical element cycles in the ocean. • Study the use of simple mathematical models in the analysis of such relationships. • Study relationship between bacterial physiology and the structure of anaerobic marine ecosystems, and the role of microbial evolution in global biogeochemical cycles are treated. • Understand methods in marine microbial ecology are used in an experimentally oriented semester exercise which includes selected molecular methods for the study of microbial communities.
Paper-IV	Special Paper-A: Agriculture Microbiology	• Process of nitrogen fixation and its molecular biology. • Microbial transformation of phosphorus, iron, Sulphur and other micronutrients in soil. • The role of plant growth promoting rhizobacteria. • Different types of plant-microbes interactions. • Study of biopesticides and biofertilizers. • Understand various diseases caused in plants by bacteria, viruses and fungi.
	Special Paper-B: Industrial Microbiology	• Get equipped with a theoretical and practical understanding of industrial microbiology • Appreciate how microbiology is applied in manufacture of industrial products • Know how to source for microorganisms of industrial importance from the environment • Know about design of bioreactors, factors affecting growth and production, heat transfer, oxygen transfer

		• Understand the rationale in medium formulation & design for microbial fermentation, sterilization of medium and air • Appreciate the different types of fermentation processes • Understand the biochemistry of various fermentations • Identify techniques applicable for Improvement of microorganisms based on known biochemical pathways and regulatory mechanisms • Comprehend the techniques and the underlying principles in down stream processing
Lab Course-I	Based on Paper- I & II	
Lab Course-II	Based on Paper- III & IV	

B.Sc. Biotechnology

1st 2nd & 3rd year

B.Sc. Biotechnology 1st Year

Objective of Programme:

- To develop industrial processes for production of antibiotics, enzymes etc.
- To develop gene surgery and gene therapy to cure genetic disease.
- To create improved varieties of plants and animals through genetic engineering and plant breeding.
- Fermentation is core of modern biotechnology.
- Acting on sewage wastage.

Course Outcome:

- After completion of this course students will be able to apply their board knowledge of science across a range of fields with in the depth knowledge in at least one area of study and they can understand the local and global context in which science is practiced.
- Students can apply suitable methods of research, investigation and design.
- Recognize the need for information employ highly developed conceptual, analytical, quantitative and technical skills and are adept with a range of technologies.

Career Opportunities:

After completion of this course students will have great opening in the following fields:

- The can go in clinical research.
- They have an option of medical representative.
- They have future in the field of industry and they can go for scientific research also.

Marking scheme:

Paper No 1: 50
Paper no 2: 50
Practical: 50
Internal: 10

Programme Outcome:

- Student will understand the core concepts of biology
    1. Evolution
    2. Cellular structure and function
    3. Information Transfer and gene
    4. Energy Transformation.
- Student will apply the process of applied biotechnology through observation, experimental and hypothesis testing.
- Students will use bioinformatics and database to study biological processes.
- Students will understand and practice the ethics surrounding scientific research.
- Students after completion of this program can conduct original, publishable research in different field of science.
- Students can demonstrate an in-depth knowledge of specific area of expertise.

Programme Specific Outcome:

Paper 1: Biochemistry, Biostatistics, and Computers

In this paper students will be able to understand the following things:

- The scope of biotechnology, history and development of biotechnology and about the structure and function of carbohydrates and lipids.

- They will also know about the amino acids and protein classification and also about the enzyme mechanisms and their function and type.
- The students will also learn about different type of hormone and about metabolism and different type of cycles and oxidation of fatty acid.
- They will able to get knowledge biostatistics and computer application.

Paper 2: Cell Biology, Genetics and Microbiology

In this paper students will be able to understand the following things:

- They will understand the basic concept of life i.e. the cell types of cell and their structure and diversity in cell.
- They can learn about the function and structure of different type cellular organelles, cytoskeleton and microtubules.
- They will also know about the cell division i.e. mitosis and meiosis and cell death.

B.Sc. Biotechnology 2nd Year

Objective of Programme:

- To develop industrial processes for production of antibiotics, enzymes etc.
- To develop gene surgery and gene therapy to cure genetic disease.
- To create improved varieties of plants and animals through genetic engineering and plant breeding.
- Fermentation is core of modern biotechnology.
- Acting on sewage wastage.

Course Outcome:

After completion of this course the learner will be able to know about

- Work effectively in groups to meet a shared goal with people whose disciplinary and cultural backgrounds differ from their own.
- Critically evaluate ideas and arguments by gathering relevant information, assessing its credibility and synthesizing evidences to formulate a position.
- To sensitize young ones towards environment and sustainability and significance of sustainable development.

Career Opportunities:

After completion of this course students will have great opening in the following fields:

- The can go in clinical research.
- They have an option of medical representative.
- They have future in the field of industry and they can pursue career in scientific research.

Program Specific Outcome:

Paper 1: Molecular Biology and Biophysics

In this paper the students will able to understand the following things:

- The basic structure of DNA, RNA and structure of gene, old and new concept.
- They will also know about the genetic code, codon assignment, and secondary genetic code. Protein synthesis, mitochondrial genome and chloroplast genome.
- They can understand the gene therapy, transposable elements, DNA damage and repair and the general concept of tissue engineering.

- They will acquire knowledge about the law of thermodynamics, radioisotopes, autoradiography and beer Lambert's law.
- They will also know about the scope and application of biophysics and principle structure and function of biophysics instruments.

Paper 2: Recombinant DNA Technology:

In this subject the students will acquire knowledge about the following things:

- The scope of biotechnology and about recombinant DNA technology and about the restriction enzymes and their nomenclature.
- They will also know about the vectors (animal and plant vector) and most importantly bacteriophage vector.
- They will get to know about the PCR techniques their types and application advantage.
- They will be able to know about monoclonal antibodies and stem cells.

B.Sc. Biotechnology 3rd Year

Objective of Programme:

- To develop industrial processes for production of antibiotics, enzymes etc.
- To develop gene surgery and gene therapy to cure genetic disease.
- To create improved varieties of plants and animals through genetic engineering and plant breeding.
- Fermentation is core of modern biotechnology.
- Acting on sewage wastage.

Course Outcome:

- After completion of the course students will be able to apply their board knowledge of science across a range of fields with in the depth knowledge in at least one area of study, and they can understand the local and global context in which science is practiced.
- They will also have a sound knowledge of team work and how to work in labs.
- They will also know the handling of the instruments and their working.

Career opportunities:

After completion of this course students will have great opening in the following fields:

- The can go in clinical research.
- They have an option of medical representative.
- They have future in the field of industry and they can go for scientific research also.

Program Specific Outcome:

Paper 1: General Biotechnology

In this paper the learner will know and understand the following things:

- The history scope of plant cell and tissue culture and their application and concept of cellular differentiation.
- They will get ample knowledge about Bt gene edible vaccines, organogenesis, anther and ovary culture.

- They will also know about the scope environmental biotechnology and environment pollution and its type they will also know about the control measure of environment through biotechnology.
- The students will know about the bio fertilizers and bio pesticides, IPR and global environment problems. Green house effects. They will also know about the bioreactor and fermentation.

Paper 2: Immunology

In this paper the students will let to know about the following things:

- The general concept and history of immunology immune system and organisation of immune system.
- The will know about which cell id involved in the immune system, antigen-antibody interaction and immunohaematology.
- The origin and diversity in immune system and autoimmune diseases.

(B.A./B.Sc./B.Com./B.B.A/B.C.A)

Environmental Studies and Human Rights

Environmental s is an interdisciplinary academic field that integrates physical biological and information sciences including ecology, biology, physics, chemistry, plant science, technology, mineralogy, oceanography, zoology, etc. to the study of environment and the solution of environmental problems.

Objective:-

- Impacting basic knowledge about environment and it allied program
- Developing an attitude of concern for the environment
- Motivating public to participate in environment protection and environment improvement
- Acquire and awareness of the environment as a whole and its related problem
- Acquire the skill for identifying and solving environmental problem
- Develop the ability to evaluate measure for the improvement and protection of environment.

Course Outcomes:-

Graduates (B.Sc./B.Com/B.C.A/B.B.A/ B.A.) with a compulsory course based on Hemchand University in Environmental Studies should be able to:

- Understand core concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- An Environmental Studies will be able to critically examine all sides of environmental issues and apply understanding from disciplines such as history, economics, psychology, law, politics, sociology, philosophy, and religion to create informed opinions about how to interact with the environment on both a personal and a social level.
- An Environmental Studies major will be able to recognize the physical, chemical, and biological components of the earth's systems and show how they function.
- An Environmental Studies major will be able to apply lessons from various courses through field experiences. These experiences will allow students to develop a better sense of not only individual organisms, but of the systems in which these organisms live. Students will also see how natural systems and human-designed systems work together, as well as in conflict with each other.
- An Environmental Studies major will be able to do independent research on human interactions with the environment.
- Apply quantitative and qualitative approaches to identify, analyze, and assess environmental problems.

Career Opportunities-

- Career opportunities are highly diverse and new opportunities are rapidly emerging. Our graduates work in all sectors: governmental, non-profit, private, and education. Our students get opportunity in various fields like environmental policy and management, urban planning, environmental law, recreation management, landscape architecture, green business, public administration, and education.
- Many become environment and resource managers working on issues of water, energy, climate, parks, transportation, and urban environments.
- **Job titles include, but are not limited to:**
  Sustainability Officer/Director /Environmental Advocate / Analyst / Educator / Program Manager / Planner /Energy Analyst / Manager / Water Resources Analysist / Manager / Planner / Environmental Justice Analyst, Compliance Specialist /Environmental Permitting, Planning, and Compliance /Environmental Business Entrepreneur

Marking Scheme:-

75 marks of theory in which 25 passing marks is marks and 25 marks of project/ field work (Topic for project is related to syllabus such as Environmental related Pollution- Air/ Water/ Noise/Soil, Global warming, Green House effect, Ozone depletion.)

Programme Outcome:-

The Programme makes Students aware about:

- The major environmental Change
- An aptitude and altitude towards conserving the environment
- Effects on the ecosystem and Eco- chain of the changing environment
- Use geospatial technologies (including global positioning systems, geographic information systems, and remote sensing) to address environmental problems
- To demonstrate ecosystems in the context of coupled human-environmental interactions.
- To competently implement an individual or group scientific project, which my include literature review, experimental design, data collection, data analysis, and reporting.

Programme Specific Outcomes:- The aim of this course is to make our younger generation Environment conscious. The contents of the course are aimed at exposing the students to the fundamental concepts of Environment so that they can appreciate the importance of individual efforts to protect and preserve our environment. Judicious use of our resources will not only help present generation but also the future generations in meeting their needs. This can be achieved by spreading Environmental awareness.

Unit	Course(B.Sc./B.Com/B.B.A/B.C.A/B.A)	Outcomes
Unit-1	The Multidisciplinary Nature of Environmental Studies	Students shall be able to: • Explain the concept of Natural Resources: Renewable, Non-Renewable. • Understand and explain the Earth's Resources: Land, Mineral, Water. • Discern the natural catastrophes, interpret risk assessment and apply disaster management methods.
Unit-2	Ecosystem a) Concept, Structure and Function of Ecosystem b) Biodiversity and its Conversation	Students shall be able to: • Explain basic concepts of Ecosystem and understand discern Biochemical cycles • Understand and explain basic concepts of Production ecology; measure productivity of an ecosystem and discern biogeochemical cycles. • Explain types of forests in India and understand and explain concepts of Deforestation, Afforestation, Joint Forest management and Social forestry. • Understand and explain the concept of Biodiversity and apply the methods of biodiversity conservation.
Unit-3	a) Causes, Effect and Control measures of Pollution and Disaster Management b) Environmental Management	a) **Environmental Pollution and Management:** This course aims to provide an understanding of the global environmental problems caused by human activities, fundamental concepts

		of air, water, noise and land pollution, their sources and impact on environment. students will be able to: • To measure and monitor air, water and waste pollution, remediate problems and examine the latest technologies in the field. • This course intends in developing critical skills sets for students aiming to pursue a career as an environmental scientist. b) **Solid Waste Management:** • Understand the basic concept of Municipal solid waste and collect, handle, treat and dispose Municipal Solid Waste (MSW). • Explain the methods of solid waste management • Explain the basic concepts and apply various methods of Hazardous and Biomedical Waste management.. c) **Environmental Management** Students shall be able to: • Explain the basic concepts of Environmental impact Assessment (EIA) and Environmental impact Statement (EIS), Public Participation. • Apply the impact assessment methodologies, its assessment and legislation of EIA • Analyze and carry Environmental Audit (EA) for industries and interpret the significant Environmental Acts. • Understand the concept of sustainable development and people's participation in Environmental protection and environmental issues.
Unit-4 & 5	General Background and Historical perspective of Human Rights	Environment Impact Assessment (EIA) is a policy and management tool for both planning and decision making towards creating a sustainable society. • To help students develop a comprehensive understanding of the theory and practice of EIA, to introduce students to the legal, economic, social, administrative and technical processes for preparing or evaluating

		Environmental Impact Documents. • Acquire better understanding to the way ecology of human societies and the social impact of development on communities and regions.

BACHELOR OF COMMERCE

OBJECTIVE OF THE PROGRAMME:

The college follows Hemchand Yadav University, Durg syllabus for Bachelor in Commerce. The objectives of the prescribed course are:

- This program aim to provide students with specific knowledge and skills relevant to their disciplines and careers.
- This program satisfies the educational entrance requirements for membership of relevant professional bodies.
- To determine and understanding of the principles of accounting, finance, economic and business law.
- To develop numerical abilities of students
- To inculcate writing skills and business correspondence
- To create awareness of law and legalizations related to commerce and business
- To introduce recent trends in business , organizations and industries
- To acquire practical skills related with banking and other business.

PROGRAMME OUTCOME:

1. This program could provide Industries, Banking Sectors, Insurance Companies, Financing companies, Transport Agencies, Warehousing etc., well trained professionals to meet the requirements.

2 .After completing graduation, students can get skills regarding various aspects like Marketing Manager, Selling Manager, over all Administration abilities of the Company.

3. Capability of the students to make decisions at personal and professional level will increase after completion of this course.

4. Students can independently start up their own Business.

5. Students can get thorough knowledge of finance and commerce.

6. The knowledge of different specializations in Accounting, costing, banking and finance with the practical exposure helps the students to stand in organization.

COURSE OUTCOME:

The three year course has been broken up into three Parts.
Part-I known as
B. Com. Part-I Examination at the end of first year. Part-II Examination at the end of the second year, and Part-III Examination at the end of the third year.

A candidate who after passing (10+2) Higher Secondary or Intermediate examination of Chhattisgarh Board of Secondary Education, Raipur or any other examination recognized by the University or Chhattisgarh Board of Secondary Education as equivalent there to has attended a regular course of study in an affiliated college or in the Teaching Department of the University for one academic year, shall be eligible for appearing at the B.Com. Part-I examination.

A candidate after passing B.Com Part-I examination of the University or any other examination recognized by the University as equivalent thereto has attended a regular course of study for one academic year in an affiliated College or in the Teaching Department of the University, shall be eligible for appearing in the B.Com Part-II examination.

A candidate after passing B.Com Part-II examination of the University has completed a regular course of study for one academic year in an affiliated College or in the Teaching Department of the University, shall be eligible for appearing at the B.Com part-III examination. Besides regular

students, subject to their compliance with this ordinance, ex-students and non-collegiate students shall be eligible for admission to the examination as per provision of Ordinance No. 6 relating to examinations (General). Provided that non-collegiate candidates shall be permitted to offer only such subject/ papers as are taught to the regular students at any of the University Teaching Department or College. Every candidate for B.Com Examination shall be examined in subjects as mentioned in the marking scheme and course or studies.

A candidate who has passed the B.Com Part-III examination of the University shall be allowed to present him of examination in any of the additional subjects prescribed for the B.Com. Examination and not taken by him at the degree examination. Such candidate will have to first appear and pass the B. Com. Part-I examination in the subject which he proposes to offer then the B.Com. Part-II and Part-III examination in the same subject. Successful candidates will be given a certificate to that effect.

In order to pass at any part of the three year degree course examination, an examinee must obtain not less than 33% of the total marks in each paper/group of subjects.

In group where both theory and practical examinations are provided an examinee must pass in both theory and practical parts of examination separately. Candidate will have to pass separately at the Part-I, Part-II and Part-III examination. No division shall be assigned on the result of the Part-I and Part-II examinations In determining the division of the Final examination, total marks obtained by the examinees in their Part-I, Part-II and Part-III examination in the aggregate shall be taken into account. Candidate will not be allowed to change subjects after passing Part-I examination.

Provided in case of candidate who has passed the examination through the supplementary examination having failed in one subject/group only, the total aggregate mark being carried over for determining the division, shall include actual marks obtained in the subject/group in which he appeared at the supplementary examination. Successful examinees at the Part - III examination obtaining 60% or more marks shall be placed in the First Division, those obtaining less than 60% but not less than 45% marks in the Second Division and other successful examinees in the Third Division.

B.COM. PART-I

GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject		Max.	Min.
i) Environmental Studies **Field Work**	**75** **25**	**100**	**33**
A. Foundation Course			
I. Hindi Language		**75**	**26**
II. English Language		**75**	**26**
B. Three Compulsory Groups			
Group-I			
I. Financial Accounting	**75**	**150**	**50**
II. Business Communication	**75**		
Group-II			
I. Business Mathematics	**75**	**150**	**50**
II. Business Reg. Framework	**75**		
Group-III			
I. Business Environment	**75**	**150**	**50**
II. Business Economics	**75**		

B.COM. PART-II
GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject		Max.	Min.
A. Foundation Course			
I. Hindi Language		75	26
II. English Language		75	26
B. Three Compulsory Groups			
Group-I			
I. Corporate Accounting	75	150	50
II. Company Law	75		
Group-II			
I. Cost Accounting	75	150	50
II. Principles of Bus. Management	75		
Group-III			
I. Business Statistics	75	150	50
II. Fundamental of Entrepreneurship	75		

B.COM. PART-III
GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject		Max.	Min.
Foundation Course			
I. Hindi Language		75	26
II. English Language		75	26
Compulsory Groups			
Group-I			
I. Income Tax	75	150	50
II. Auditing	75		
Group-II			
I. Indirect Taxes with GST	75	150	50
II. Management Accounting	75		
Group-III Optional			
Option Group A (Finance Area)			
I. Financial Management	75	150	50
II. Financial Market Operations	75		
Option Group B (Marketing Area)			
I. Principles of Marketing	75	150	50
II. International Marketing	75		
Option Group C (Commercial Area)			
I. Information Technology and its Applications in Business	75	150	50
II. Essential of e-Commerce	75		
Option Group D (Money Banking & Insurance Area)			
I. Fundamental of Insurance	75	150	50
II. Money & Banking System	75		

At the end of the B.Com. Course:

1. The students can get the knowledge, skills and attitudes during the end of the B.com degree course.
2. By goodness of the preparation they can turn into a Manager, Accountant , Management Accountant, cost Accountant, Bank Manager, Auditor, Company Secretary, Teacher, Professor, Stock Agents, Government employments and so on., 3. Students will prove themselves in different professional exams like C.A., C.S., CMA, UPSC and state PSC's as well as other courses.
3. The students will acquire the knowledge, skill in different areas of communication, decision making, innovations and problem solving in day to day business activities.
4. Students will gain thorough systematic and subject skills within various disciplines of finance, auditing and taxation, accounting, management, communication, computer.
5. Students can also get the practical skills to work as accountant, audit assistant, tax consultant, and computer operator. As well as other financial supporting services.
6. Students will learn relevant Advanced accounting career skills, applying both quantitative and qualitative knowledge to their future careers in business.
7. Students will be able to do their higher education and can make research in the field of finance and commerce

PROGRAMME SPECIFIC OUTCOME:

B.COM I YEAR

PSO: FINANCIAL ACCOUNTING

1. Define bookkeeping and accounting.
2. Explain the general purposes and functions of accounting.
3. Explain the differences between management and financial accounting.
4. Describe the main elements of financial accounting information – assets, liabilities, revenue and expenses.
5. Preparation of final accounts and their purposes.

PSO: BUSINESS COMMUNICATION

1. To give the knowledge of effective Communication in Business.
2. Different processes and considerations involved in writing in business.
3. Identify the appropriate use of different channels of written communication in business.
4. Create various types of business reports
5. Communicating through Technology

PSO: BUSINESS MATHS

1. Understanding of basic marketing mathematics by solving relevant problems, including trade discount, cash discounting, and markup & markdown calculations.
2. Apply the principles of simple interest to solve relevant problems in financial applications such as simple interest based loans.
3. To analysis business math concepts that are encountered in the real world understand and able to communicate the under lined business concepts & mathematics involve to help another person.

PSO: BUSINESS REG. FRAMEWORK

1. Knowledge of Contract Act.
2. Explain the rights and duties of bailor, bailee, pawnee and surety
3. Provisions of agency.
4. Contract of Sale.
5. To give the knowledge of consumers protection act and FEMA.

PSO: BUSINESS ENVIRONMENT

1. Analyze the global business environment.
2. Analyze the local business environment.
3. Use critical thinking skills in business situations.
4. Apply an ethical understanding and perspective to business situations.

PSO: BUSINESS ECONOMICS

1. Apply the concept of opportunity cost.
2. Law of Demand.
3. Employ marginal analysis for decision making
4. Analyze operations of markets under varying competitive conditions
5. Analyze causes and consequences of unemployment, inflation and economic growth

B.COM II YEAR

PSO: CORPORATE ACCOUNTING

1. This course aims to enlighten the students on the accounting procedures followed by the Companies.
2. Student's skills about accounting standards will be developed.
3. To make aware the students about the valuation of shares.
4. To impart knowledge about holding company accounts, amalgamation, absorption and reconstruction of company.

PSO : COMPANY LAW

1. To impart students with the knowledge of fundamentals of Company Law and provisions of the Companies Act of 2013.
2. To apprise the students of new concepts involving in company law regime.
3. To acquaint the students with the duties and responsibilities of Key Managerial Personnel.

PSO : COST ACCOUNTING

1. To understand Basic Cost concepts, Elements of cost and cost sheet.
2. Providing knowledge about difference between financial accounting and cost accounting.
3. Ascertainment of Material and Labor Cost.
4. Student's Capability to apply theoretical knowledge in practical situation will be increased.

PSO : PRINCIPAL OF BUSINESS MANAGEMENT

1. To understand basic knowledge of principles & function of management.
2. To understand the process of decision making.
3. Modern trends in management process.
4. To inculcate knowledge of personality perception motivation. job satisfaction morale , group dynamic and leadership.

PSO : BUSINESS STATISTICS

1. To develop the students ability to deal with numerical and quantitative issues in business
2. To enable the use of statistical, graphical and algebraic techniques wherever relevant.
3. To have a proper understanding of Statistical applications in Economics and Management significance
4. Discuss critically the uses and limitations of statistical analysis.
5. Solve a range of problems using the techniques covered.
6. Conduct basic statistical analysis of data

PSO : FUNDAMENTAL OF ENTREPRENEURSHIP

1. To aiming to develop students about Entrepreneurship development
2. To create an awareness on various Entrepreneurship Development Program.
3. To enable them to understand project formulation.
4. To familiarize the students with EDP schemes 5. To give an introduction about MSME, EDI and other training institutes in Entrepreneurship

B.COM III YEAR

PSO : INCOME TAX

1.To introduce the basic concept of Income Tax .
2. In order to familiarize the different know-how and heads of income with its components.
3. It helps to build an idea about income from house property as a concept.
4. It give more idea about the income from business or profession
5. Make the students familiarizes with the concept of depreciation and its provisions

PSO: AUDITING

1. Student will understand the audit process from the engagement planning stage through completion of the audit, as well as the rendering of an audit opinion via the various report options.
2. Student will understand auditors‟ legal liabilities, and be able to apply case law in making a judgment whether auditors might be liable to certain parties;
3. Student will understand to describe the various levels of persuasiveness of different types of audit evidence and explain the broad principles of audit sampling techniques.
4. Student will understand to discuss the need for an independent or external audit and describe briefly the development of the role of the assurance provider in modern business society;
5. Student will able describe the quality control procedures necessary to ensure that a competent assurance engagement is performed, and apply professional ethics including Code of Conduct to specific scenarios
6. Student will able to explain the internal audit process including the professional standards applicable to the internal audit profession

PSO: INDIRECT TAX WITH GST

1. Understand the impact of new regulation on distribution of pesticides and kind of changes needed to be done
2. Gain an insight on the recording and analyzing the transactions for compliance under GST especially in supply chain and distribution
3. Getting familiar with the technology and the flow of return filing under GST
4. Knowing “place of supply rules” and applicability of the same under GST

PSO : MANAGEMENT ACCOUNTING

1. To enlighten the students thought and knowledge on management Accounting
2. Helps to give proper idea on financial statement analysis in practical point of view
3. To introduce the concept of fund flow and cash flow statement
4. To provide knowledge about budget control keeping in mind the scope of the concept
5. To develop the know-how and concept of marginal costing with practical problems

PSO : FINANCIAL MANAGEMENT (Group A)

1. To develop the knowledge of business finance and financial management decision
2. Demonstrate a basic understanding of financial management.
3. To teach a sense of responsibility and a capacity for financial management.

PSO : FINANCIAL MARKET OPERATIONS

1. To give them outline about the participants in the financial markets.
2. To aware the students about share and debt markets, and name their collective name.
3. To aware the students about the instruments of the money and bond markets.
4. To make them capable to distinguish between fixed-interest and interest-bearing markets.
5. To aware the students about the foreign exchange market and the organization of the financial markets.
6. To make them aware about the primary and secondary markets.

PSO: PRINCIPLES OF MARKETING (Group B)

1. To introduce the marketing concept and how we identify, understand and satisfy the
2. Needs of customers and markets.
3. To analyze companies and competitors and to introduce marketing strategy to increase
4. Awareness of the strategic and tactical decisions behind today's top performing brands.
5. The marketing concept and environment

PSO: INTERNATIONAL MARKETING

1. Students will be an expert in international marketing management with competencies in applied business research. Furthermore, you will learn responsible business and teamwork skills.
2. Able to gain an in-depth knowledge and understanding of international marketing strategy processes in all types of firms, be able to identify current challenges in international marketing and propose solutions to them.
3. Able to interpret the special characteristics of an international knowledge-intensive environment and originations and their role in marketing decision-making.
4. You will also learn to apply different marketing tools and strategies in technology and knowledge-intensive markets and to analyze and criticize firms' strategic marketing decisions in these markets.

PSO: INFORMATION TECHNOLOGY AND ITS APPLICATIONS IN BUSINESS (Group C)

The objective of the course is to familiarize the students with the innovation information technology and how it affects business. An understanding of the Group rules of these technologies will enable the students to appreciate the nitty-gritty commerce.

After Completion of the subject student should able to:-

1. Understand development of business with the help of basic feature of IT.

2. Understand Fundamental of computers, Electronic data processing (EDP)

3. Understand how to use computer based business Application.

4. Understand Application of internet in Business, education, governance, etc.

PSO: ESSENTIAL OF E-COMMERCE

This course provides an introduction to information systems for business and management. It is designed to familiarize students with organizational and managerial foundations of systems, the technical foundation for understanding information systems

After Completion of the course student should able to:

1. Understand the basic concepts and technologies used in the field of management information systems, Business operations, Organization.
2. Have the knowledge of the different types of management information systems, EDI, Applications in Governance.
3. Understand the processes of developing and implementing information systems.
4. Understand Emerging business models, information service model, Security & Legal aspects of E-commerce.

PSO: FUNDAMENTAL OF INSURANCE (Group D)

1. To equip students with basic foundation knowledge of insurance in order to develop a better understanding of insurance practice.
2. To apply the technical and practical skills needed in starting a career in the insurance industry.
3. To acquire knowledge to improve the selling, underwriting, investigating or assessing losses of insurance products to the public.
4. To appreciate the importance of business ethics with special reference to insurance.

PSO: MONEY AND BANKING SYSTEM

1. Describe the context of banking: the financial system.
2. Explain the principles of banking.
3. Elucidate the broad functions of banks.
4. Analyze and explain the basic raison d'etre for banks.
5. Describe the components of the balance sheets of banks.
6. Elucidate the liability and asset portfolio management "problem" of banks.

DEPARTMENT OF COMMERCE
MASTER OF COMMERCE

OBJECTIVE OF THE PROGRAMME:

The college follows Hemchand Yadav University, Durg syllabus for Master of Commerce. The objectives of the prescribed course are:

- To opens up innumerable career options and opportunities to the aspiring managers both in India and abroad.
- To train the student to develop conceptual and applied skills for effective problem solving and right decision making in routine and special activities relevant to financial, management, banking transaction of a business.
- M.Com program also prepares one to start a business of his/ her own in the capacity of an entrepreneur.
- Prepares the students for positions of leadership in business organizations at the local and national levels.
- Prepare the students to apply Statistical methods and skilled use of tools for modeling and analysis of business data.
- Facilitate the students to apply capital budgeting techniques for investment decisions.
- To train the student in project works, which is compulsory in 4th sem.

PROGRAMME OUTCOME:

The Master of Commerce programme ensures:

- To acquaint a student with conventional as well as contemporary areas in the discipline of Commerce.
- To enable a student well versed in national as well as international trends.
- To enable the students for conducting business, accounting and auditing practices, role of regulatory bodies in corporate and financial sectors nature of various financial instruments.
- To provide in-depth understanding of all core areas specifically Advanced Accounting managerial Economics, Income Tax Law & Accounts, Statistical analysis, corporate legal frame work, business Economics, Specialized Accounting ,Business law, Advanced Statistics, Tax Planning &management, Advance Cost Accounting, Management Accounting, Accounting for managerial decisions, IN Group (A) - Marketing, Group (B)management, Group (c) Banking and Insurance, Group (D) Taxation & Accounting and Project work as well.

COURSE OUTCOME:

The Master of Commerce course shall be spread over four semesters. In each semester, there shall be theory courses and practical. Written examinations shall be completed by the end of the each Semester and **Project Work is compulsory** at the end of fourth semester. There shall be numerical marking in evaluation. A candidate who has obtained a Bachelor's degree of this University or of a statutory University recognized by this university as equivalent to the Bachelor's Degree shall be eligible to seek admission in M.Com. Course.

Every candidate thus admitted shall pursue regularly the prescribed courses in each of the four semesters successively. The Master's Degree shall be awarded to those candidates who have obtained at least 36% marks in cumulative aggregate in each of four semesters in theory and practical courses separately and a minimum of 20% qualifying marks in each theory course. The successful candidates shall be placed in divisions on the following basis:

- An aggregate of 60% or above – I Division
- An aggregate of 48% or above – II Division
- An aggregate of 36% or above – III Division

Candidates failing to appear or securing less than 36% aggregate or obtaining less than 20% marks in any of the theory course of semester examinations shall be allowed to pursue the courses for the next following semester and to appear at the examination simultaneously in
the course for that semester and any course of the previous semester, which he/she has not cleared. Failure in all the four papers shall have to re-appear in the same ATKT provision shall be in three papers of one semester & maximum three attempts only i.e. (1 main+ 2 ATKT). Failure to secure 36% aggregate or to obtain qualifying marks of 20% in each course in two successive semester examinations, in addition to main examination, shall if so facto disqualify a candidate for admission to the next higher semester or for re-examination.

M.COM SEMESTER FIRST/SECOND/THIRD AND FOURTH

Paper	**Name of Paper**	**Question Paper Marks**	**Internal Marks**	**Paper code**
Paper I	MANAGERIALECONOMICS	80	20	101
Paper II	ADVANCED ACCOUNTING	80	20	102
Paper III	INCOME TAX LAW AND ACCOUNTS	80	20	103
Paper IV	STATISTICAL ANALYSIS	80	20	104
Paper V	CORPORATE LEGAL FRAMEWORK	80	20	105
Paper VI	BUSINESS ECONOMICS	80	20	201
Paper VII	SPECIALISED ACCOUNTING	80	20	202
Paper VIII	TAX PLANNING & MANAGEMENT	80	20	203
Paper IX	ADVANCED STATISTICS	80	20	204
Paper X	BUSINESS LAW	80	20	205
Paper I	MANAGEMENT CONCEPT	80	20	301
Paper II	ORGANIZATIONAL BEHAVIOUR	80	20	302
Paper III	ADVANCE COST ACCOUNTING	80	20	303
Paper IV	MANAGEMENT ACCOUNTING	80	20	304
Paper V	ACCOUNTING FOR MANAGERIAL DECISION	80	20	305
Paper A I	PRINCIPLES OF MARKETING	80	20	401
Paper A II	ADVERTISING & SALES MANAGEMENT	80	20	402
Paper A III	MARKETING RESEARCH	80	20	403
Paper A IV	INTERNATIONAL MARKETING	80	20	404
Paper BI	FINANCIAL MANAGEMENT	80	20	411
Paper B II	PERSONNEL MANAGEMENT	80	20	412
Paper B III	PRODUCTION MANAGEMENT	80	20	413
Paper B IV	STRATEGIC MANAGEMENT	80	20	414
Paper CI	BANKING PRACTICES	80	20	421
Paper C II	BANKING INSTITUTION IN INDIA	80	20	422
Paper C III	LIFE INSURANCE	80	20	423
Paper C IV	GENERAL INSURANCE	80	20	425
Paper D I	DIRECT TAX IN INDIA	80	20	431
Paper D II	INDIRECT TAX	80	20	432
Paper D III	ACCOUNTING IN SERVICE SECTOR CONCEPT	80	20	433
Paper D IV	ACCOUNTING METHODS	80	20	434
Paper E I	BUSINESS ENVIRONMENT	80	20	431
Paper E II	FINANCIAL INSTITUTION	80	20	432
Paper E III	RESEARCH METHODOLOGY	80	20	433
Paper E IV	SECURITY ANALYSIS	80	20	434

At the end of the M.Com. Course the student will be able to:

- Work as accountant in any private or Government sector.
- Work as an Auditor, manager, Accountant.
- Pursue research in their chosen areas.
- Work as Data Analyst
- Work as an investment consultants after a brief internship in suitable organizations absorbed in Banking and Insurance sector as executives.
- Pursue professional courses like CA, CMA, CS and other accounting fields.

PROGRAMME SPECIFIC OUTCOME:

The course of Semester First M.Com has been divided into Five Papers:-

PSO: PAPER-I MANAGERIAL ECONOMICS

OBJECTIVE:

This course develops managerial, perspective to economic fundamentals as aids to decision making under given environmental constraints. The paper covers the major part of managerial Economics Scope, Nature, objective, Fundamental of Economic Concepts, Demand Analysis, Theory of Consumer Choice and Production.

- Ability to forecast demand in light of changing circumstances and to formulate business plans.
- Ability to chalk out Business Policies.
- Knowledge about Profit Planning and control.
- Skill to analyze effects of Government Policies.

PSO: PAPER-II ADVANCED ACCOUNTING

OBJECTIVE: -

The paper covers the major part of Accounting for Shares, Final Account issues related to amalgamation AND Reconstruction of Company Holding and Subsidiary company and Liquidation of Companies. The objective of this course is to expose students to accounting issues and practices such as maintenance of company accounts and handling accounting adjustments.

- To study the basic concepts of corporate accounting
- To prepare the final accounts of companies.
- To analyze the internal or external reconstructions of companies
- To know the liquidators final statement of accounts.
- To summarize the consolidated financial statement and balance sheet for holding companies

PSO: PAPER-III INCOME TAX LAW AND ACCOUNTS

OBJECTIVE:

The paper covers the major part of Law relating Income Tax, Taxable Incomes, Deprecation and development allowance, HUF, Appeals and revisions reference of HC and SC. The objective of this course is to help student Understand and conceptual framework of Income tax.

- To introduce the basic concept of Income Tax.
- In order to familiarize the different know-how and heads of income with its components.
- It helps to build an idea about income from house property as a concept.
- It give more idea about the income from business or profession.
- Make the students familiarizes with the concept of depreciation and its provisions.

PSO: PAPER-IV STATISTICAL ANALYSIS

OBJECTIVE

The Objective of this course is to help student learnt application of statistical tools and techniques for decision making.

1. Development of logical reasoning ability in students.
2. Knowledge about the applicability of various parametric and non-parametric tests.
3. Ability to solve statistical problems.
4. Ability to make decisions under uncertain business situations.

PSO: PAPER-V CORPORATE LEGAL FRAMEWORK

OBJECTIVE

The Objective of this course is providing knowledge of relevant provisions of various Semester laws influencing business operations.

1. To provide students' knowledge of company act with relevant provisions.
2. To provide students' knowledge of negotiable instruments holder and holder in due course and its payments.
3. Endorsement and crossing of Cheque.
4. To provide the knowledge of legal environment for security markets.

The course of Semester Second M.Com has been divided into five papers:

PSO: PAPER-VI BUSINESS ECONOMICS

OBJECTIVE:

This course develops managerial perspective to economic fundaQ1entals' as aids to decision making under given environmental constraints.

- To provide students' knowledge of Micro Economic concepts and inculcate an analytical approach to the subject matter.
- To arouse the students interest by showing the relevance and use of various economic theories.
- To apply economic reasoning to solve business problems.
- To familiarize the students with the basic concept of Macro Economics and its application.
- To aware students about Gross National Product (GNP), Net National Product (NNP) ,Income at Factor cost or National Income at Factor Prices ,Per Capita Income , Personal Income (PI) ,Disposable Income etc.
- To Study the relationship among broad aggregates.
- To apply economic reasoning to solve the problems of the economy.

PSO: PAPER-VII SPECIALISED ACCOUNTING

OBJECTIVE.

The objective of this course-is to expose students to accounting issues and practices such as maintenance of company accounts and handling accounting adjustments. Purpose to introduce the learner to advanced accounting for special types of business Expected

- Explain the accounting procedure for partnership reorganization
- Describe procedure for accounting for consignments
- Describe procedure for accounting for branch and agency
- Describe procedure for accounting for hire purchase, royalty, and investment
- Describe procedure for accounting for foreign transactions and translation and price changes

PSO: PAPER-VIII TAX PLANNING AND MANAGEMENT

(Paper –VIII)

OBJECTIVE

This course aims at making students conversant with the concept of corporate Tax planning and Indian tax laws, as also their implications for corporate Management.

- To introduce the basic concept of Income Tax
- In order to familiarize the different know-how and heads of income with its components
- It helps to build an idea about income from house property as a concept
- It give more idea about the income from business or profession
- Make the students familiarizes with the concept of depreciation and its provisions

PSO: PAPER-IX ADVANCE STATISTICS

OBJECTIVE

The objective of this course is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, multiple regression and business/economic forecasting.

By completing this course the student will learn to perform the following:

- How to calculate and apply measures of location and measures of dispersion grouped and ungrouped data cases.
- How to apply discrete and continuous probability distributions to various business problems.
- Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases. Understand the conceptof p-values.
- Learn non-parametric test such as the Chi-Square test for Independence as well as Goodness of Fit.
- Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis, for forecasting and also perform ANOVA and F-test. Further, understand both the meaning and applicability of a dummy variable and the assumptions which underline a regression model. Be able to perform a multiple regression using computer software

PSO: PAPER-X BUSINESS LAWS

OBJECTIVE

The Objective of this course is providing knowledge of relevant provisions of various laws influencing business operations.

- Explain the concepts in business laws with respect to foreign trade.
- Apply the global business laws to current business environment.
- Analysis the principle of international business and strategies adopted by firms to expand globally.
- Integrate concept of business law with foreign trade

The course of Semester Third M.Com has been divided into five papers:

PSO: PAPER-I MANAGEMENT CONCEPT

OBJECTIVE -

The Objective of this course is to help student understand and conceptual framework of management and organizational behavior.

- To understand the concept and functions and importance of management and its application.
- To make the student understand principles, functions and different management theories.

PSO: PAPER-II ORGANIZATIONAL BEHAVIOUR

OBJECTIVE -

The Objective of this course is to help student understand and conceptual framework of management and organizational behavior.

- To equip the students with the basic idea and introduction on organizational behavior as a concept
- To give a light on the concept and difference theories on motivation
- Explain and helps the students to gain more knowledge on Group Behavior
- To introduce the concept of leadership
- Understand the concept of conflict management

PSO: PAPER-III ADVANCED COST ACCOUNTING

OBJECTIVE -

This course exposes the students to the basic concepts and the tools used in cost accounting.

- To understand Basic Cost concepts, Elements of cost and cost sheet.
- Providing knowledge about difference between financial accounting and cost accounting.
- Ascertainment of Material and Labor Cost.
- Student's Capability to apply theoretical knowledge in pact
- To provide knowledge regarding costing techniques.
- To give training as regards concepts, procedures and legal Provisions of cost audit situation will be increased.

PSO: PAPER-IV MANAGEMENT ACCOUNTING

OBJECTIVE:

The objective of this course is to acquaint student with the accounting concepts, tools and techniques for managerial decisions.

- To enlighten the students thought and knowledge on management Accounting
- Helps to give proper idea on financial statement analysis in practical point of view
- To introduce the concept of fund flow and cash flow statement
- To provide knowledge about budget control keeping in mind the scope of the concept
- To develop the knowledge and concept of marginal costing with practical problems

PSO: PAPER-V ACCOUNTING FOR MANAGERIAL DECISIONS

OBJECTIVE

The objective of this course is to acquaint student with the accounting concepts, tools and techniques for managerial decisions.

- Identify the role and scope of financial and managerial accounting and the use of accounting information in the decision making process of managers.
- Define operation and capital budgeting, and explain its role in planning, control and decision making.
- Prepare an operating budget, identify its major components, and explain the interrelationships among its various components.
- Explain methods of performance evaluation.
- Use appropriate financial information to make operational decisions.
- Demonstrate use of accounting data in the areas of product costing, cost behavior, cost control, and operational and capital budgeting for management decisions.

  Course Content: A general description of lecture/discussion topics included in this course.

The course of Semester Fourth M.com has been divided into five papers:

Specialization: (A) Marketing

PSO: PAPER-A-I PRINCIPLES OF MARKETING

OBJECTIVE–

The Objective of this course is to facilitate understanding of the conceptual framework of marketing and its applications in decision making under various environmental constraints. This Paper covers the major part of Introduction of Marketing, Market Analysis, Production Decisions, Pricing Decisions, and Distribution Channels and Physical Distribution Decisions.

- To develop an idea about marketing and its functions
- To enhance the students on consumer behaviour
- To familiarize students about product and its classifications
- To make them understand pricing policies
- To introduce the concept of sales forecast

PSO: PAPER-A-II ADVERTISING & SALES MANAGEMENT

This Paper covers the major part of Concept, Scope, Objective, and Functions of Advertising, Pre-Launch Advertising Decision, Promotional management, Personal Selling and Sales Management.

- Identify and respond to clients' advertising and marketing communications objectives by applying principles of marketing and communications.
- Perform a market segmentation analysis, identify the organization's target market/audience and define the consumer behaviour of each segment.
- Develop an advertising plan and present and defend it persuasively.
- Contribute to evaluating the effectiveness of advertising and marketing communications initiatives.
- Collaborate in the development of advertising and marketing communications material, in compliance with current Canadian legislation, industry standards and business practices

PSO: PAPER-A-III MARKETING RESEARCH

- define the basic concepts related to marketing research.
- explain the concepts about contemporary marketing research.
- explain relationship and differences between marketing research and marketing information systems.
- interpret development of marketing research.
- list the marketing research process.
- define each step and concept in the marketing research process.
- relate each step to other steps in the marketing research process.
- evaluate the corporate public relations and tools.
- apply a research in the marketing area.
- realize to gather data in the marketing research.

PSO: PAPER-A-IV INTERNATIONAL MARKETING

To develop knowledge and understanding of key issues associated with international marketing:

- Importance of global and international marketing
- Motives to internationalization
- The influence of macro-environment on market selection
- Market entry modes
- Financial, ethical, and organizational issues involved in international marketing.
- Have developed an understanding of major issues related to international marketing
- Have developed skills in researching and analyzing trends in global markets and in modern marketing practice
- Be able to assess an organization’s ability to enter and compete in international markets.

Specialization: (B) Management

PSO: PAPER-B-I FINANCIAL MANAGEMENT

OBJECTIVE

The objective of this course is to help students of understand the conceptual framework of financial management, and is applications under various environmental constraints.

- 1.To provide introduction to Financial Management
- 2. To create an awareness about capital structure and theories of capital structure
- 3. To make them understand the cost of capital in wide aspects
- 4. To provide knowledge about dividend policies and various dividend models.
- 5. To enable them to understand working capital management

PSO: PAPER-B-II PERSONNEL MANAGEMENT

- To aiming to enable the students in Human Resources Management
- To introduce the students about placement and training
- To facilitate the knowledge about performance appraisal and different methods
- To provide an idea about different compensation policies

PSO: PAPER-B-III PRODUCTION MANAGEMENT

- analyze production management and types of Production .
- System; plant location; factors
- affecting locations and plant layouts
- To understand Importance and Procedure of Production Planning, Routing scheduling,
- factors affecting scheduling, Dispatch and Follow up
- To acquire knowledge on Quality Control and supply chain management (SCM)
- Operation.
- To understand work measurement and work standards.

PSO: PAPER-B-IV STRATEGIC MANAGEMENT

- Making students aware complexity of business.
- To provide the students the knowledge of strategy formulation and choice of alternatives and its implementation, evaluation.
- To give the knowledge of functional strategies and global issues in strategic management.

Specialization: (C) Banking and Insurance

PSO: PAPER-C-I BANKING PRACTICES

OBJECTIVE–

This course enables the students to know the working of the Indian banking system and fundamentals of insurance.

- To help to gather knowledge on banking and financial system in India
- To provide knowledge about commercial banks and its products
- To aim to familiarize banking system in India
- To enable them to understand better customer relationship
- To create awareness about modern banking services like e-banking, m-banking and
- internet banking

PSO: PAPER-C-II BANKING INSTITUTION IN INDIA

- Definition of Banking – Types of Commercial Banking systems.
- Indian Commercial Banking Structure.
- Bank Nationalization and its Evaluation.

- Banking Sector reforms.
- RBI, Banking Regulation Act 1949.

PSO: PAPER-C-III LIFE INSURANCE

On completion of this course students will be able to:

- Understand the risks faced by human beings and ways to overcome them.
- Understand the difference between Life and Non-Life Insurance.
- Understand how to choose life insurance policies based on their needs.
- Under settlements of Life Insurance claims Guidelines and procedures.
- Understand Insurance Regulatory and Development Authority Act, 1999.

PSO: PAPER-C-IV GENERAL INSURANCE

- Demonstrate knowledge of insurance contracts and provisions, and the features of property-liability insurance, marine and fire insurance, and miscellaneous insurance.
- Demonstrate knowledge of the operation and management of insurance entities, and the economic implications of organizational design and structure.
- Develop skills to facilitate insurance product cost and pricing, marketing, and distribution.
- Develop practical skills through professional development seminars, internships, and/or practicums in insurance and risk management.

Specialization: (D) Taxation and Accounting

PSO: PAPER-D-I DIRECT TAX IN INDIA

On successful completion of this course, the students will able:

- To accustom legal regime governing the direct taxes.
- To gain knowledge and understanding of the provisions of the direct tax laws.
- To acquire the ability to apply the knowledge of the provisions of the direct tax laws to the various situation in actual practice.
- To develop the skill of independent thinking and creativity in the field of direct tax laws
- To familiarize the students with recent amendments in Income-tax. On successful completion of this course, the student should be well versed in the prevailing act.

PSO: PAPER-D-II GOODS AND SERVICE TAX AND CUSTOM LAW

At the end of this course students should be able to:

- Understanding of Goods and Service Tax Concepts.
- Learn about Supply of Goods and Services
- Learn about time of Supply and Value of Supply
- Return and Payment of Tax.
- Accounts and Other Records
- Tax Rate structure and Refund of Tax
- Transition to GST and Input Service Distributor

PSO: PAPER-D-III ACCOUNTING IN SERVICE SECTOR

At the end of this course students should be able to:

- Able to know how to prepare accounts for Hotel Companies, Cash Book, Visitors ledger.
- To understand type of govt. grants and its accounting, Annual statement of accounts.
- To understand how to make accounts of agricultural farms.
- To understand basic principal of govt. accounting, Commercial Accounting and Consolidated Funds and Public Accounts.

PSO: PAPER-D-IV ACCOUNTING METHODS

On successful completion of this course, students will be able to:

- Preparation of Accounts from incomplete records and single entry system.
- Understand how to prepare Branch Account.
- Understand Lease Account, Social Accounting, Accounting for Price level changes.
- Understand how to prepare insolvency Accounts for individual and Firm.

PSO: PAPER-E-I BUSINESS ENVIRONMENT

At the end of this course students should be able to:

- Explain the concept of business
- Distinguish between for-profit and nonprofit businesses
- List and explain the four factors of production required to sustain a business Identify the primary functional areas within a business and describe their contribution to the organization
- Describe the methods economists use to evaluate the health of an economy, such as GDP, unemployment rate, and CPI
- Explain the effect that the four stages of an economy (expansion, peak, contraction and trough) have on business operations
- Identify and explain the four stages of an economy (expansion, peak, contraction, and trough), and describe their impact on business operations
- Define tort law, and explain the role of product liability in tort law
- Summarize consumer protection Act

PSO: PAPER-E-II FINANCIAL INSTITUTION AND MARKETS

At the end of this course students should be able to:

- Able to understand what financial market is and what makes it useful
- Able to understand role of banks, UTI, Mutual Funds and Insurance Sector in India.
- Able to know about merchant banking services, SEBI, non-Banking Financial Institution in India etc.
- Able to understand ways in which businesses obtain financial system and Economic Development.

PSO: PAPER-E-III RESEARCH METHODOLOGY

This course aims at providing students with an understanding of research methodology. This paper covers all topics like scientific method of research, nature /role of hypothesis in Commerce Research, Deduction and Induction Methods, Research Design, Research problem selection and Identification.

- Students are be able understand a general definition of research design.
- Students are be able know why educational research is undertaken, and the audiences that profit from research studies.
- Students are be able to identify the overall process of designing a research study from its inception to its report.
- Students are be able be familiar with ethical issues in educational research, including those issues that arise in using quantitative and qualitative research.
- Students are be able know the primary characteristics of quantitative research and qualitative research.

PSO: PAPER-E-IV SECURITY ANALYSIS

At the end of this course students should be able to:

- To provide a theoretical and practical background in the field of investments.
- Designing and managing the bond as well as equity portfolios in the real word.
- Valuing equity, preference shares, economic analysis, industry analysis and company analysis.
- Able to understand the various issues in security analysis.
- To understand what is Depository Act 1996 and its need.

Department of Education
B.Ed. Two Year Course
(Semester I, II, III & IV)

OBJECTIVE OF THE PROGRAMME

The college follows Hemchand Yadav University, Durg syllabus for Bachelor in Education. The objectives of the prescribed course are:

(1) To provide efficient teachers who possesses dynamic personality for growth of society.
(2) To encourage them toward research and further learning.
(3) To inculcate among the student teacher the strong sense of commitment towards their duty and society at large.
(4) To create among student teacher an awareness about current issues and development in the field of education.
(5) To prepare professional teacher who understand Indian values and culture preserve them and transmit to the next generation

PROGRAMME OUTCOMES

To enable students to understand the central concepts, tools of inquiry and structures of the disciplines of Education in general and teacher education in particular. To provide opportunities to teacher trainees that enable learning experiences to make subject matter meaningful at secondary level. It enables them:-

PO-I: To make the student teachers understand how children learn and develop, how they differ in their approaches to learning and create learning opportunities that benefit diverse learners and learning contexts

PO-II: To develop the skills of student teachers to plan learning experiences in and outside the classroom that are based on learners' existing proficiency, interests, experiences and knowledge, and enable them to understand how students come to view, develop, learn and make sense of subject matter contained in the curriculum.

PO-III: To develop the capacity among student teachers to use knowledge of effective verbal, non-verbal and media communication techniques to foster active enquiry, collaboration and supportive interaction in the classroom.

PO-IV: To enable the student teachers to understand and use formal and informal assessment strategies to evaluate and ensure the continuous intellectual social, emotional and physical development of the learners.

PO-V: To provide student teachers self-identity as a 'teacher' through school based learning experiences and reflective practices that continually evaluate the effects of their choices and actions.

COURSE OUTCOME

Teacher students are able to understand their psychology of their students. Students are able to apply their knowledge of psychology, philosophy. Technology, research etc. in their classroom situation. Proficiency technology application for improving instructional practices. Development of language proficiency for expression and communication.

B.Ed. admission process is centralizes at the State level:-

(1) The B.Ed. centralized admission process (CAP) is an online process governed by the Director of SCERT in coordination with the Maharashtra Knowledge Corporation Limited (MKCL)

(2) As the B.Ed. admission process CAP is online, it is more transparent and convenient to the teacher trainees of the state and other states.
(3) In the month of February every year, B.Ed. CAP begins with the advertisement in the newspapers.
(4) The Advertisement is followed by Pre B.Ed. Common Entrance Test
(5) Rank is given to Pre B.Ed. score and 50% weighted is given to the graduation marks.
(6) The list of admitted teacher trainees is sent to the institution.
(7) The institution gives admission to these teacher trainees after the verification of relevant documents.
(8) All the rules of state government regarding reservation policy are strictly followed.

Marking Scheme for B.Ed. First/Second/Third/Fourth Semester

SL. NO.	PAPER	SCHEME OF MARKS	
SEMESTER I	THEORY	EXTERNAL MARKS	INTERNAL MARKS
Paper I	Philosophical Perspectives of Education	100	--
Paper II	Learner and Learning Process	100	--
Paper III	Pedagogy – I	100	--
	PRACTICUM	EXTERNAL MARKS	INTERNAL MARKS
(i)	Preparation of Teaching aids	--	50
(ii)	Community Activities	--	50
	TOTAL	300	100
SEMESTER II	THEORY	EXTERNAL MARKS	INTERNAL MARKS
Paper IV	Sociological Perspectives of Education	100	--
Paper V	Curriculum and Knowledge	100	--
Paper VI	Elective – I	100	--
Paper VII	Arts Education	100	--
	PRACTICUM	EXTERNAL MARKS	INTERNAL MARKS
(i)	Internship (One month) School Experience – a) Observation of School Document; b) Mentor's Report	--	50
	TOTAL	400	50
SEMESTER III	THEORY	EXTERNAL MARKS	INTERNAL MARKS
Paper VIII	Pedagogy – II	100	--
Paper IX	Assessment in Learning	100	--
	PRACTICUM	EXTERNAL MARKS	INTERNAL MARKS
	Internship (4 months)	--	100
	Reflective Diary & Supervisor's Assessment	--	50
	TOTAL	200	150
SEMESTER IV	THEORY	EXTERNAL MARKS	INTERNAL MARKS
Paper X	Gender, School and Society	100	--
Paper XI	Language Proficiency	100	--
Paper XII	Elective – II	100	--
	PRACTICUM	EXTERNAL MARKS	INTERNAL MARKS
(i)	Training in Yoga, Sports & Games	--	50
(ii)	Psycho-metric Assessment	50	--
(iii)	Viva-Voce on Teaching Experience	100	--
	TOTAL	450	50

SEMESTER	I		II		III		IV	
EXAM	THEORY	PRACTICUM	THEORY	PRACTICUM	THEORY	PRACTICUM	THEORY	PRACTICUM
MARKS	300	100	400	50	200	150	300	200
TOTAL MARKS	400		450		350		500	
	THEORY (SEM-I,II,III,IV)				PRACTICUM (SEM-I,II,III,IV)			
TOTAL MARKS	1200				500			
GRAND TOTAL	1700							

PROGRAMME SPECIFIC OUTCOME

The course of semester first has been divided into three papers:-

PSO: Semester I

PSO 01: Semester I Philosophical Perspectives of Education

- To develop understanding of the inter-relationship between philosophy and education.
- To acquire knowledge of human values and role of education
- Mastery of knowledge in their field and the ability to apply their expertise to novel and emerging problems.

PSO 02: Semester I: Learner and Learning Process

- To develop understanding of the psychological basis of education
- To understand the changing concept of intelligence and its application
- To understand the process and concept of teaching

PSO 03: Semester I: Pedagogy- Mathematics/Biological Science/Physical Science/Social Science/Languages

- Develop insight into the meaning, nature, scope and objectives of Mathematics/Biological Science/Physical Science/Social Science/Languages
- Appreciate the process of developing a concept and develop ability to use the concept of life skills.

PSO: Semester II

The course of semester two has been divided into four papers:-

PSO 01: Semester II Sociological Perspective of Education

- To develop appreciation of education as a means of social reconstruction.
- To develop understanding of the inter relationship between sociology and education.
- To understand the bearing of various political and religious ideologies on education.

PSO 02: Semester II Curriculum and Knowledge

- To understand the nature of knowledge, moral values and skills.
- To examine the place of work in education.
- To understand the implication of constructivism for education.

PSO 03: Semester II Educational and Mental Measurement/Educational Administration and Management/Career Information in Career Guidance

- To enable the student teacher to interpret the result of educational measurement.
- To develop skills and competencies in the student teacher for use of the techniques in the field.
- To enable the students to understand to concept at importance of communication and its possible barriers in educational administration.
- To acquaint the student teacher with the scientific practices of educational management and keep him to apply it in work situation.
- To develop an understanding of how one's ability, interest and aptitudes are related to world of work.
- To know about the importance of developing the right attitudes and values at every to stage of education.

PSO 04: Semester II Arts Education

- To develop an insight towards sensibility and aesthetic appreciation.
- To develop a perspective of artistic and creative expression.
- To work together on small and large projects.

PSO: Semester III

The course of semester three has been divided into two papers:-

PSO 01: Semester III- Pedagogy of Mathematics/Biological Science/Physical Science/Social Science/Language

- Develop insight into the meaning nature and scope and objectives of Mathematics/biological science/physical science/social science/language
- Appreciate the process of developing a concept and develop ability to use the concept of life skills

PSO 02: Semester III- Assessment in Learning

- Students apply their knowledge of methods, techniques, strategies principles etc during teaching in schools.
- Evolve realistic, comprehensive and dynamic assessment procedures that are able to keep the whole student in view.
- Be exposed to different kinds and forms of assessment that aid student learning.

PSO: Semester IV

The course of semester four has been divided into three papers:-

PSO 01: Semester IV Gender Perspective and Education

- Develop basic understanding and familiarity with key concepts gender, gender bias, gender stereo type empowerment, gender parity, equity and equality.
- Understand how gender, power and sexuality relate to education (in terms of access curriculum and pedagogy)

PSO 02: Semester IV Language Proficiency

- There will be accuracy and clarity in the pronunciation of the language and will be able to tell the expression of sentences.

PSO 03: Semester IV Computer Education/Inclusive Education/Teaching of Values to Develop Understanding of Computers and their Application in Education

- Communicate clearly and convincingly about various facts, theories and skills and technology.
- Demonstrate knowledge of different perspectives in the area of education of children with disabilities.

Department of Education
M.Ed. Two Years Course
Semester I, II, III & IV

OBJECTIVE OF THE PROGRAMME:

The college follows Hemchand Yadav University, Durg syllabus for Masters in Education. The objective of the prescribed course are:

(1) To provide efficient teachers who possess dynamic personality for growth of society.
(2) To encourage them toward research and further learning.
(3) To inculcate among the student teacher the strong sense of commitment towards their duty and society at large.
(4) To create among student teacher an awareness about current issues and development in the field of education.
(5) To prepare professional teacher who understand Indian values and culture preserve them and transmit to the next generation.

PROGRAMME OUTCOMES

PO-I: To change the behaviour, attitude and values of teacher trainees so that they shape into responsible and accountable agents of change in the society, in the perspective of local, national and global concerns and issues vital for human survival, progress and development.

PO-II: To provide a rich programme of curricular and extra-curricular activities for student teachers for all round development of their personalities as also those of the student.

PO-III: Able to state a research problem, apply research methods, tool for data collection, analyze and interpret research data.

PO-IV: Expected to broaden their professional foundations through activities such as internship, teaching and project work.

PO-V: Conduct original work in the field or complete a substantial project related to the field.

COURSE OUTCOMES

Teacher students are able to understand their psychology of their students. Students are able to apply their knowledge of psychology, philosophy. Technology, research etc. in their classroom situation. Proficiency Technology application for improving instructional practices. Development of language proficiency for expression and communication.

The Master of Education course shall be spread over four semester. In each semester, there shall be theory courses and written examinations shall be completed by the end of the each semester. There shall be numerical marking in evaluation. M.Ed. admission process is clear and transparent. It is on the basis of Merit Marks (in B.Ed. course) and regulation of the state government regarding reservation are strictly followed.

Marking Scheme for M.Ed. First/Second/Third/Fourth Semester

SL.NO.	PAPER	EXTERNAL	INTERNAL
SEMESTER - I	THEORY		
Paper I	Philosophical Perspectives of Education	100	
Paper 2	Sociological Perspectives of Education	100	
Paper 3	Education Technology/ Teacher Education	100	
Paper 4	Strengthening Language Proficiency	100	
	PRACTICUM		
	Exploring Library Resources		50
SEMESTER – II	THEORY		
Paper 5	Introduction of Research Methodology in Education	100	
Paper 6	Psychological Perspectives of Education	100	
Paper 7	Specialization Part I	100	
	PRACTICUM		
	Proposal of Dissertation	100	
	Internship , School based Activities		50
SEMESTER - III	THEORY		
Paper 8	History and Development of Education in India	100	
Paper 9	Economic and Political Perspectives of Education	100	
Paper 10	Advanced Edu. Statistics/Edu. Administration	100	
Paper 11	Gender Perspectives in Education	100	
	PRACTICUM		
	Psycho-metric Assessment		50
SEMESTER - IV	THEORY		
Paper 12	Curriculum Development	100	
Paper 13	Specialization Part II	100	
	PRACTICUM		
	Academic Writing		50
	Dissertation	100	
	Viva Voce on Dissertation	100	
	TOTAL	1600	200
	GRAND TOTAL	1800	

Programme Specific Outcomes

The course of semester first education has been divided into four papers:-

PSO 01: Semester I Philosophical Perspectives of Education

(1) To develop understanding of the inter relationship between philosophy and education.
(2) To acquire knowledge of human values and role of education
(3) Mastery of knowledge in their field and the ability to apply their expertise to novel and emerging problems.

PSO 02: Semester I: Sociological Perspective of Education

(1)To develop appreciation of education as a means of social reconstruction.
(2) To develop understanding of the inter relationship between sociology and education.
(3) To understand the bearing of various political and religious ideologies on education.

PSO 03: Semester I:- Educational Technology / Teacher Education

(1) Students acquaints with emerging trends in educational technology and technology of education so that to apply it in them classrooms.
(2) To enable the learner to become effective user of technology in education
(3) To make the student familiar with new trends, techniques in education along with e-learning
(4) Demonstrate teach work and leadership skill specifically function in a variety of work groups.
(5) To understand the concept of Teacher education.
(6) To develop necessary skill like: (a) demonstrate critical thinking apply analytical models and critical responding processes to evaluate evidence select among alternatives and generate creative options. (b) Possess effective communicative skills in oral and written form. (c) Demonstrate teach work and leadership skill specifically function in a variety of work groups

PSO 04: Semester I:- Strengthening Language Proficiency

(1) Student teachers will begin the programme with different levels of language ability
(2) Student teachers will develop a taste for and abilities in reading and making meaning of different kind of text

PSO: Semester II

The course of semester two education has been divided into three papers.

PSO 01: Semester II:- Introduction to Research Methodology in Education

(1) Effective researcher able to develop a research proposal applying scientific method, scientific inquiry. Able to conduct a research by applying scientific method, tool and analyse/ interpret data develops competences in constructing and standardizing a test.
(2) To understand the procedure to conduct the research in the education field
(3) To understand the nature of issues and problems faced by the state system of education and to find out the remedies to solve them.

PSO 02: Semester II:- Psychological Perspectives of Education

(1) To develop understanding of the psychological basis of education
(2) To understand the changing concept of intelligence and its application
(3) To understand the process and concept of teaching

PSO 03: Semester II:- Guidance and Counseling /Education for the Differently Abled

(1) Ability to understand the organizational framework and procedures of guidance service in schools and knowledge about tools and techniques required for providing guiding and counseling service and language.
(2) To acquire the student with the organizational frame work and process of guidance services in educational institutions.
(3) To unable the learner to understand the concept of inclusive, integrated and special education, need of special education and its practices.
(4) To understand the various suggestion of recent commissions of education for the differently abled for realizing the concept of universalisation of education.

PSO: Semester III

The course of semester three education has been divided into four papers:-

PSO 01: Semester III History and Development of Education in India

(1) To be acquainted with the salient features of education in India ancient and medieval times
(2) To be acquainted with the development of British India

PSO 02: Semester III Economic and Political Perspectives of Education

(1) To be acquainted with the development of education independent India, including significant points of selected education
(2) To be acquainted with current issues and trends in education.

PSO 03: Semester III Advanced Educational Statistic/Educational Administration and Management

(1) To understand the roll and use of advanced statistics in educational research
(2) Select appropriate statistical method in educational research
(3) To enable the learner to become effective manager of teaching/administration of education
(4) To make the student understand about the finance, management of education

PSO 04: Semester III Gender Perspective and Education

(1) Develop basic understanding and familiarity with key concepts gender, gender bias, gender stereo type empowerment, gender parity, equity and equality.
(2) Understand how gender, power and sexuality relate to education (in terms of access curriculum and pedagogy)

PSO: Semester IV

The course of semester four education has been divided into two papers.

PSO 01: Semester IV Curriculum Development

(1) To understand the concept and principles of curriculum development
(2) To understand and appreciate curriculum as a means of development of the individuals
(3) To gain insight into the development of curriculum

PSO 02: Semester IV Educational Guidance and Counselling

(1) Ability to understand the organizational framework and procedures of guidance service in schools and knowledge about tools and techniques required for providing guiding and counseling service and language.

(2) To acquire the student with the organizational frame work and processes of guidance services in educational institutions.

(3) To unable the learner to understand the concept of inclusive, integrared and special education , need of special education and it's practices.

(4) To understand the various suggestion of recent commissions of education for the differently abled for realizing the concept of universalisation of education.

M.A. ENGLISH LITERATURE

Semester-First, Second, Third & Fourth

OBJECTIVES OF THE PROGRAMME:

The college follows Hem Chand Yadav University, Durg syllabus for Masters in English Literature. The objectives of the prescribed course are:

- To develop an aesthetic sense and love for literature in learners.
- To help them appreciate ancient classic texts.
- To encourage them towards research and further learning.
- To provide learners with critical faculty.

PROGRAMME OUTCOME:

The English Literature programme ensures:

- Critical learning of the texts.
- Analysis of the text for proper understanding and interpretation.
- Representation of the text in literary usage.
- Appreciate old texts
- Can differentiate between texts of different genre and continents.
- Will able to use the text artistry in their language.

COURSE OUTCOME:

The prescribed MA English Literature course has been designed to acknowledge students regarding different genres and the background of the English Literature. The course also acquaints students of the emergence of the English literature, socio-political changes and major influences. Moreover, the course describes about the major changes and developments in the English Literature, effects of the colonization, translation, and spread of the English language and English literature with an impression of the English culture on the colonies.

The Master of Arts course shall be spread over four semesters. In each semester, there shall be theory courses and. Written examinations shall be completed by the end of the each Semester. There shall be numerical marking in evaluation. A candidate who has obtained a Bachelor's degree of this University or of a statutory University recognized by this university as equivalent to the Bachelor's Degree shall be eligible to seek admission in MA courses.

Every candidate thus admitted shall pursue regularly the prescribed courses in each of the four semesters successively. The Master's Degree shall be awarded to those candidates who have obtained at least 36% marks in cumulative aggregate in each of four semesters in theory and practical courses separately and a minimum of 20% qualifying marks in each theory course. The successful candidates shall be placed in divisions on the following basis:

- An aggregate of 60% or above – I Division
- An aggregate of 48% or above – II Division
- An aggregate of 36% or above – III Division

Candidates failing to appear or securing less than 36% aggregate or obtaining less than 20% marks in any of the theory course of semester examinations shall be allowed to pursue the courses for the next following semester and to appear at the examination simultaneously in the course for that semester and any course of the previous semester, which he/she has not cleared. Failure in all the four papers shall have to re-appear in the same ATKT provision shall be in three papers of one semester & maximum three attempts only i.e. (1 main + 2 ATKT). Failure to secure 36% aggregate or to obtain qualifying marks of 20% in each course in two successive semester examinations, in addition to main examination, shall if so facto disqualify a candidate for admission to the next higher semester or for re-examination.

Syllabus and Marking Scheme for First/Second/Third/Fourth Semester

Paper No.	Title of the Paper	Marks Allotted in Theory		Marks Allotted in Internal Assessment	
		Max.	Min.	Max.	Min.
I	POETRY-I	80	16	20	04
II	DRAMA-I	80	16	20	04
III	PROSE-I	80	16	20	04
IV	FICTION-I	80	16	20	04
V	HISTORY OF ENGLISH LITERATURE	80	16	20	04
	Total	400		100	

Paper No.	Title of the Paper	Marks Allotted in Theory		Marks Allotted in Internal Assessment	
		Max.	Min.	Max.	Min.
I	POETRY-II	80	16	20	04
II	DRAMA-II	80	16	20	04
III	PROSE-II	80	16	20	04
IV	FICTION-II	80	16	20	04
V	MODERNIST POETRY	80	16	20	04
	Total	400		100	

Paper No.	Title of the Paper	Marks Allotted in Theory		Marks Allotted in Internal Assessment	
		Max.	Min.	Max.	Min.
I	CRITICAL THEORY-I	80	16	20	04
II	INDIAN WRITING IN ENGLISH-I	80	16	20	04
III	AMERICAN LITERATURE-I	80	16	20	04
IV	COLONIAL AND POST COLONIAL STUDIES-I	80	16	20	04
V	LINGUISTICS-I	80	16	20	04
	Total	400		100	

Paper No.	Title of the Paper	Marks Allotted in Theory		Marks Allotted in Internal Assessment	
		Max.	Min.	Max.	Min.
I	CRITICAL THEORY-II	80	16	20	04
II	INDIAN WRITING IN ENGLISH-II	80	16	20	04
III	AMERICAN LITERATURE-II	80	16	20	04
IV	COLONIAL AND POST COLONIAL STUDIES-II	80	16	20	04
V	LINGUISTICS-II	80	16	20	04
	Total	400		100	

At the end of the MA course in English Literature the student can:

- **Read** and interpret Classical and Modern Literature from all the different Genres. Can apply the critical approach while interpreting a text. Understand the main idea behind any piece of the Literature.
- **Acquire** the knowledge of the vast English Literature and appreciate the literature aesthetically. Know the use of literary devices and terms in their writings.
- **Knowledge** of the basics of the literature also of the History of the English Literature from Chaucer to the Post-Modern times. The learner will also know the basic Colonial and Postcolonial Literatures.
- **Reproduce** the piece of literature that they have read and can bring proper justice to the work using their learning. Can also create and write a piece of literature their own.
- **The history behind the piece of literary work** and the importance of the work in contemporary society and the use of the work in the present context.
- **Basic Moral values** literature also helps the learner to know about their basic moral values and to imply them in their day-to-day life.

Culture and Tradition can be easily understood through these literary pieces of works also the cultural variations of different countries can be easily understood by the literature of the time.

- **Writing skills and Process**; Students will be able to recognize and comprehend different varieties of English language and develop a writing style of their own. English literature students should be aware also that textual analysis can be extended with profit to political and commercial writings. It is expected that their exposure to the ideas of variety of writers and their cultural backgrounds, will have a bearing in their own literary styles.
- **Means of Effective Communication;** Study of literature is intertwined with the study of language. Learning various language patterns, sentence structures and dialogue forms can help one in real life in effectively communicating with others. English is the language of science, computers, diplomacy, and tourism. Knowing English increases students' chances of getting a good job in future.
- **Future Scope** – Students can secure their future in the fields of transcription, teaching and education, language curators etc.

PROGRAMME SPECIFIC OUTCOME:

The course of Semester First English Literature has been divided into five papers.

PSO 01: Semester-I – Poetry I

The paper covers the major works from the era of Geoffrey Chaucer to the Restoration Era. The paper aims at imparting knowledge regarding:

- The era and major works.
- Old English and flourish of the old English literature
- Renaissance and the literature of the time
- Tudor literature, Caroline and Jacobean poetry.
- The rise and fall of the Puritan era and Epic poetry
- The Commonwealth Literature
- The Restoration era and mock-epic poetry.

PSO 02: Semester-I – Drama I

The paper will enable the learner to grasp knowledge about:

- The Era of Theatre.
- The Shakespearean era and its impact on contemporary English Literature.
- The Puritan era and closing and re-opening of theatres.
- Theatre of morality.

PSO 03: Semester-I – Prose I

The paper covers a period of the Restoration Era and will help students to learn about:

- The impact of prose writing on theatre and epic.
- The quarterly papers and journals
- The coffee houses
- The spurt of science and its impact on the literature of the time.
- Famous literary essays and essayists

PSO 04: Semester-I – Fiction I

The paper has been designed to impart knowledge regarding:

- The famous fiction and fiction writers.
- Themes and scope in fictions
- Changing trends in writing
- Complex themes and subjects
- The era of anti-hero and re-telling of old dramas.

PSO 05: Semester-I – History of English Literature

This paper acknowledges learners with detail information about English eras and periods:

- Prominent writers and their contemporary minor authors
- Important literary works
- Major socio-political upheaval
- Monarch and contemporary society
- Major literary and social movements

PROGRAMME SPECIFIC OUTCOME:

The course of Semester Second English Literature has been divided into five papers:-

PSO 01: Semester-II – Poetry II

The paper covers the major works from the Pre-Romantic era to Victorian Era. The paper aims at imparting knowledge regarding:

- The era and major works.
- Pre-Romantic works
- Major changes in the literature of the time
- The spurt of logic and reasoning in the literature
- Change in the genre and introduction of new themes in the poetry

PSO 02: Semester-II – Drama II

The paper covers the period from the Restoration Era to the Edwardian Era and will enable the learner to grasp knowledge about:

- The Era of Restoration Comedy
- The era of Closet Drama and Curtain Raisers
- Translations and their impact on the English literature
- Colonial world and their meagre pictures

PSO 03: Semester-II – Prose II

The paper covers a period from the Romantic Era to World War I and will help students to learn about:

- The changing face of the prose writing
- Famous works and author
- Adoption of more formal language
- Essays dealing the common life
- Satire, irony, humour and pathos as the major themes
- Logic became the core of all writings

PSO 04: Semester-II – Fiction II

The paper has been designed to impart knowledge regarding:

- The famous fiction and fiction writers
- Themes and scope in fictions
- Changing trends in writing
- Complex themes and subjects
- The era of anti-hero and re-telling of old dramas.
- Novels became an instrument for liberating female voices

PSO 05: Semester-II – Modernist Poetry

The paper precisely covers writers from different genres of poetry and introduces learners to:

- Prominent writers and their seminal works
- Authors from different eras and continents
- Varying writing style
- Major literary and social movements

PSO 01: Semester-III – Critical Theory I

This paper introduces learners to the critical theories from Classics to the English Victorian Era; also it will enable them to:

- Understand and interpret the classical theories
- The Greco-Roman Era and the major critical exponents
- Influence of the Classics on English Critics
- The shaping of the English Criticism
- The Romantic phase of the criticism
- Major English critics

PSO 02: Semester-III – Indian Writings in English I

The paper focuses on the Indian Writings in English covering the Indian Colonial era and Postcolonial era which will acknowledge learners about:

- The early Indian writings and the prominent writers
- The translation phase of the Indian English literature
- Knowledge about Anglo-Indian and Indo-Anglian Literature
- Major literary works
- Changing phase of the Indian Writings in English

PSO 03: Semester-III – American Literature I

Learners will have knowledge about the Renaissance American Literature, New England Renaissance and also:

- The major American writers
- Prominent American literary works
- Democratic phase of the American literature
- Impression of two World Wars
- Feminism and the impact of the feminist movement on the literature
- Major literary movements

PSO 04: Semester-III – Colonial and Post-Colonial Studies I

The paper focuses on the Colonial and Post-Colonial Studies and the theories of the eras. The students will learn about:

- The impact of Colonialism on the Indian society and Literature
- Impact of English Language and Literature on the Indian minds
- The image of India and Indians in the Anglo-Indian texts and image of Westerns in Indo-Anglian texts
- Learning of the new culture and mingling of the cultures
- East-West encounters
- The Post-Colonial literature and the spurt of oriental expression
- Gaining an orient identity
- Changing phases of the Indian society in literature since independence

PSO 05: Semester-III – Linguistics I

Students should have knowledge and use of English language after completion of their post - graduation and they must know the correct usage of the language for the same the paper enables:

- Structure and Morphology of English Language and its characteristics
- Scope levels and branches of Linguistics
- Socio and Psycho Linguistics
- Structure of English words
- IC Analysis and its models, Phrase Structure Grammar (Syntax NP-VP)

PSO 01: Semester-IV – Critical Theory II

Criticism in English has changed a lot since early of the Modern Era to the Postmodern Era students will be informed and be acknowledged of:

- The spurt of the Modern thinking
- New theories
- Re-visiting old texts
- Traits of the Modern Era
- New historians and fourth world criticism

PSO 02: Semester-IV – Indian Writings in English II

Students will know about the Modern Indian English Literature and how it came into present form:

- The three biggies of the Indian English Literature
- Modern Indian English Poets
- Use of colloquial words in English Literature
- Modern Indian English Drama and theatre
- Modernism in the Indian society and its impact on the contemporary literature
- Spurt of modern science and modern oriental Indian theories.

PSO 03: Semester-IV – American Literature II

Students will know and can interpret the Modern American Literature also they will:

- Learn about the about modern themes used in the literature
- Impact of Ancient Indian scriptures on the modern American writers
- Era of translation and its influence
- American renaissance and major literary movements

PSO 04: Semester-IV – Colonial and Post-Colonial Literature II

The paper acknowledges students about the colonial era and related texts. Students will further know:

- Orientalism and Colonialism
- Occident text and rewriting oriental text
- Finding origins and clearing the orient images
- World literature and their common link with each other

PSO 05: Semester-IV – Linguistics II

Students will learn about:

- Basic English Phonetics
- Organs of speech
- Vowel and Consonant sounds and symbols
- Transcription
- Correctness of the language and usage

BA ENGLISH LITERATURE
(PART – I, II & III)

OBJECTIVES OF THE PROGRAMME:

The college follows Hem Chand Yadav Vishwavidyalaya, Durg syllabus for Bachelor of Arts in English Literature. The objectives of the prescribed course are:

- To develop an aesthetic sense and love for literature in learners.
- To help them appreciate ancient classic texts.
- To encourage them towards research and further learning.
- To provide learners with critical faculty.

PROGRAMME OUTCOME:

The BA English Literature programme ensures:

- Critical learning of the texts.
- Analysis of the text for proper understanding and interpretation.
- Representation of the text in literary usage.
- Appreciate old texts
- Can differentiate between texts of different genre and continents.
- Will able to use the text artistry in their language.

COURSE OUTCOME:

There are two papers in the English literature of each academic year. Each paper carrying maximum marks of 75. Each question carries the marks according to the scheme mentioned in each paper. Minimum passing marks will be 50.

At the end of the BA course in English Literature the student can:

- **Read** and interpret the Basic English literary texts. The students will have basic knowledge of the Ancient Greek Literature, Roman Literature and the Renaissance English.
- **Acquisition -** Student will acquire knowledge of the use and interpretation of the literary texts and to introduce and felicitate students to understand the history of post-war reflection of life in literature. To focus on the demeanour behind the paradigm shift from orthodoxy to radical life during the modern age.
- **Engage** them in the life-long learning process.
- **Research –** Students will be capable to explore and research in the field of literature more with progress of the course.
- **Assist** students in the field of literacy, intellectuality, flexibility and adaptability to different cultures.

- **Understanding –** Students will develop an understanding towards the less familiar texts and will read them more for the proper usage.
- **Description** – Students will describe, analyse and interpret literary texts critically exploring ideas and themes by themselves.
- **Aesthetic sense -** Students will develop an aesthetic sense and a sense of love towards the literature and learning and interpreting the concept of individualism and equality at all inclusive levels.
- **Expressive -** The learning of the literature will make them more expressive and sharpen their artistic outlook further, retracting the ideas of the 'modern' mindset and the cultural transition.
- **Language –** Students will learn and use the literary language in their writings and will also able to create poetry and prose of their own.
- **Acquaint** with various schools of thought in the modern age leading to Post-modern age and new trends in English theatre.
- **Analyse** the effects of socio-cultural changes in the poetry of the century.
- **Future Scope** – Students can secure their future in the fields of transcription, teaching and education, language curators etc.

PROGRAMME SPECIFIC OUTCOME:

The course of BA in English Literature has been divided into two papers in an academic year:

PSO: BA Part I – Paper I – Literature in English- (1550-1750)

The paper covers the course of English literature from 1550-1750. Students will acquire knowledge regarding:

- Broad idea of the era and the features
- Language of the era and the basic literary works
- The basic poetry and the critical analysis of the same
- Introduction to the Shakespearean literature and theatre culture
- Era of the drama and theatres
- Use of literary terms and devices
- Prominent works and authors
- Literary movements and their impact on society and the literature of the contemporary time
- English monarch and the important event in their eras
- Various changes brought in the course of construction of the literature
- Brief History of the English Literature

PSO: BA Part I – Paper II – Literature in English from (1750-1900)

The paper covers the course of English literature from 1750-1900. Students will acquire knowledge regarding:

- Brief knowledge of the Romantic Era, Victorian Era and Edwardian Era
- Change in the main theme and adoption of sublime language in literature.
- Lake poets and the development of the European literature
- Famous essays and the flourishing culture of coffee houses
- Increase in the literacy level and end of the tragedies
- Spurt of closet dramas and curtain raisers
- Novel as the new genre of the literature
- Expanse of the expression and use of complex themes
- Literary movements and their impact on society and the literature of the contemporary time
- English monarchs and their influence on the literature of their time
- Brief History of the English literature

PSO: BA Part II – Paper I – Modern English Literatures I

The paper prepares students in the field of modern English literature with brief knowledge of American literature;

- Important American and English writers and texts
- Impact of the British colonialism and imperialism on the American literature
- Change of themes from English to American
- Glimpse of other British colonies
- Mingling of cultures
- Deeper knowledge of the genres and their usage
- Important literary movements and the influences
- The democracy and voice of commoners in literature
- Origin and development of novella and Short-Stories

PSO: BA Part II – Paper II – Modern English Literatures II

The paper focuses more on the American writers and American literature of American Renaissance time to the time of two World Wars. The student will learn about:

- Important social and political movements and their influence on the literature of the time
- Major American writers and texts
- Use of complex themes and introduction of various sub-genres in the literature
- Re-reading the old texts
- Psycho-analytical approach in literature
- Development of the short stories
- Impact of feminist movement on literature

PSO: BA Part III – Paper I – Indian Writing in English

The paper presents the finest Indian writings in English and the best of the translated works. The paper will enable students to:

- Collect information about the prominent Indian authors
- The important literary works
- Best literature from the other languages in translation
- The Indian theatre and mythology
- The use of folklore and legends; both local and national in the Indian literature
- Best playwright and their seminal works
- The different genre of the Indian English Literature
- Modern Indian English Literature

PSO: BA Part III – Paper II (A) – American Literature

Learners will have knowledge about the brief introduction of American Literature, New England Renaissance and also:

- The major American writers
- Prominent American literary works
- Democratic phase of the American literature
- Impression of two World Wars
- Major literary movements
- Major themes and the modern literary terms and devices.

PSO: BA Part III – Paper II (B) – 20th Century Literature in English

The Principle focus will be to probe the students a general background and cultural history of this period and also to make them aware of the literary trends of the twentieth century.

- The students are exposed to the newer nuances of American and impression of British life and their change by analysing 20th century literature.
- Impact of two the two World Wars
- Induction of Absurd Theatre and themes
- Impression of the Russian revolution on the contemporary literature
- Great depression Era and its influence of the life and literature of the time
- Study of human psychology and emergence of Freudian thoughts in the literature

BA, BSc & BCom (PART – I, II & III)
FOUNDATION COURSE
(ENGLISH LANGUAGE)
PAPER - II
BCA (PART – II & III)
FOUNDATION COURSE
(ENGLISH LANGUAGE)

OBJECTIVES OF THE PROGRAMME:

The college follows Hem Chand Yadav Vishwavidyalaya, Durg syllabus for the English Language as the second paper of Foundation Course; Hindi language being the first paper.

The objectives of the prescribed course are:

- To develop an aesthetic sense and love for literature, culture, tradition and language in learners.
- To help them appreciate ancient classic texts.
- To encourage them towards further learning.
- To provide learners with a basic understanding of the language.

PROGRAMME OUTCOME:

English being the second language in the state and the other in the official use and understanding nationwide the course of English Language programme hence ensures:

- The proper reading and writing of the prominent English texts
- Understanding of the texts
- Development of the curiosity and aesthetic sense towards the language
- Learning of the basic grammar and phonetics
- Learning of the syntax and morphology of the language
- Use of the correct language
- Ensures the learner read the other texts in the language

COURSE OUTCOME:

The subject Foundation Course has been divided into two separate papers; Paper-II – English Language. The paper is of maximum marks 75 and minimum pass mark is 26. The candidate has to pass each paper separately.

The English Language of BCA Part- II and III are of maximum marks of 50 each and the minimum pass mark is 20 each.

At the end of the course in the English Language the student can:

- **Read** and write the in the language
- **Acquisition -** Student will acquire knowledge of the use and interpretation of the texts.
- **Engage** them in the life-long learning process.
- **Write –** Student can write and describe his thoughts in the language

- **Assist** students in the field of literacy, intellectuality, flexibility and adaptability to different cultures.
- **Understanding –** Students will develop an understanding of the less familiar texts and will read them more for the proper usage.
- **Description** – Students will able to describe the incidences and events in the language
- **Aesthetic sense -** Students will develop an aesthetic sense and a sense of love towards the literature and learning.
- **Expressive -** The learning of the literature will make them more expressive and sharpen their artistic outlook.
- **Language –** Students will learn and use the literary language in their writings and will also able to create poetry and prose of their own.
- **Future Scope** – Students can secure their future in the fields of translation, transcription, teaching and education, language curators etc.

PROGRAMME SPECIFIC OUTCOME:

The course of BA in the English Language has been divided into one paper in an academic year:

PSO: BA/BSc/B Com Part-I – English Language and Indian Culture

The paper highlights ancient and old cultural traditions in Ancient India. The paper enables students to:

- To read and understand about Ancient and Old Indian culture and traditions
- Ancient Indian texts, myths and the impact of Ancient Indian culture on other cultures
- The age of Ramayana and Mahabharata and the impact of these epics in the development of the culture and traditions of the South-Asian countries
- Impact of Buddha and Buddhism in India and the neighbouring countries. Also, the development of Buddhism as a religion worldwide
- Ancient Indian Science and knowledge; India being the centre of literature and cultural exchange
- The old India and her boundaries, the rich heritage, the flourishing culture, Ancient Indian civilization, Harappa, Mohenjo-Daro and Indus-River Valley.
- The Ancient Indian Literature and the impact of the literature worldwide.

PSO: BA/BSc/B Com/BCA Part-II – Foundation English

The paper focuses on the Ancient Indian Science and the cultural ethics of India. The paper acquaints students with:

- The fine knowledge of Ancient India
- Ancient Indian Scientists, Mathematics and Mathematicians, medicines, medical practices and the ancient texts based on the same

- The colonial Indian culture and the impact of the colonization on the Indian sub-continent
- The introduction of Western Science and Western Culture
- Modern Indian scientists and the contribution of the Indians in the development of the Modern Science
- The basic knowledge of the language with the fine grammar, phonetics and the vocabulary
- Students will collect much information on the Science in Ancient India with the knowledge of the English language

PSO: BA/BSc/B Com/BCA Part-III – Aspects of English Language and Development

The paper is a collection of essays on the general information and awareness; also it helps students to advance in the language. Students also get glimpse of the English Literature with the collections of short-stories in the prescribed book. The textbook also helps students in:

- Collecting the information on the development and the advancement of the modern technique
- The geography of the state, soil, crops and water
- General information on the types of pollution and the increasing water crisis
- The ethics and conducts of the day-to-day life
- English language and the basic genres of the literature
- Famous essayists and short-story writers
- Famous Indo-Anglian and Anglo-Indian writers
- Texts describing the achievements of the modern Indians
- The development of modern science and technique in India
- Sci-fi and other such forms of the literature
- Also, the learners will develop a positive attitude towards the future and love for learning
- Advance grammar, sentence formation and vocabulary.

BCA PART – I
(COMMUNICATION SKILLS) &
BBA 1ST SEMESTER (ENGLISH)

OBJECTIVES OF THE PROGRAMME:

The college follows Hem Chand Yadav Vishwavidyalaya, Durg syllabus for the English Communication Skills. The objectives of the prescribed course are:

- The basic knowledge about English grammar, vocabulary, sentence formation with advance practical grammar
- To develop LSRW skills in learners.
- To encourage them towards further learning.
- To provide learners with a basic understanding of the English language.

PROGRAMME OUTCOME:

English being the second language in the state and the other in the official use and understanding nationwide the course of English Language programme hence ensures:

- Development of the curiosity and aesthetic sense towards the language
- Learning of the basic grammar
- Learning of the syntax and morphology of the language
- Use of the correct language
- Letter, essay and paragraph writing
- Ensures the learner read the other texts in the language

COURSE OUTCOME:

The paper Communication Skills for BCA Part-I is of maximum marks 80 and minimum pass marks of 27. The candidate has to get the minimum marks to pass the paper separately.

The English paper in BBA Semester-I have been designed to enable the students of management to speak and write with a fair degree of grammatical correctness. The paper is of maximum100 marks with an internal of 10 marks and external 90 for the semester exam. The candidate has to pass both in internal and external examination.

At the end of the course in the English Language the student can:

- **Read** and write the in the language
- **Acquisition -** Student will acquire knowledge and use of the language. Also, will sharpen their speaking skills.
- **Engage** them in the life-long learning process.
- **Write –** Student can write and describe his thoughts in the language
- **Understanding –** Students will develop an understanding of the less familiar texts and will read them more for the proper usage.

- **Description** – Students will able to describe the incidences and events in the language
- **Aesthetic Sense -** Students will develop an aesthetic sense and a sense of love towards the literature and learning.
- **Expressive -** The learning of the literature will make them more expressive and sharpen their communicative and artistic outlook.
- **Language –** Students will learn and use the language in their writings and will also able to create poetry and prose of their own.
- **Future Scope** – Students can secure their future in the fields of translation, transcription, teaching and education, language curators etc.

PROGRAMME SPECIFIC OUTCOME:

The course of BBA 1ST Semester (English) & BCA Part-I (Communication Skills) comprises of one paper in an academic year. The student will have knowledge regarding:

- The basic grammar usage
- The communication skills and the learning of the same
- Drafting of letters; formal, informal and editorial
- Paragraph writing and creating an essay
- Creative writing and creation of the conversation précis writing, presentation skills
- Advanced grammar and the basic knowledge of clauses, phrases and Modals
- Use of English idioms and finding errors in the sentences
- The correctness of the language
- English language learning and the basic errors in the pronunciation
- Write and create notice, circular minutes and agenda of meeting, memorandum,e-mail writing strategies, advantages, characteristics and formatting.
- Using video conferencing and fax as a source of learning.

हिन्दी विभाग

B.Com./B.Sc. /B.A./B.B.A.-II sem. – F.C. –I Paper- (Hindi Language) (आधार पाठ्यक्रम हिन्दी भाषा)

Program Outcomes (POs): कार्यक्रम परिणाम

बी ए / बी कॉम बी एस सी त्रिवर्षीय व बी बी ए द्वितीय सेमेस्टर कार्यक्रम में प्रवेश के इच्छुक विद्यार्थी कार्यक्रम की सफलता पूर्वक समाप्ति पश्चात हिंदी भाषा के विशेष संदर्भ में सक्षम बनता है।

पाठयक्रम का उददेश्यः–

उच्च शिक्षा में पाठ्यक्रमों को सामाजिक प्रासंगिकता देने के लिए विश्वविद्यालय अनुदान आयोग द्वारा अनुशंसित मार्गदर्शी सिद्धांतों के अनुसार आधार पाठ्यक्रम (हिन्दी भाषा) की शुरूवात हुई। जिसका उद्देश्य विद्यार्थियों में सम्प्रेषण कौशल के विकास के साथ ही साथ, विभिन्न विषयों की बुनियादी अवधारणाओं का ज्ञान तथा देश की संस्कृत, विरासत, भारतीय जीवन मूल्य और समाज व्यवस्था, राष्ट्रिय उपलब्धियों और विकास की दिशाओं के साथ विश्व के आधुनिक परिदृश्य का बोध जागृत करना है।

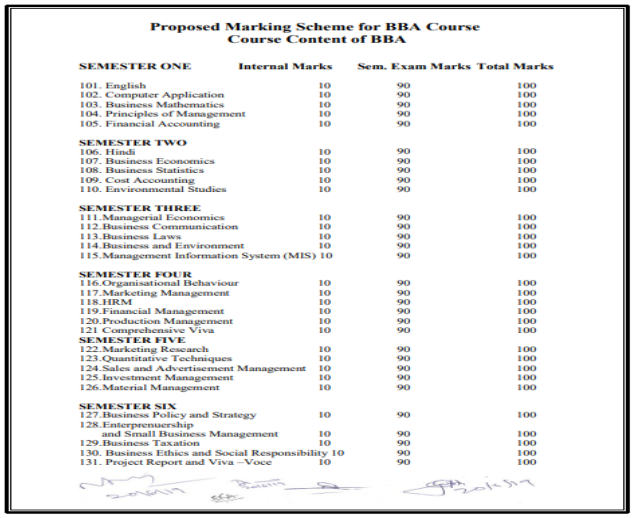
1. स्नातक स्तर पर विद्यार्थियों में संप्रेषण कौशल के विकास के साथ ही साथ विभिन्न विषयों की बुनियादी अवधारणाओं के लिए भाषा का अध्ययन अनिवार्य है।
2. कला के विद्यार्थियों में वैज्ञानिक विकास और समकालीन तकनीकी प्रगति की जानकारी देना है तो विज्ञान व वाणिज्य विद्यार्थी भारतीय साहित्य कला और संस्कृति की चेतना से परिचित कराना।
3. विद्यार्थियों में अंतर अनुशासनात्मक ज्ञान और चेतना के साथ एक समावेशी आधुनिक भाव बोध और समग्र जीवन दृष्टि का विकास हो सके।
4. ज्ञान, विषय, वस्तु, भारत की सांस्कृतिक विरासत, विज्ञान और विकासशील देशों की समस्याओं के माध्यम से ही हिंदी के भाषा ज्ञान संप्रेषण कौशल का विकास किया जाए ।
5. विद्यार्थी हिंदी के रूपों से परिचित हो सकें उन्हें अपने समकालीन सामाजिक और ऐतिहासिक परिवेश की चेतना भी विकसित हो सके।

Course Outcomes (COs): पाठ्यक्रम परिणाम

हेमचंद यादव विश्वविद्यालय दुर्ग द्वारा संचालित पाठ्यक्रम

Hemchand Yadav Vishwavidyalaya, Durg (C.G.)
SYLLABUS
B.COM. PART-I
GROUPING OF SUBJECTS AND SCHEME OF EXAMINATION

Subject		Max.	Min.
i) Environmental Studies Field Work	75 25	100	33
A. Foundation Course I. Hindi Language II. English Language		 75 75	 26 26
B. Three Compulsory Groups			
Group-I I. Financial Accounting II. Business Communication	75 75	150	50
Group-II I. Business Mathematics II. Business Reg. Framework	75 75	150	50
Group-III I. Business Environment II. Business Economics	75 75	150	50



Proposed Marking Scheme for BBA Course
Course Content of BBA

SEMESTER ONE	Internal Marks	Sem. Exam Marks	Total Marks
101. English	10	90	100
102. Computer Application	10	90	100
103. Business Mathematics	10	90	100
104. Principles of Management	10	90	100
105. Financial Accounting	10	90	100
SEMESTER TWO			
106. Hindi	10	90	100
107. Business Economics	10	90	100
108. Business Statistics	10	90	100
109. Cost Accounting	10	90	100
110. Environmental Studies	10	90	100
SEMESTER THREE			
111.Managerial Economics	10	90	100
112.Business Communication	10	90	100
113.Business Laws	10	90	100
114.Business and Environment	10	90	100
115.Management Information System (MIS)	10	90	100
SEMESTER FOUR			
116.Organisational Behaviour	10	90	100
117.Marketing Management	10	90	100
118.HRM	10	90	100
119.Financial Management	10	90	100
120.Production Management	10	90	100
121 Comprehensive Viva	10	90	100
SEMESTER FIVE			
122.Marketing Research	10	90	100
123.Quantitative Techniques	10	90	100
124.Sales and Advertisement Management	10	90	100
125.Investment Management	10	90	100
126.Material Management	10	90	100
SEMESTER SIX			
127.Business Policy and Strategy	10	90	100
128.Enterprenuership and Small Business Management	10	90	100
129.Business Taxation	10	90	100
130. Business Ethics and Social Responsibility	10	90	100
131. Project Report and Viva –Voce	10	90	100

1 हिंदी भाषा के व्याकरण नियमों को समझना ताकि बिना त्रुटियों के भाषा के उपयोग को विकसित किया जा सके।

2 समकालीन आवश्यकताओं के सहयोग से हिंदी भाषा व साहित्य को समझने के लिए ।

3 युवाओं के बीच हिंदी भाषा का उपयोग को बढ़ावा देना और प्रसार के लिए ।

4 प्रसिद्ध साहित्यकारों की दृष्टि से प्रेरणादायक जीवन दर्शन को विकसित करना ।

5 कार्यालयीन हिंदी के माध्यम से अधिकारी पत्र लिखने के कौशल को विकसित करना।

6 बुनियादी सूचना कौशल को अद्यतन और विस्तृत करने के लिए ताकि विद्यार्थी हिंदी कंप्यूटिंग के महत्व और संभावनाओं से परिचित हो सकें।

7 आईसीटी की मदद से भाषा के उपयोग को बढ़ाने के लिए ।

8 भारतीय संस्कृति और परंपरा के साथ हिंदी में संवाद कौशल और संप्रेषण की दक्षता अर्जित कर अखिल भारतीय और राज्य सेवाओं की प्रतियोगी परीक्षा में सम्मिलित हो सके।

9 पाठ्यक्रम को समाप्त करने के उपरांत निम्नलिखित परिणाम मिल सकते हैं

10 भारतीय भारतीय लोक सेवा आयोग की प्रतियोगिता मूलक परीक्षा में बैठने की योग्यता प्राप्त होना

11 अनुवादक के रूप में देश के प्रशासनिक व्यवस्था अथवा विविध क्षेत्रों में सहायक के रूप में नियुक्ति

12 रचनात्मक लेखन के द्वारा भारतीय संस्कृति और साहित्य के क्षेत्र में अपना योगदान दे सकते हैं।

13 इस पाठ्यक्रम के माध्यम से विभिन्न सरकारी उच्च सरकारी एवं गैर सरकारी संस्थान जैसे भारतीय रेलवे भर्ती बोर्ड, भारत संचार निगम लिमिटेड, भारतीय खाद्य निगम, संयुक्त रक्षा अकादमी, भारतीय इस्पात प्राधिकरण आदि पर कार्यरत हो सकते हैं

14 बैंकों में हिन्दी अधिकारियों की नियुक्ति तथा विभिन्न खेलों हेतु कमेन्टेटर की नियुक्ति।

16 फिल्म, दूरदर्शन, विज्ञापन, डिस्कवरी चैनल आदि में हिन्दी में डबिंग करने हेतु नियुक्ति।

16 कुछ बहुराष्ट्रीय कम्पनियों द्वारा हिन्दी भाषा के जानकारों को प्राथमिकता।

17 स्कूलों, महाविद्यालयो, विश्वविद्यालयों में हिन्दी अध्यापन–प्राध्यापन हेतु शिक्षकों–प्राध्यापकों के रूप में नियुक्ति।

Program Specific Outcomes(PSOs): कार्यक्रम विशिष्ट परिणाम

B.Com./B.Sc. /B.A.- I Year
F.C.- I Paper- (Hindi Language)
Paper Code –(0101)

उद्देश्य

पाठ्यक्रम संशोधन का औचित्य व्याकरण के बुनियादी ज्ञान संप्रेषण कौशल सामाजिक संदेश एवं भाषाई दक्षता को ध्यान में रखते हुए यह पाठ्यक्रम प्रस्तावित है।

1 पल्लवन संक्षेपण पारिभाषिक शब्दावली आदि के महत्व व उपयोगिता से अवगत कराना।
2 कहानी कविता व्यंग के माध्यम से साहित्य की विभिन्न विधाओं से अवगत कराना।
3 कार्यात्मक हिंदी उसके अनुप्रयोगों और अनुवाद प्रक्रिया से परिचित कराना।
4 सरकारी अथवा गैर सरकारी कार्यालयों में पत्र व्यवहार के विभिन्न रूपों से अवगत कराना।
5 देवनागरी लिपि की ऐतिहासिकता व वैज्ञानिकता से परिचित कराना।
6 कंप्यूटेशनल भाषा विज्ञान के माध्यम से इंटरनेट व नवीन तकनीक के उपयोग हेतु सक्षम बनाना।
7 हिंदी भाषा के मानक रूप व मानकीकरण की प्रक्रिया से परिचित कराना।

B.Com./B.Sc. /B.A.- II Year
F.C. – I Paper- (Hindi Language)
Paper Code –(0171)

उद्देश्य

पाठ्यक्रम संशोधन का औचित्य विद्यार्थी चर्चित एवं सुप्रसिद्ध व्यक्ति के लेख के माध्यम से समाज एवं राष्ट्र हित के साथ–साथ व्यक्तित्व विकास विषयक मुद्दों से परिचित हो सकें तथा व्याकरणिक एवं भाषा विषयक प्रस्तावित पाठ्यक्रम के माध्यम से हिंदी भाषा संबंधित प्रयोग पक्ष से परिचित होते हुए प्रतियोगी परीक्षाओं की दृष्टि से ज्ञानार्जन कर सकें (B.Com)

1 हिंदी भाषा को प्रशासन संचार जनमाध्यम और ज्ञान विज्ञान के विभिन्न अनुशासनो की भाषा रुपों से परिचित करना।
2 भाषा के व्यापारिक रचनागत और साहित्यिक संदर्भों को दृष्टिगत रखते हुए तथा छात्रों में ऐतिहासिक नैतिक वैज्ञानिक तथा सांस्कृतिक समझ विकसित करने की दृष्टि से साहित्य निबंध रूप को रखा गया।
3 विदेशी भाषा रूपों से विद्यार्थियों के लिए रोजगार की संभावनाओं में अभिवृद्धि होगी तथा हिंदी के भाषण अनुप्रयोगों का विस्तार भी होगा।
4 विद्यार्थियों में भाषा के व्यावहारिक, रचनागत एवं साहित्यिक संदर्भों को दृष्टिगत रखते हुए उनमें ऐतिहासिक, नैतिक, वैज्ञानिक तथा सांस्कृतिक समझ को साहित्य के निबंध रूपों के माध्यम से विकसित करना।
5 संज्ञा सर्वनाम विशेषण और क्रिया विशेषण संधि समास के द्वारा हिंदी का व्याकरणिक एवं व्यवहारिक ज्ञान प्रदान करना।

B.Com./B.Sc. /B.A.- III Year
F.C. – I Paper-(Hindi Language)
Paper Code –(0231)

उद्देश्य

आधार पाठ्यक्रम की संरचना और अनिवार्य पाठ्य पुस्तक हिंदी भाषा एवं समसामयिकी का संयोजन इस तरह किया गया है कि सामान्य ज्ञान की विषय वस्तु विकासशील देशों की समस्याओं के माध्यम आधार और साथ–साथ हिंदी भाषा का ज्ञान और उसके संप्रेषण कौशल अर्जित किया जा सके । इसी प्रयोजन से व्याकरण की अंतर्वस्तु को विभिन्न विधाओं की संगीत रचनाओं और सम्मान का ज्ञान की पाठ्य सामग्री के साथ अंतर्गत किया गया है । अध्ययन अध्यापन के लिए पूरी पुस्तक की पाठ्य सामग्री है और अभ्यास के लिए विस्तृत प्रश्नावली है। यह प्रश्न पत्र भाषा का है अतः पाठ्य सामग्री का व्याख्यात्मक या आलोचनात्मक अध्ययन अपेक्षित नहीं है। पाठ्यक्रम और पाठ्यक्रम सामग्री का संयोजन निम्नलिखित पांच इकाइयों में किया जाता है।

पाठ्यक्रम संशोधन का औचित्य निर्धारित पाठ का अध्ययन एवं हिंदी भाषा प्रयोग की व्यावहारि प्रणालियों से विद्यार्थियों को परिचित कराना तथा भाषा प्रयोग की सामान अशुद्धियों को दूर करने की दृष्टि से पाठ्यक्रम तैयार किया गया है विद्यार्थियों के लिए पाठ्यक्रम का विस्तार बहुत ज्यादा ना हो इसका ध्यान रखा गया है (B.Com)

1 हिंदी भाषा के प्रयोग अध्ययन तथा अधुनातन भाषा व्यवहारों की तथा वर्तमान भारत में विभिन्न क्षेत्रों के विकास के आयामों की जानकारी देना।

2 हिंदी भाषा और विकासशील देशों की समस्याओं से संबद्ध सामान्य ज्ञान के परिपेक्ष में हिंदी भाषा के संप्रेषण कौशल को प्राथमिक रूप में महत्व को ज्ञात करना।

3 शासकीय तथा व्यवहारिक भाषा ज्ञान हेतु कथन की शैलियां कार्यालय, पत्राचार तथा अनुवाद प्रतिवेदन निमंत्रण पत्रों के स्वरूपों को रचना गत एवं प्रयोग गत आधारों पर समझना।

4 भाषा एवं सामान्य ज्ञान के विषयों में एकरूपता लाने के लिए इनका अन्योन्याश्रित संयोजन भी अध्ययन एवं अध्यापक की सुविधा के लिए किया गया है।

B.B.A.-II sem.
F.C. –(Hindi Language)
Paper Code- 106

उद्देश्य

इस प्रश्न पत्र का उद्देश्य विद्यार्थियों का हिंदी भाषा से उसकी अंतर्गता बढ़ाना है उसे इसका अभ्यास हो की वह रुचि से हिंदी रचना के संसर्ग में आए और धीरे–धीरे उसके भीतर प्रवेश करें।

1 मानक हिंदी भाषा के विभिन्न रूपों तथा प्रकारों से परिचित कराना।

2 भाषा में होने वाली अशुद्धियों को जानना तथा उनका संशोधन।

3 हिंदी की शब्दरचना, शब्दप्रयोग तथा शब्दकोश में शब्द व अर्थ के संधान से अवगत कराना।

4 पत्र लेखन के माध्यम से व्यावसायिक निजी शासकीय और अशासकीय तथा आवेदन पत्र के विभिन्न प्रारूपों से परिचित कराना।

5 निबंध लेखन के माध्यम से समाज के ज्वलंत विषयों पर अपने विचारों की अभिव्यक्ति से रचनात्मक कौशल को विकसित करना।

B.A. – Hindi Literature (हिंदी साहित्य)

Program Outcomes (POs): कार्यक्रम परिणाम

बी ए हिंदी साहित्य त्रिवर्षीय कार्यक्रम में प्रवेश के इच्छुक विद्यार्थी कार्यक्रम की सफलता पूर्वक समाप्ति पश्चात सक्षम बनता है ।

1 हिंदी भाषा व हिंदी साहित्य के इतिहास व विकास से अवगत होना ।
2 हिंदी भाषा एवं उसकी बोलियों का ज्ञान तथा हिंदी व्याकरण से परिचित होना ।
3 गद्य विधाओं कहानी नाटक उपन्यास निबंध के माध्यम से भारतीय समाज धर्म दर्शन इतिहास व परंपरा का ज्ञान ।
4 समन्वयवाद के लिए छत्तीसगढ़ी भाषा व साहित्य की अनुकूलता को समझना ।
5 समकालीन आवश्यकताओं के सहयोग से हिंदी साहित्य का बोध ।
6 प्राचीन काल से आधुनिक युग तक हिंदी की अवधारणा का मूल्यांकन करने व साहित्य के माध्यम से समाज को और अधिक निकट से जानने व समझने में सक्षम ।
7 हिंदी साहित्य के अध्ययन के माध्यम से प्राचीन मध्ययुगीन व आधुनिक भारतीय समाज की सामाजिक आर्थिक और सांस्कृतिक परिस्थितियों से अवगत होना ।
8 हिंदी साहित्य के माध्यम से विद्यार्थियों में नैतिक मूल्य सामाजिक मूल्य व राष्ट्रीय मूल्यों के प्रति आस्था जागृत हुई ।
9 विद्यार्थियों में हिंदी भाषा व साहित्य को समझने अध्ययन आस्वादन और मूल्यांकन की क्षमता का विकास हुआ ।
10 हिंदी साहित्य की विभिन्न रचना व रचनाकारों का परिचय प्राप्त हुआ ।
11 हिंदी साहित्य विद्यार्थियों में सर्जनात्मक क्षमता व भावनात्मक विकास में सहायक है ।

Course Outcomes (COs): पाठ्यक्रम परिणाम

1 हिंदी साहित्य की विविध विधाओं से परिचित होना ।
2 साहित्य के पठन–पाठन के माध्यम से मूल्यों के महत्व को प्रदर्शित करना।
3 साहित्य और भाषा के माध्यम से सामाजिक मुद्दों का समाधान करना।
4 विभिन्न साहित्यकारों के व्यक्तित्व एवं कृतित्व से परिचित होना ।
5 विद्यार्थियों को हिंदी की मूल आधार भाषाएं तथा विभिन्न बोलियों से अवगत कराना ।
6 हिंदी भाषा व साहित्य से जुड़ी ऐतिहासिक सांस्कृतिक पारंपरिक साहित्यिक शैक्षणिक पृष्ठभूमि की यात्रा से परिचित कराना ।
7 पाठ्यक्रम द्वारा अवसरो की उपलब्धताः–
   1. सरकारी संस्थानों एवं सार्वजनिक उपक्रमों में हिन्दी अनुवादकों एवं हिन्दी अधिकारियों की नियुक्ति।

2. बैंकों में हिन्दी अधिकारियों की नियुक्ति तथा विभिन्न खेलों हेतु कमेन्टेटर की नियुक्ति।
3 पटकथा लेखक,संवाद लेखक, विज्ञापन लेखक के रूप में नियुक्ति।
5 प्रूफ शोधक, निवेदक और सूत्र संचालक के रूप में नियुक्ति।
6 प्रिंट मीडिया एवं इलेक्ट्रॉनिक मीडिया में विभिन्न पदों में नियुक्ति।
7 फिल्म, दूरदर्शन, विज्ञापन, डिस्कवरी चैनल आदि में हिन्दी में डबिंग करने हेतु नियुक्ति।
8 कुछ बहुराष्ट्रीय कम्पनियों द्वारा हिन्दी भाषा के जानकारों को प्राथमिकता।
9 स्कूलों, महाविद्यालयो, विश्वविद्यालयों में हिन्दी अध्यापन–प्राध्यापन हेतु शिक्षकों – प्राध्यापकों के रूप में नियुक्ति।

हेमचंद यादव विश्वविद्यालय दुर्ग द्वारा संचालित पाठ्यक्रम

SCHEME OF EXAMINATION

	Subject	Paper	Max. Marks	Min. Marks
	i) Environmental Studies		75	33
	Fild Work		25	
A.	Foundation Course			
	i) Hindi Language - I		75	26
	ii) English Language - II		75	26
B.	Three Core Subject :			
	1. Hindi Literature	I	75	50
		II	75	
	2. Sanskrit Literature	I	75	
		II	75	50
	3. English Literature	I	75	
		II	75	50
	4. Philosophy	I	75	
		II	75	50
	5. Economics	I	75	
		II	75	50
	6. Political Science	I	75	
		II	75	50
	7. History	I	75	50
		II	75	
	8. Ancient Indian History	I	75	50
	Culture & Archaeology	II	75	
	9. Sociology	I	75	50
		II	75	
	10. Geography	I	50	33
		II	50	
		Practical	50	17
	11. Mathematics	I	50	
		II	50	50
		III	50	
	12. Statistics	I	50	33
		II	50	
		Practical	50	17

Program Specific Outcomes (PSOs): कार्यक्रम विशिष्ट परिणाम

बी ए प्रथम वर्ष (हिंदी साहित्य)

प्रथम प्रश्न पत्र– प्राचीन हिंदी काव्य

(पेपर कोड– 0103)

उद्देश्य एवं प्रस्तावना

प्राचीन से तात्पर्य है आधुनिक काल से पूर्व का काल । सही अर्थ में हिंदी भाषा और साहित्य का विकास आदिकाल से शुरू होता है। इसमें धार्मिक तथा ऐतिहासिक दो प्रकार का साहित्य मिलता है जो प्रबंध, मुक्तक ,रासो, फागु, चरित, सुभाषित आदि विविध काव्यरूपों में अभिव्यंजित है। मध्यकालीन साहित्य की पृष्ठभूमि के रूप में इसे प्रतिष्ठापित किया जाता है । मध्यकालीन काव्य में भक्ति काव्य जहां लोक जागरण को स्वर देने वाला है वही रीतिकाल अपने अलौकिक श्रृंगारिका परिदृश्य में तत्कालीन सामाजिक, सांस्कृतिक, राजनीतिक स्थितियों को बेलौस अभिव्यंजित करता है। अतः भाषा, संस्कृति,विचार, मानवता, काव्यरूपता , लौकिकता– पारलौकिकता आदि दृष्टि से इसका अध्ययन अत्यावश्यक है।

1 प्राचीन काव्य के प्रति विद्यार्थियों के मन में अभिरुचि उत्पन्न करना ।
2 विद्यार्थियों के समक्ष मध्यकालीन काव्य की समकालीनता को स्पष्ट करना
3 कबीर के प्रगतिशील स्वरूप व साखियां की प्रासंगिकता का वर्णन अवगत होना।
4 मध्ययुग की साहित्यिक गतिविधियों से अवगत होना ।
5 प्राचीन हिंदी काव्य हिंदी साहित्य के तीन काल खंडों से परिचय कराता है।
6 मध्यकाल की काव्य प्रवृत्तियों एवं कवियों का संचयित किया गया है
7 सूरदास की कृष्ण लीला द्वारा जीवन– दर्शन का वर्णन।
8 भक्तिपंथ के साथ तुलसीदास की रामभक्ति का आस्वादन करना।

बी ए प्रथम वर्ष (हिंदी साहित्य)

द्वितीय प्रश्न पत्र – हिंदी कथा साहित्य

पेपर कोड–(0104)

उद्देश्य एवं प्रस्तावना

गद्य की प्रमुख विधाओं का द्रुत विकास इनकी लोकप्रियता का प्रमाण प्रस्तुत करता है। इसमें आधुनिक जीवन अपनी विविध कमियों के साथ यथार्थ रूप में अभिव्यंजित हुआ है। जीवन की अनुभूतियां संवेदनाओ तथा परिस्थितियों के साक्षात्कार के लिए इनका अध्ययन सर्वदा अपेक्षित है।

1 हिंदी कथा साहित्य के विकासयात्रा से अवगत होना।
2 यथार्थ के धरातल पर लिखी गई प्रेमचंद की कहानी जहां भारतीय समाज के कड़वे सच का दर्पण है वही गबन में टूटते मूल्यों के अंधेरे में भटकते मध्यवर्ग की

वास्तविकता से परिचय होता है।

3 आंचलिक कथा के माध्यम से कला के सम्मान की आकांक्षा व कलाकार के मानवीय संवेदना से साक्षात्कार होता है।

4 संचित कहानियों से मात्तृ– हृदय की वेदना ,भारत–पाकिस्तान विभाजन की त्रासदी, स्व के विसर्जन तथा निम्न मध्यम वर्ग के बदहाली जीवन से परिचित होते हैं।

5 विद्यार्थी प्रतिनिधि रचनाओं के द्वारा नारी के स्वतंत्र व्यक्तित्व उसका संघर्ष उसका स्वावलंबन तथा दांपत्य जीवन की विषमताओं अवगत हुए।

6 विद्यार्थी ने संचित कहानियों के माध्यम से जीवन के विभिन्न पहलुओं का व समस्याओं को समझना तथा समाधान ज्ञात किया।

7 प्रसिद्ध साहित्यकारों की रचनाओं के माध्यम से ग्रामीण– जगत व भारतीय जीवन की सच्चाई को चित्रित करने की कला से परिचित हुए।

बी ए द्वितीय वर्ष (हिंदी साहित्य)
प्रथम प्रश्न पत्र – अर्वाचीन हिंदी काव्य
पेपर कोड–(0174)

प्रस्तावना

आधुनिक काव्य आधुनिकता की विशेषताओं को समेटे हुए हैं । स्वतंत्रता प्राप्ति के पूर्व की भाव–भाषा, शिल्प ,अंतर्वस्तु संबंधी समस्त विकास धारा यहां सजीव रूप में देखी जा सकती है। इसे अनदेखा करना मनुष्य की विकास यात्रा को नजरअंदाज करना है इस यात्रा के साक्षात्कार के लिए आधुनिक काव्य का अध्ययन अपेक्षित ही नहीं अपितु अनिवार्य है ।

1 विद्यार्थियों को अर्वाचीन काव्य इस रचना विरोधी समय में अति उपभोक्तावादी विपत्ति और दैत्याकार टेक्नॉलॉजी की भूल भुलैया में फंसे हुए मनुष्य को उसकी स्थिति का एहसास कराती है ।

2 राष्ट्रप्रेम, राष्ट्रीय जागरण और समाज सुधार की चेतना की सुसंगत और व्यवस्थित काव्यात्मक अभिव्यक्ति संचित रचनाओं में देखी जा सकती है ।

3 विद्यार्थी अर्वाचीन काव्य में विविधता को भाषा ,शिल्प और कथ्य के स्तर पर विकसित नए प्रयोगों द्वारा ज्ञात कर सकते हैं।

4 छायावादी कवि सूर्यकांत त्रिपाठी निराला तथा प्रकृति के सुकुमार कवि सुमित्रानंदन पंत की के व्यक्तित्व एवं कृतित्व से परिचय होगा।

5 नई कविता के शलाका पुरुष अज्ञेय की आधुनिक सोच व तकनीक ने आत्मबोध को नए साहित्य में तथा व्यक्ति स्वतंत्रता को साहित्य की रचनात्मक संवेदना के केंद्र में स्थापित करने की चेष्टा का बोध होता है ।

6 विद्यार्थी को हरिऔध की प्रिय प्रवास रचना द्वारा विरहानुभूति व राधा कृष्ण के

लोकसेवक रूप के दर्शन होते हैं।

7 श्रीकांत वर्मा की मगध की कविताएं आत्ममंथन का मार्ग प्रशस्त कर मगध सत्ता और प्रतिष्ठान के समकालीन चरित्र को चित्रित कर उसकी त्रासदी का बखान करती हैं।

बी ए द्वितीय वर्ष (हिंदी साहित्य)
द्वितीय प्रश्न पत्र – हिंदी निबंध तथा गद्य विधाएं
पेपर कोड–(0174)

1 नाटक निबंध व एकांकी के विकास की विस्तृत जानकारी प्राप्त तथा नाटक व एकांकी के मध्य अंतर का स्पष्ट ज्ञान हुआ।

2 भारतेंदु का लोकप्रिय प्रहसन्न अंधेर नगरी में तत्कालीन ब्रिटिश स्वेच्छाचारी और सामंती व्यवस्था पर किये गये तीखे व्यंग्य का बोध तथा प्रहसन्न की संवाद योजना गीत व रंगमंचीयता को समझा जिसके कारण इसे नाचा,नौटंकी, यक्ष गान आदि विविध शैलियों में सुगमता से प्रस्तुत किया जा सकता है।

3 संचित एकांकियो मे डॉ रामकुमार वर्मा के ऐतिहासिक एवं मनोवैज्ञानिक एकांकी औरंगजेब की आखिरी रात के विषय को जाना, भुनेश्वर के प्रतिनिधि एकांकी स्ट्राइक में मध्यमवर्गीय दांपत्य जीवन की विडंबना और विरोधाभास का तीखा और प्रभावशाली चित्र देखने को मिला।

4 लक्ष्मी नारायण मिश्र के एक दिन एकांकी में आधुनिकता और परंपरा के द्वंद को,भट्ट जी के दस हजार एकांकी में समकालीन सामाजिक जीवन की विडंबना को तथा डॉक्टर लाल के सामाजिक एकांकी मम्मी ठकुराइन में नारी की स्वाभाविक हार्दिकता व संवेदनशीलता के लक्षण को देखा जा सकता है ।

5 आचार्य रामचंद्र शुक्ल के मनोविकार संबंधी निबंध क्रोध के सामाजिक स्वरूप की विस्तृत व्याख्या का बोध हुआ।

6 हजारी प्रसाद द्विवेदी ने जहां ललित निबंध वसंत आ गया है के माध्यम से प्रकृति की वसंतहीनता को देश की युवा पीढ़ी से जोड़ उनकी उमंगहीनता के कारणों को तलाशने का प्रयास किया, वही उस अमराई ने राम राम कही है ललित निबंध में उपभोक्तावादी मूल्यों से बिखरती हमारी नगरी संस्कृति को कैसे ग्रामीण मूल्यों द्वारा संरक्षण का सुझाव परिलक्षित होता है।

7 छत्तीसगढ़ी लोक नाट्य को विश्व में पहचान दिलाने वाले हबीब तनवीर के अवदान को जाना जा सकता है ।

बी ए तृतीय वर्ष (हिंदी साहित्य)
प्रथम प्रश्न पत्र–जनपदीय भाषा साहित्य छत्तीसगढ़ी
पेपर कोड–(0233)

प्रस्तावना

हिंदी केवल खड़ी बोली नहीं है बल्कि एक बहुत बड़ा भाषिक समूह है। हिंदी जगत में अनेक विभाषाएं, बोलियां और उपबोलियां विद्यमान हैं जिनमें पुष्कल साहित्य संपदा है । इनके सम्यक अध्ययन और अन्वेषण की आवश्यकता है । जनपदीय भाषा छत्तीसगढ़ी निरंतर विकास की ओर अग्रसर हो रही है अस्तु इस भाषा और इसमें रचित साहित्य का इतिहास विकास को स्पष्ट करते हुए इनसे संबंधित प्रमुख रचनाकारों का आलोचनात्मक अनुशीलन करना हिंदी के वृहत्तर हित में होगा।

1 प्रदेश की राजभाषा छत्तीसगढ़ी भाषा के इतिहास व विकास यात्रा से परिचित होना।

2 छत्तीसगढ़ी भाषा में रचित विपुल साहित्य संपदा को जानने व अध्ययन का अवसर प्राप्त।

3 छत्तीसगढ़ी भाषा के प्रमुख प्राचीन व अर्वाचीन रचनाकारों व उनकी कृतियों से परिचित होना।

4 छत्तीसगढ़ के कबीर कहे जाने वाले प्राचीन कवि संत धर्मदास के काव्य में सतगुरु की महत्ता व गुरु भक्ति की अभिव्यंजना के दर्शन करना।

5 श्री लखन लाल गुप्त के सोनपान निबंध के माध्यम से छत्तीसगढ़ के दशहरा पर्व की सांस्कृतिक छटा को ज्ञात किया जा सकता है।

6 सीख सीख के गोठ कविता के माध्यम से छत्तीसगढ़ी लोकोक्तियां कहावतों और मुहावरों का अध्ययन किया जाता है जो ग्रामीण जीवन में सीख की उपयोगिता को दर्शाती है।

7 छत्तीसगढ़ी साहित्य एवं अनुसंधान के विकास में डॉक्टर विनय पाठक के अवदान से अवगत होना।

8 छत्तीसगढ़ी गजल साहित्यकार मुकुंद कौशल, सुंदरलाल शर्मा, कपिल नाथ कश्यप तथा छत्तीसगढ़ी रंगकर्मी रामचंद्र देशमुख के व्यक्तित्व एवं कृतित्व से परिचित होना।

बी ए तृतीय वर्ष (हिंदी साहित्य)
द्वितीय प्रश्न पत्र – हिंदी भाषा साहित्य का इतिहास तथा काव्यांग विवेचन
पेपर कोड–(0234)

प्रस्तावना

हिंदी भाषा का इतिहास जितना प्राचीन है, उतना ही गु ढ़–गहन भी । इसमें रचित साहित्य ने लगभग डेढ़ हजार वर्षों का इतिहास पूरा कर दिया है इसलिए हिंदी भाषा और साहित्य के ऐतिहासिक विवेचन की बड़ी आवश्यकता है। इसी के साथ –साथ हिंदी ने अपना जो स्वतंत्र साहित्य शास्त्र निर्मित किया है, उसे भी रूपायित करने की आवश्यकता है। इसके संज्ञान द्वारा विद्यार्थी की मर्म ग्राहिणी प्रतिभा का विकास होगा और ऐतिहासिक परिपेक्ष्य में शुद्ध साहित्यिक विवेक का सन्निवेश होगा।

1 हिंदी भाषा का उद्भव– विकास एवं ऐतिहासिक पृष्ठभूमि से परिचित होना।
2 हिंदी की मूल आधार भाषाएं तथा विभिन्न भाषाओं के विकास से परिचित होना।
3 भारतीय आर्य भाषा के कालखंडों से अवगत तथा हिंदी की विभिन्न बोलियों के वर्गीकरण व क्षेत्र की जानकारी प्राप्त हुई।
4 हिंदी भाषा के विभिन्न रूपों व हिंदी शब्द भंडार परिचित होना।
5 विद्यार्थियों को हिंदी साहित्य के इतिहास के काल विभाजन,नामकरण संबंधित जानकारी प्राप्त हुई।
6 हिंदी के विभिन्न कालों की सामाजिक, सांस्कृतिक, राजनीतिक ,धार्मिक स्थिति तथा साहित्यिक पृष्ठभूमि से अवगत होना।
7 हिंदी साहित्य के विभिन्न कालों के प्रमुख रचनाकार व उनकी प्रतिनिधि कृतियों का तथा साहित्यिक विशेषताओं का बोध होना।
8 विद्यार्थियों को काव्यांग के अंतर्गत काव्य का स्वरूप, काव्य के तत्व व काव्य प्रयोजन का विवेचनात्मक अध्ययन द्वारा का विश्वास की जानकारी प्राप्त करें।

BACHELOR OF ARTS
(Subject: Political Science, Psychology, Music, Economics & Sociology)
First, Second &Third Year

OBJECTIVES OF THE PROGRAMME:

Shri Shankaracharya Mahavidyalaya Bhilai Established in the year 1997 and teaching Arts at under-graduate level i.e. for First B.A. since 2016-2017. Department of Arts started with the subjects Sociology, Political Science, Economics and Hindi Literature. Psychology, English Literature and Music are added in the session 2018-2019. The aim of department is to aware students about their socio-economic status, human right and health.

The college follows Hemchand Yadav University, Durg syllabus for under graduate arts courses. The objectives of the prescribed courses are:

1. To spread the constitutional values like democracy, Secularism, Fraternity and Equality among the student.
2. To create awareness among the students about social, political, economical, psychological, literature and musical.
3. To provide updated information in preparation for higher studies, all types of competitive examination.
4. To make civilized citizen of India

The Arts Department provides Student with a learning experience that will equip them to face the challenges of an increasingly complex job market and prepare them to become active and engaged citizen at the local, National and International levels. It will make them ready to learn:-

- Indian democratic, Economic and Social values
- To cultivate knowledge about Indian Social culture thought.
- To give information related to Indian Administration system and International Political, Social and Economical.
- By making significant role in the area of research work particular from rural and tribal areas.

PROGRAMME OUTCOMES

The Programme represent the knowledge, skills and attitudes the students should have at the end of a degree. The programmes under Arts faculty are broadly categorized into Languages and Social Sciences.

PO:1- Specific, measurable statements of what graduating/existing students should know, be able to do , believe or value after completing the programme.

PO:3- Students summarize language acquisition theory and research.

PO:4- Students evaluate pedagogical materials.

PO:6- Demonstrate proficiency in a range of techniques and media.

PO:7- Communication: Demonstrate familiarity with and ability to analyze both verbally and in writing issues and forms of contemporary art with a clear understanding of historical precedents.

PO:8- Critical Thinking: Demonstrate the ability to articulate an insightful response and analysis of a work of art in order to participate in discussions and studio critiques.

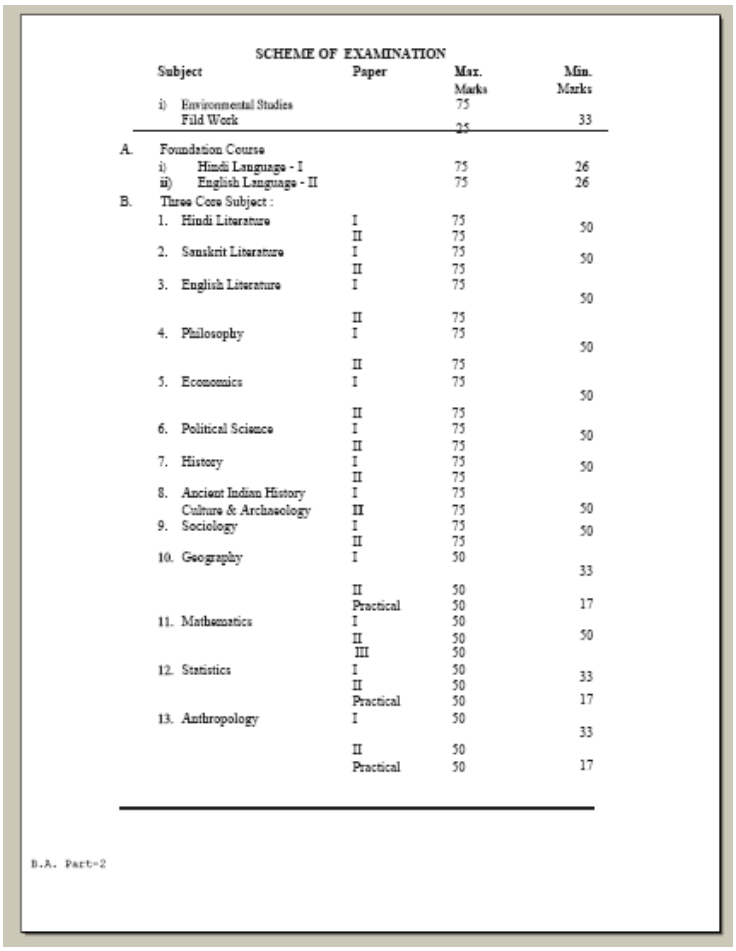
B.A.-I

SCHEME OF EXAMINATION

	Subject	Paper	Max. Marks	Min. Marks
	i) Environmental Studies		75	33
	Fild Work		25	
A.	Foundation Course			
	i) Hindi Language - I		75	26
	ii) English Language - II		75	26
B.	Three Core Subject :			
	1. Hindi Literature	I	75	50
		II	75	
	2. Sanskrit Literature	I	75	50
		II	75	
	3. English Literature	I	75	50
		II	75	
	4. Philosophy	I	75	50
		II	75	
	5. Economics	I	75	50
		II	75	
	6. Political Science	I	75	50
		II	75	
	7. History	I	75	50
		II	75	
	8. Ancient Indian History	I	75	50
	Culture & Archaeology	II	75	
	9. Sociology	I	75	50
		II	75	
	10. Geography	I	50	33
		II	50	
		Practical	50	17
	11. Mathematics	I	50	50
		II	50	
		III	50	
	12. Statistics	I	50	33
		II	50	
		Practical	50	17

	Subject	Paper	Max. Marks	Min. Marks
13.	Anthropology	I	50	33
		II	50	
		Practical	50	17
14.	Linguistics	I	75	50
		II	75	
15.	Music	I	50	33
		II	50	
		Practical	50	17
16.	Home Science	I	50	33
		II	50	
		Practical	50	17
17.	Education	I	75	50
		II	75	
18.	Psychology	I	50	33
		II	50	
		Practical	50	17
19.	Management	I	75	50
		II	75	
20.	Defence Studies	I	50	
		II	50	33
		Practical	50	17
21.	Urdu	I	75	50
		II	75	
22.	Dance	I	50	33
		II	50	
		Practical	50	17

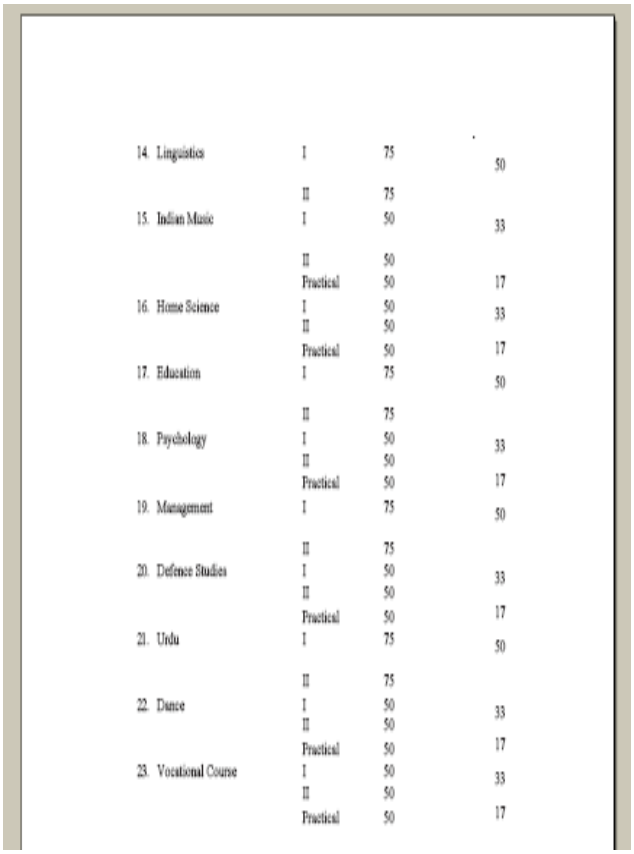
B.A.-II



SCHEME OF EXAMINATION

	Subject	Paper	Max. Marks	Min. Marks
	i) Environmental Studies		75	
	Fild Work		25	33
A.	Foundation Course			
	i) Hindi Language - I		75	26
	ii) English Language - II		75	26
B.	Three Core Subject :			
	1. Hindi Literature	I	75	50
		II	75	
	2. Sanskrit Literature	I	75	50
		II	75	
	3. English Literature	I	75	50
		II	75	
	4. Philosophy	I	75	50
		II	75	
	5. Economics	I	75	50
		II	75	
	6. Political Science	I	75	50
		II	75	
	7. History	I	75	50
		II	75	
	8. Ancient Indian History Culture & Archaeology	I	75	50
		II	75	
	9. Sociology	I	75	50
		II	75	
	10. Geography	I	50	33
		II	50	
		Practical	50	17
	11. Mathematics	I	50	50
		II	50	
		III	50	
	12. Statistics	I	50	33
		II	50	
		Practical	50	17
	13. Anthropology	I	50	33
		II	50	
		Practical	50	17

B.A. Part-2



14. Linguistics	I	75	50
	II	75	
15. Indian Music	I	50	33
	II	50	
	Practical	50	17
16. Home Science	I	50	33
	II	50	
	Practical	50	17
17. Education	I	75	50
	II	75	
18. Psychology	I	50	33
	II	50	
	Practical	50	17
19. Management	I	75	50
	II	75	
20. Defence Studies	I	50	33
	II	50	
	Practical	50	17
21. Urdu	I	75	50
	II	75	
22. Dance	I	50	33
	II	50	
	Practical	50	17
23. Vocational Course	I	50	33
	II	50	
	Practical	50	17

BA-III

SCHEME OF EXAMINATION

	Subject	Paper	Max. Marks		Min. Marks
A.	**Compulsory Subject - Foundation Course :**				
	Hindi Language	I	75		26
	English Language	I	75		26
B.	**Three Core Subject :**				
1.	Hindi Literature	I	75		
		II	75	150	50
2.	Sanskrit Literature	I	75		
		II	75	150	50
3.	English Literature	I	75		
		II	75	150	50
4.	Philosophy	I	75		
		II	75	150	50
5.	Economics	I	75		
		II	75	150	50
6.	Political Science	I	75		
		II	75	150	50
7.	History	I	75		
		II	75	150	50
8.	Ancient Indian History	I	50		
	Culture & Archaeology	II	50	100	50
			Practical	50	17
9.	Sociology	I	75		
		II	75	150	50
10.	Geography	I	50		
		II	50	100	50
			Practical	50	17
11.	Mathematics	I	50		
		II	50	150	50
		III	50		
12.	Statistics	I	50		
		II	50	100	33
			Practical	50	17

	Subject	Paper		Max. Marks	Min. Marks
13.	Anthropology	I	50	100	33
		II	50		
			Practical	50	17
14.	Linguistics	I	75	150	50
		II	75		
15.	Indian Music	I	50	100	33
		II	50		
			Practical	50	17
16.	Home Science	I	50	100	33
		II	50		
			Practical	50	17
17.	Education	I	75	150	50
		II	75		
18.	Psychology	I	50	100	33
		II	50		
			Practical	50	17
19.	Management	I	75	150	50
		II	75		
20.	Defence Studies	I	50	100	33
		II	50		
			Practical	50	17
21.	Urdu	I	75	150	50
		II	75		

USE OF CALCULATORS

The Students of Degree/P.G. Classes will be permitted to use of Calculators in the

BACHELOR OF ARTS

POLITICAL SCIENCE

First, Second &Third Year

Course Outcome:

01 Students will be able to access the primary literature, identify the relevant work for particular topic and evaluate the content of this study.
02 Establish the ideal political system and encourage students to participate in awareness programme.
03 The students should know the importance of democracy as the back bone of the nation.
04 Understand Constitutional Framework of state and central government.
05 Know about Right to Information Act.
06 Understand the basic concepts of political theories
07 Study the fundamental right and duties in reality
08 Analyze the thoughts of Political Thinkers.
09 To analyze the source and making of Constitution and understand the objectives of constitution.
10 To understand the importance of Preamble of the Constitution, Fundamental Rights, Directive Principles of State Policy
11 To analyze the working of the Union Executive - President, Vice-President, Prime Minister, Council of Ministers; State Executive- Governor, Chief Minister and Council of Ministers.
12 To understanding the working of the Union Legislature- Parliament-Composition and Functions and the Composition and functioning of the State Legislature-Vidhan Sabha; Panchayati Raj Institutions
13 To analyze the working of Judiciary-Supreme Court, High Courts, Judicial Review and Judicial
14 To Analyze the Federalism and its Working with reference to Centre-State Relations
15 To understand demand for State Autonomy; Emerging Trends in Indian Federalism.
16 To understand the working of Election Commission, Electoral Process and its defects and Voting Behavior, Electoral Reforms, Problem of Defection.
17 To analyze the Party System in India: National and Regional Political Parties, Interest and Pressure Groups.
18 Role of Caste, Religion, Language, Regionalism in India, Politics of Reservation, Emerging Trends and Challenges before Indian Political System.

PROGRAMME SPECIFIC OUTCOME:

The course of B A First Year Political Science has been divided into two papers:-

PSO 01 B.A – I Paper - 1 Political Theory

1. Understanding the origin and nature of State.
2. Assessing the social issues from the political perspective.
3. Becoming a leader of the nation with actual constitutional knowledge.
4. Have a wide variety of positions: One can work as a political advisor, a policy maker, a political journalist
5. It helps to know the political activities taking place in other countries and its impact on own nation.
6. One can be able to make a substantially critical and scientific contribution to government and society.

PSO 02 B.A – I Paper - II State Government and Polity

1. Political Science goes beyond the politics carried out in a national social system.
2. Political Science helps to understand the concept and origin of power and different types of power relationships.
3. In each and every field of society there is politics (e.g. in sports club in companies, in the pub, even in the relationship of couples).
4. It raises many questions: who decides? Who has more influence? How are the decisions being made? What are the consequences of a decision?
5. Raising questions is not enough: A political scientist also tries to find the answers in a responsible, scholarly and scientific way.
6. It makes to understand the inter-connection between local, state, national and international politics.

PSO 03 B.A – II Paper – I Western Political Thought

1- Providing an insight into the dominant features of Ancient Western Political Thought: Ancient Greek political thought with focus on Aristotle and Plato; Roman Political Thought: its contributions with special emphasis on the emergence of Roman law.
2- Examining the features of Medieval Political Thought
3- Evaluating the Renaissance; political thought of Reformation; and Machiavelli.
4- Critically examining Bodin's contributions to the theory of Sovereignty; Hobbes as the founder of the science of materialist politics; Locke as the founder of Liberalism with focus on his views on natural rights, property and consent; and Rousseau's views on Freedom and Democracy; Bentham's Utilitarianism; and John Stuart Mill's views on liberty and representative government.
5- Taking an insight into the following: Hegel's views on Civil Society and State; Utopian and Scientific socialism: basic characteristics.
6- Examining the varieties of non-Marxist socialism: Fabianism, Syndicalism, Guild Socialism, german revisionism.

PSO 04 B.A – II Paper – II Comparative Governance and Politics

1 Understanding the nature and developments in national and international politics
2 Analyzing the Indian constitutional provisions, major legislations and reforms.
3 Critical evaluation of social, economic and political variables for a proper understanding of the plurality of Indian society
4 Building overall consciousness regarding national political history, international relations and present Indian and Western political thinkers.
5 Encouraging a comprehensive, comparative understanding of specific world constitutions such as UK, USA, China, Russia, Switzerland and France.
6 Developing knowledge of administrative studies with special reference to Indian administrative structures and practices.
7 Examining India's foreign relations with her neighbors and great powers.
8 Use of case study method for analyzing the working of important international and regional organizations like UN, EU, ASEAN

PSO 05 B.A – III Paper – 1 International Politics

1- Explaining scope and subject matter of International Relations as an autonomous academic discipline.
2- Approaches and methods to study the discipline through Political realism, Pluralism and Worlds system's Model.
3- Examining the issues of Underdevelopment, Terrorism, Regionalism and Integration that characterizes the Post Second World War order.
4- Studying the role of Diplomacy, Propaganda and Military capabilities in the making of foreign policy.
5- Explaining certain basic concepts like Globalization in contemporary world order.
6- Describing the Cold War phases and understanding the post-cold war era.
7- Discussing the developments in European Ethno-nationalism since 1990's. Tracing the growth of European Union
8- Examining Indian Foreign Policy: Basic Principles, Evolution and Bilateral Relations.
9- Evaluating the working of UN and its organs; Peace keeping Function and Human Rights.
10- Analysing the Foreign Policy of USA and China.
11- Studying the developments in third world countries in post-world war II era like NAM: Relevance, ASEAN, SAFTA and SAARC, OPEC, OAU, West Asia-Palestine problem after Cold War.

PSO 06 B.A. – III Paper - 2 Public Administration

1- Explaining the nature, scope and evolution of Public Administration; Private and Public Administration; Principles of Socialist Management.
2- Discussing making of Public Policy Making and methods of Implementation
3- Analyzing the major Concepts in Public Administration.
4- Tracing the Challenges in the discipline of Public Administration like New Public Administration (NPA); Comparative Public Administration (CPA) and Development Administration
5- Discussing the Ecological approach to Pub. Adm.
6- Analyzing the Administrative Processes: decision making; communication and control; leadership; co-ordination.
7- Discussing Weber an and Marxian theories of bureaucracy
8- Studying the Organization of the Union Government and State Government.
9- Examining the Institutions of Local Self Government in India
10- Assessing the relationship between the Citizen and Administration: Lokpal and Lokayukt.
11- - Understanding the concept of District Administration in India.
12- Examining the Institutions of Financial Administration in India.
13- Analyzing the Civil Service in India.
14- Explaining the Planning and Planned Administration in India. Continuity and Change in Indian Administration.

BACHELOR OF ARTS

PSYCHOLOGY

First, Second &Third Year

Course Outcome

Enhancement of stress management skills. Enhancement of coping skill with different problems in life. Enabling to measure attitude, aptitude, interest, adjustment, skills etc. within the people. Introduction to counseling process and techniques. Illustration of mental disorder and treatment.

PSO-1. B.A. –I PAPER – I Basic Psychology Processes

1 Making familiar with the foundations of Psychology.
2 Acquaintance with cognitive process, states of consciousness and learning.
3 Acquaintance with memory processes.

PSO-2 B.A. –I PAPER – II Psychopathology

1 Getting acquainted with field of psychopathology.
2 Introduction to various models of abnormality.
3 Knowing about the nature, types and perspectives of Anxiety and disorders of childhood and adolescence.

PSO-3. B.A.II Paper –I Social Psychology

1. Understanding the social process.
2. Understanding the social perception.
3. Acquaintance with the knowledge of Interpersonal Attraction
4. Understanding the Processes of Aggression.

PSO-4 B.A.II Paper –II Psychological Assessment

1 Introduction to the field of psychological testing in general.
2 Acquaintance with the nature and uses of psychological test
3 Understanding the nature and other description of intelligence test, ability tests and personality tests.

PSO- 5 B.A. III Paper –I Psychological Statistics

1 Introduction to the field of cognition in general.
2 Understanding the process of attention, perception, reaction time and learning.
3 Acquaintance with memory.
4 Introducing Psychological experiments.
5 Imparting the knowledge and skills for conducting experiments and writing their reports.
6 Introducing some statistical methods

PSO- 6 B.A. III Paper –II Human Development

1 Understanding the beginning process of life.
2. Knowledge about the Prenatal, Infancy and childhood developmental Processes
3 Understand the development processes of Adolescence, early Adulthood, Middle Adulthood and Late Adulthood
4 Introduction to the field of counseling Psychology.
5 Comprehending the applications of counseling Psychology in the fields of career, marriage, couple and family Counseling

BACHELOR OF ARTS

MUSIC

First, Second &Third Year

Course Outcome:

On the completion of the course the students are able to: Study Ragas – Yaman, Kaffi, Durga, Bilawal, Bhupal, Bhairavi, Bindrawano, Sarang, to compose and play classical and semi classical songs.Stand and understand Talas like Tritals, Ektal, Chantal, Japtal, tilwada, dadara, Kerawa to give melody and harmony to the musical compositions. Learn folk Music and light music to understand and Preserve the same. Develop the skills of reading and writing of notations of songs – Bandish. To get asquint with different Gharanas of Music and the to develop historical sense of music

PSO -1 BA-I Theory -I

1 The student will be able to explain the major theories of Music and perform all major and minor tanpura.

2 The student will be able to Get acquaint with the knowledge of musical composition.

3 The student will be able to Study the theoretical details of ragas and talas with their practical performance.

4 The student will be able to Study the contribution of the renowned musicians.

5 The student will be able to develop the technical skills of musical performance with harmony

PSO -2 BA-I Theory -II

1 The student will be able to give a practical demonstration of ragas for a period of at least half an hour

2 The student will be able to demonstrate various aspects of ragas and their differentiation.

3 The student will be able to know about the theoretical aspects of the prescribed ragas

4 The student will be able to learns to write the practical compositions according to the Notation system

5 The student will be able to understands the basic terminologies of Indian music

PSO -3 BA-II Theory of Indian Music Vocal/ Instrumental - 1

1 The student will be able to learn about the music in the Vedic period, and also studies the works of music scholars of the past.

2 The student will be able to studies about the Gharanas of Hindustani music

3 The student will be able to makes an analytical study of various musical forms of Hindustani music and Karnatak

4 The student will be able to music studies about the theoretical aspects of the prescribed ragas

PSO -4 BA-II Theory of Indian Music Vocal/ Instrumental - 2

1 The student will be able to studies about the compositional forms and notation systems of Hindustani music

2 The student will be able to studies about the life and contribution of the composers of Hindustani music, Western music and Karnatak music

BACHELOR OF ARTS
ECONOMICS
First, Second &Third Year

Course Outcomes
On the completion of the course student will be able to:
1: Understand the fundamental concepts of Economics
2: Understand the theory of Production and Cost
3: Understand the process of commercial and central Banking
4: Study economic development and economic growth
5: Study Environment, ecology and pollution control.

PSO -1 BA-I Paper-I Micro Economics

1. Micro economics knowing the decision making of consumer.
2. Identifying the nature of revenue and cost of production.
3. Comprehending the demand function and production function.
4. Realizing various production theories.
5. Clarifying the meaning of Marginal, average, total revenue,
6. Marginal, average and total cost and its implication. Awareness of different markets structure.
7. Understanding pricing in different markets.
8. Judging the factor pricing.

PSO -2 BA-I Paper-II Indian Economy

1. Understanding characteristics, features, structural changes in Indian Economy.
2. Economy Comprehension of the nature and impact of New Economic Reforms on The Indian Economy.
3. Knowing the problems of unemployment, poverty, rising economic.
4. Social inequality and problems of regional imbalances in India.
5. Evaluating the changing role of agriculture, industrial and service sector.

PSO -3 BA-II Paper-I Macro Economics

1 Macro Economics identifying the basic concepts and theories of macro-economics.
2 Awareness about changing macro-economics policies and theories.
3 Understanding various concepts such as; GDP, GNP NNP, Personal
4 Income, Disposable Income, Per Capita Income, and National Income. Identifying the factors determining gross domestic product, employment
5 The general level of prices, and interest rates.
6 Realizing the law of markets, consumption function and investment
7 Function. Judging the role of fiscal policy and monetary policy in a Developing
8 Knowing features, phases and theories of trade cycles.
9 Evaluating types, merits and demerits of taxes.
10 Comprehending the role of public finance in developing economy.

PSO -4 BA-II Paper-II Money Banking and Public Finance

1. Understanding the meaning, function and role of commercial banking.

2. Comprehending the procedure of an account opening, operating and closing
3. Knowing the structure, function and role of RBI in economic development.
4. Judging the progress of financial inclusion.
5. Evaluating the importance, characteristics and components of the financial Market.

PSO -5 BA-III Paper-I Development and Environmental Economics

1. Understanding the role and types of development banks and non-banking financial intermediaries.
2. Identifying recent trends in Indian Banking such as E- Banking, MICR.
3. Understanding the efficiency and equity implications of market interference, including government policy.
4. Developing research knowledge in economics.
5. Developing the knowledge about theories of economic growth and development policies.

PSO -6 BA-III Paper-II Statistical Methods

1. Research Methodology understanding the basic framework of research process.
2. Defining various research designs and techniques.
3. Identifying various sources of information for literature review and data collection.
4. Discussing the ethical dimensions of conducting applied research.
5. Appreciating the components of scholarly writing and evaluate its quality.
6. Knowing various aspects of Research in Economics.
7. Understanding various data analysis techniques (Mean, Mode, Median, Range, Standard Deviation, Karl person coefficient of correlation).
8. Ability to interpretation of data and report writing.

MASTER OF ARTS
ECONOMICS
I & II SEMESTER

CORSE OUTCOME:

On completion of the course, Students will be able to:

- ✓ Understand the concept of Globalization.
- ✓ Understand concept of budget and deficit finance.
- ✓ Understand economics of Agriculture.
- ✓ Understand Micro and Macro-economic analysis.
- ✓ Understand classical and Keynesian theories of output and employment.
- ✓ Detailed study of Inflation and Business Cycles

M.A. SEMESTER-I and SEMESTER-II

PAPER	SEMESTER-I	Marks		SEMESTER-II	Marks	
		Theory	Internal Assessment.		Theory	Internal Assessment
PAPER-I	Micro Economics-I	80	20	Micro Economics-II	80	20
PAPER-II	Macro Economics-I	80	20	Macro Economics-II	80	20
PAPER-III	Quantitative Methods	80	20	Research Methods & Computer Application	80	20
PAPER-IV	Indian Economy	80	20	Indian Economic Policy	80	20
PAPER-V	Industrial Economics	80	20	Labour Economics	80	20

PROGRAMME OUTCOMES:

Upon completion of the B.A. Degree Programme, the graduate will be able to:-

1. The students should be able to analyze the socio-political and economic issues related to national and international scenario.
2. Apply supply and demand analysis to examine the impact of government regulation.
3. Curriculum helps to create the capacity to Work effectively in a multi-disciplinary environment.
4. The students should able to find a career in Economics.
5. The students should be able to understand how the economic policies affect the common people through the societal interactions.
6. Understand the circular flow model and use the concepts of aggregate demand and aggregate supply to analyze the response of the economy to disturbances.

PROGRAMME SPECIFIC OUTCOMES:

SEMESTER – I

PSO-1 Subject- Micro Economics I

1. Students should be able to develop knowledge about production, demand, market and pricing.

2. Students should be able to develop knowledge about monetary policy and its implications in economy.
3. Students should be able to develop knowledge about economic planning in India and recent changes in our economy.
4. Gain knowledge regarding the implications of mathematical tools in economic planning.

PSO-2 Subject- Macro Economics I

- ✓ Concepts and methods of National income accounting.
- ✓ Theories of aggregate income and employment.
- ✓ Theories of consumption function and investment spending.
- ✓ Rate of interest- Classical, Keynesian and IS-LM Model.
- ✓ Basics of international trade -open economy and closed economy, balance of payments.

PSO – 3 Subject- Quantitative Methods

- ✓ 1 Basic concepts of statistics such as measures of central tendency, dispersion, skewers and kurtosis.
- ✓ 2 Elementary probability theory including probability distributions.
- ✓ 3 Methods of sampling and census.
- ✓ 4 Correlation and simple regression
- ✓ 5 Index numbers.

PSO-4 Subject- Indian Economy

1. Students should be able to develop knowledge about the role of International trade in economic.
2. Helps to understand the basic theories of economic growth and development.
3. Students should be able to develop knowledge about the recent trends in banking trends.
5. Students will understand the use of mathematics and statistics in economic analysis.

PSO-5 Subject- Industrial Economics

1. Classical trade theories- Adam Smith's absolute advantage, Ricardo's comparative advantage, Neo-classical models, offer curve, Huckster-Ohlin theorem.
2. Terms of trade and gain from trade, Perish-Singer views on deterioration of terms of trade, Myrdal's theory of backwash effect and growth
3. International trade policy- free trade and protection, globalization, capital movements
4. Foreign exchange markets, exchange rates, balance of payments
5. Evolution of international monetary system.

SEMESTER –II

PSO- 1 Micro Economics II

1. To analyse the cost conditions of the industries
2. To understand the decision making in market
3. To understand the concept of input output analysis
4. To give awareness about the market conditions

5 To insist an entrepreneurial skill among the students

6. To provide an idea about how externalities affect the market
7. To introduce the general equilibrium concept
8. To make aware how decision making leads to social welfare
9. To provide an idea about how lemon market influence the general market
10. To provide an idea about distribution theory

PSO-2 Macro Economics II

1. To provide knowledge about monetary transactions
2. To understand the theories of inflation
3. To understand about the unemployment problem
4. To understand about the macro economic principles
5 To provide knowledge about business cycle
6. To provide knowledge about goods market and money market equilibrium

PSO-3 Research Methods and Computer Application

1. To introduce the basic principles of fiscal economics
2. To understand the difference between public and private finance
3. To understand the source of public expenditure
4. To understand the source of public revenue
5. To make awareness about budget preparation

PSO-4 Subject- Indian Economic Policy

1. Students should be able to develop knowledge about the role of International trade in economics.
2. Helps to understand the basic theories of economic growth and development.
3. Students should be able to develop knowledge about the recent trends in banking trends.
4. Students will understand the use of mathematics and statistics in economic analysis.

PSO-5 Subject- Labour Economics

- ✓ Analyse the nature and scope and significance of labour markets in developing countries.
- ✓ Analyse the nature and scope of Industrial Relations
- ✓ Describe the different theories of wage determination
- ✓ Analyse the level of discrimination in labour market in India
- ✓ Restate the concept of social security and social insurance
- ✓ Analyse the impact of economic reforms on labour market.
- ✓ Describe the evolution of machinery for labour administration in India
- ✓ Restate and analyse the origin of International labour organization
- ✓ Knowledge about labour problems and helps to develop employability skill

Bachelor of Arts
Sociology
(B.A. PART – I, II & III)

OBJECTIVES OF THE PROGRAMME:

The college follows Hemchand Yadav Vishwavidyalaya, Durg syllabus for Bachelor of Arts. The objectives of the prescribed course is:

- To spread origin and development of sociology to students and familiarisation with fundamental concepts of sociology.
- To provide knowledge of traditional and contemporary social structure and problems of Indian society.
- To providing knowledge about crime which are happening in modern society.
- To broad analysis of tribal society and a distinct study of major tribes of Chhattisgarh.
- To share knowledge of the methods of social research.

COURSE OUTCOME:

At the end of the BA course with subject Sociology the student will be able:

- To acquire sociological knowledge by understanding basic concepts in sociology
- To other disciplines this will be an initiation to develop sociological imagination and to look beyond their immediate surroundings
- To understand the social processes and study of society.
- To reflect on the issues and changing trends in Indian society.
- To perceive the adaptive experiences by social groups in villages, towns, cities, and regions. Students will understand how the basic social units of family, caste, and community are intimately connected with one another and with other social units through social and cultural networks of various kinds that incorporate the social units into the complex structure of Indian society. Within this broadened conception of Indian society, students will be prepared to trace the changing relations of politics, and economics
- To introduce to the language and logic of research design in order to provide with a good foundation for future learning
- To learn first-hand about the successes and problems of research by trying out data collection method on a small scale

SCHEME OF EXAMINATION

There are two papers in the subject Sociology in an academic year. Each paper carrying maximum marks of 75 and minimum passing marks will be 50 of the total.

PROGRAMME OUTCOME:

The BA with subject Sociology ensures:

- To develop a strong foundation of sociology as a distinctive discipline in Social Science arena, its nature, scope and relationship.
- To understand the significance of sociology in studying human societies with variable features and attaining different positions across a variable continuum of stages of technological, economic and social development and change.
- To conceptualize the process of social change, development of modern organizations, and the importance of demography in bringing about social change.
- To understand the methodology of sociological research, its importance and application of different approaches to understand, analyze and resolve social issues for a better life in society as a whole.

PROGRAMME SPECIFIC OUTCOME:

The course of BA in subject sociology has been divided into two papers:

PSO 01: BA Part I – Paper I – Introduction to Sociology- (0115)

The paper covers the course of sociology and acquire knowledge regarding:

- Sociological meaning, Nature, Scope, subject matter and significance and its basic concept
- Social Institution: Marriage, Family and kinship. culture, socialization social control, norms and values
- Social Stratification, Social Mobility
- Social Change
- Social System and Process

PSO 01: BA Part I – Paper II – Contemporary Indian Society (0116)

- Classical View about Indian Society
- The Structure and Composition of Indian Society
- Basic Institution of Indian Society
- Familial Problems
- Social Problems

PSO 02: BA Part II – Paper I – Society in India (0185)

The paper prepares students in the field of society with brief knowledge of Indian Societal Problem and Solutions

- View about Indian Society in the Classical views, dharma field views
- The Structure and Composition of Indian Society
- Basic Institution of Indian Society
- Familiar and social problem

PSO3: BA Part II – Paper II Crime and Society - II (0186)

- Conception and types of Crime
- Social Structure and Anomie criminality
- Nature of social change and crime in India Social Diso-Denization, Alcoholise Drug Addiction, beggary fact in society
- Major theories of punishment, objective and forms and modern correctional concept
- Correctional process: Role of Police and Judiciary in Indian Development of Jail Reform in India

PSO: BA Part III – Paper I – Sociology of Tribal Society (0246)

- The concept and Characteristics of Tribal society, distinction in Tribe and Caste
- Classification of Tribal people in various part
- Sociocultural profile
- Social Mobility and change sensitization, schemes of development various tribal movement
- Problem of Tribal people: Poverty illiteracy, indebtedness and exploitation study of tribal immunities in Chhattisgarh

PSO: BA Part III – Paper II (A) – Social Research Method (0247)

- To understand the basic framework of research process
- In defining various research designs and techniques
- To identify various sources of information for literature review and data collection
- To discuss the ethical dimensions of conducting applied research
- Appreciating the components of scholarly writing and evaluate its quality
- To understand the various data analysis techniques (Mean, Mode, Median, Range and Standard deviation)

Bachelor of Arts

History (B.A I, II, III)

Course Outcomes (COs)

At the end of program following outcomes are expected from students:

1. Develop historical outlook to resolve the day to day life struggles in the society and nations.
2. Understand background of the religions, customs, institutions and administration and so on.
3. By analyzing relationship between the past and the present students will understand the social, political, religious, and economic conditions of the people.
4. Study of history help to impart moral and environmental values for sustainable development in the society.
5. It develops a feeling of patriotism in the hearts of the pupils.
6. After this end of the program students can be benefitted by getting jobs in various fields through competitive exams.
7. Students should believe in the equality of man irrespective of caste, creed, religion and colour.

Program Outcomes (POs)

The program represents the knowledge, skills and attitudes the students should have at the end of the degree:

1. To acquaint students with the past and present of India and World.
2. It will help in developing analytical and critical understanding of Indian society, economy, polity and culture through a historical perspective.
3. Capacity to explain how and why any important events happen.
4. Student will learn basic narrative of historical events, chronology, personalities and turning points of the history of the India and World.
5. It will help in understanding of the basic concepts of History and an awareness of the emerging areas of the field.

Program Specific Outcomes (PSOs)

PSO 01 B.A - I Paper – I History of India from beginning to 1206 A.D.

1. Acquisition of knowledge about Geographical Features of India and Prehistoric India.
2. Students will be able to analyze perceptions, limitations and range of Sources of Ancient India.
3. Students will be able to understand Indus Valley Civilization, Vedic Civilization and Vedic Literature.
4. Students will be able to illustrate emergence of caste based societies in Ancient India.
5. Students will be able to explain emergence of States in Ancient India, and they know about the Condition of North India during 6th Century B.C. and rise of new religions.
6. They analyze the emergence of the Mauryan and Gupta empires during the "Classical age" in India.
7. They know the difference between northern political system and southern political system.
8. Students will be able to understand about origin and theory of Rajputs.
9. They gained knowledge about the advents of Muslim invaders.
10. Students will be able to indicate multiple cultures (Greek, Shaka, Hun etc.) of Ancient India.
11. Students should understand the value of diversity.
12. Students should develop a secular outlook towards society.
13. Students will be able to explain our heritage through cultural aspects of Ancient India.

CO 02 B.A - I Paper - II World History from 1453 to 1890 AD.

1. Acquisition of knowledge about the historical significance of the dawn of Modern Age.
2. Analyze the epoch making events of Renaissance and Reformation which brought enlightenment to the western world.
3. Enable the students to understand the power struggle that affected Europe during the period under review.
4. Demonstrate advanced factual knowledge of world histories, Politics and Cultures.

5. Assess and appraise the developments of literature and society during the Renaissance and utilize content knowledge of the Reformation and Counter Reformation to make predictions about the evolution of Christianity in Europe and abroad.
6. Evaluate the causes of American Revolution and identify the background for the evolution of Human Right Movement.
7. Understand the main events of the French Revolution and its significance.
8. The students will notice that the world may change due to the geographical discoveries.
9. Students will understand and be able to describe the differences between the various forms of Government: Monarchial Government and Parliamentary Government.

PSO – 03 BA-II Paper-I HISTORY OF INDIA 1206 TO 1761 A.D.

Upon successful completion of the course students will be able to-

1. Get information about Sultanante Age.
2. Aware about Rajput policies and religious policies of Mughals.
3. Acquire knowledge about socio-economic life of Medieval India.
4. Know about, Vijaynagar & Bahmani empire and administration of Shivaji.
5. Familiar with Chhattisgarh under Maratha rule.

POS – 04 BA-II Paper-II WORLD HISTORY 1890 TO 1964 A.D.

Upon successful completion of the course students will be able to-

1. Know about Partition of Africa & Modernization of Japan.
2. Get knowledge of Russo Japanese war, Opium war and Eastern Problems.
3. Get information about the First World War, treaty of Versailles and Russian Revolution.
4. Learn the policies of Hitler and causes of Second World War
5. Familiar with organization and working of UNO

PSO 05 BA-III Paper-I HISTORY OF INDIA 1761 TO 1947 A.D.

Upon successful completion of the course students will be able to-

1. Get information about advent of Europeans and expansion of English power in India.
2. Familiar with British Administrative Reforms, British Commercialism and decline of industries.
3. Acquainted with Land Revenue Settlement and Decline of Agriculture, Indian Renaissance.
4. Know about development of Railways, Education and Press in India.
5. Aware about life and administration in Chhattisgarh under British control.

PSO – 06 BA-III Paper-II HISTORY OF INDIAN NATIONAL MOVEMENT 1857 TO 1947 A.D.

Upon successful completion of the course students will be able to-

1. Get information about Rise of Nationalism in India and Indian National Congress.
2. Familiar with Home Rule Movement to Non-Cooperation Movement.
3. Understand Indian National Movement from Civil- Disobedience to Quit India Movement.
4. Know the causes of partition of India as well as Integration of Native states in India.
5. Acquire knowledge about National Movement in Chhattisgarh.