



Accredited With Grade "C" by NAAC

Registered Under Section 2f & 12 (B) of UGC Act, AISHE Code C-21676

Affiliated to Pt. RavishankarShukla University, Raipur (C.G.)

Website -<http://mvpgcollege.org> , Email -[pgcollege.mahasamund@gmail.com](mailto:pgcollege.mahasamund@gmail.com), Phone- (07723) 299100

# ***COURSE OUTCOMES***

## ***(COS)***

### **COMPUTER DEPARTMENT**

### **AND**

### **YOGA**





**SHASKIYA MAHAPRABHU VALLABHACHARYA  
SNATKOTTAR MAHAVIDYALAYA,  
MAHASAMUND (C.G.) 493445**

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## **P.G.D.C.A.**

The broad objective of the PGDCA programme is to prepare Post Graduates for productive careers in software industry, corporate sector, govt. organisations and academia by providing skill-based environment for teaching and research in the core and emerging areas of the discipline. PGDCA graduates who will have successful careers based on their understanding of formal and practical methods of Application Development using the concepts of computer programming, software and design principles.

### **P.G.D.C.A. Semester I**

#### **Paper-I: Introduction to Software Organization**

CO1: Computers – Introduction, Computer System Characteristics, Strength and Limitations of Computer, Development of Computers, Types of Computers

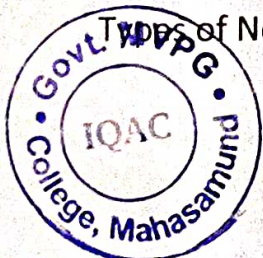
CO2: Central Processing Unit – Arithmetic Logic Unit, Control Unit, Registers, Instruction Set, Processor speed. Storage Devices.

CO3: Basics of Software – needs of Software, Types of Software; Free Domain Software; Open-Source Software; Compiler, Interpreter and Assembler

CO4: Introduction, Comparison between Human and Computer Language; Program; Data, Information and Knowledge; Characteristics of Information

CO5: Communication – Introduction, Communication process, Communication Types, Communication Protocols, Communication Channels/Media. Networks – Introduction;

Types of Networks



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**Paper-II: Programming in 'C'**

CO1: Introduction Character set, Identifiers and Keywords, Variables, displaying variables, Reading Variables, Character and Character String, Qualifiers

CO2: Control Structure: If - statement, If -else statement, Multi decision, Compound Statement, Loops: For - loop, While -loop, Do-While loop

CO3: Function main, Functions accepting more than one parameter, User defined and library functions, Concept associatively with functions, Arrays

CO4: Pointers: Definition and use of pointer, address operator, pointer variable, referencing pointer, void pointers, pointer arithmetic

CO5: Declaring and using Structure, Structure initialization, Structure within Structure, Operations on Structures, Array of Structure, Array within Structure

**Paper-III: Office Automation & Tally**

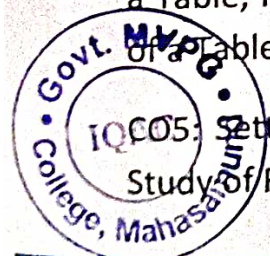
CO1: Windows Concepts, Features, Structure, Desktop, Icons, Taskbar, Start Menu, My Computer, Recycle Bin, my document, creating shortcut. Accessories

CO2: Word: Creating, Editing, & Previewing Documents, Formatting, Advanced Features, Worksheet Basics, Creating, Opening, & Moving in Worksheet

CO3: Creating a presentation, modifying visual Elements, adding objects, Applying Transitions, animations and linking, preparing handouts, presenting a slide show

CO4: Introduction to MS Access, The Tables of a Database, Introduction to the Record of a Table, Introduction to Controls Design, Details on Controls Design, The Characteristics of a Table, The Characteristics of a Form

CO5: Setting up Ledger & Groups. Study of recording of transactions in the 'Voucher', Study of Final A/C preparation



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**P.G.D.C.A. Semester II**

**Paper-I: Programming in Visual Basic**

CO1: Editions of Visual Basic, Event Driven Programming, Terminology, working environment, Introduction to objects, controlling objects, Properties, methods and events, Working with forms

CO2: Overview of variables, Declaring, Scope, arrays, User-defined data types, Comparison and logical operators, if...Then statements, Select Case Statements looping structures

CO3: Types of controls, Overview of standard controls, Combo Box and List Box, Overview of run-time errors, error handling process, The Err object, Errors and calling chain, Errors in an error-handling routine

CO4: Sequential and Random Files - Saving data to file, basic filling, data analysis and file, Overview of ActiveX data Objects, Visual Basic data access features

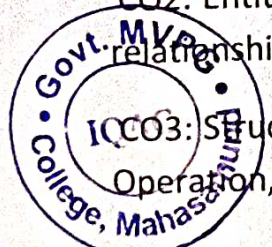
CO5: Overview of Report, Data Report, add groups, Data Environment, Connection to database, Overview of drag and drop, Mouse events, Drag-and drop basics, Date Time Control, Calendar

**Paper-II: Database Management System**

CO1: Data, Information and knowledge, concept of DBMS, Advantages of DBMS, data independence, database administration roles, DBMS architecture

CO2: Entity - Relationship model as a tool for conceptual design-entities, attributes and relationships. ER diagrams

CO3: Structure to Relational Database, Relational Algebra, Extended Relational- Algebra Operation, Simple and complex queries



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CO4: Pitfalls in Relational Database Design, Decomposition, Functional Dependencies, Normalization: 1NF, 2NF, BCNF, 3NF, 4NF, 5NF

CO5: Creating Table, Specify Integrity Constraint, Modifying Existing Table, Management of Roles, Changing Password, Granting Roles & Privilege.

**Paper-III: Essentials of E-Commerce and HTML**

CO1: The scope of E-commerce; Size, growth and future projection of Ecommerce Market Worldwide and in India; Internet and its impact on traditional businesses

CO2: Security of Data/Information in Internet/web environment; Client security, Network security; Virus protection and Hacking

CO3: Concept of a Web Site, Web Standards, what is HTML? HTML Versions, Naming Scheme for HTML Documents,

CO4: Netscape, Microsoft and Advanced Standard Elements List, FONT, BASEFONT and CENTER. Insertion of images using the element IMG

CO5: Concept of static web pages and dynamic web pages. Hosting & promotion of the web site, Domain Name Registration, Web Space allocation.



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**B.C.A.: BACHELOR OF COMPUTER APPLICATION (COURSE OUTCOME)**

Students will able to recognize & appreciate the role of computing in a wide variety of activities & application of Modern society, including commerce, education, communication. Analyse a given problem and develop an algorithm to solve the problem. Demonstrate the basic technicalities of creating word document, creating power point presentation, design spreadsheet for office use.

**BCA I Year**

**Paper I: Discrete Mathematics**

CO1: Recall of statements and logical connectives, tautologies and contradictions, logical equivalence, algebra of propositions quantifiers.

CO2: Boolean algebra and its properties, algebra of propositions as an example, De Morgan's Laws, partial order relations g.l.b., l.u.b.

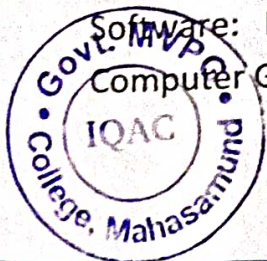
CO3: Boolean functions - disjunctive and conjugative normal forms. Boolean's expansion theorem, fundamental forms. Many terminals Networks.

CO4: Arbitrary Cartesian product of sets. Equivalence relations, partition of sets, injective, surjective, bijective maps, binary operations, countable.

CO5: Basic Concept of Graph Theory, Sub graphs, Trees and their properties, Binary Trees, Spanning Trees.

**Paper II: Computer Fundamental**

CO1: Computer System Characteristics and Capabilities, Computer Hardware and Software: Block Diagram of a Computer, Data Processing, Types of Computers, Computer Generations



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CO2: Input Devices: Categorizing Input Hardware, Scanning Devices, Output Fundamentals, Hardcopy Output Devices, Printers, Non-Impact Printers, Plotters, Cathode Ray Tube, Flat Screen Technologies

CO3: Central Processing Unit: The Microprocessor, control unit, A.L.U., Registers, Storage Devices: Storage Fundamentals, Primary and Secondary Storage, – Sequential, Direct & Indexed Sequential, Tape Storage and Retrieval Methods Tape Storage Devices

CO4: Computer Software, System software Vs. Application Software, Operating Systems programs, Booting Loader, Assembler, Compiler & Interpreter. Types of Application Software, Program and Packages.

CO5: Introduction, History and Versions of DOS. Fundamentals of DOS, Disks & DOS versions, Preparing Disks for use, Operating System function and definition, Overview of Linux / Unix.

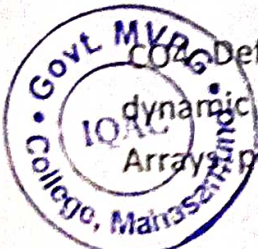
**Paper III: BCA: Programming in 'C' Language**

CO1: Overview of C: History of 'C', Structure of 'C' program. Keywords, Tokens, Data types, Console I/O formatting, Unformatted I/O functions: getch(), getchar, getche(), getc(), putc(), putchar()

CO2: If-else, conditional operators, switch and break, nested conditional branching statements, loops: For, do. while, while, Nested loops, function components: Function arguments, return value, function call statement

CO3: Array: -Array declaration, One and Two dimensional numeric, String declaration, initialization, string manipulation, declaring structure and structure variable, Union: basics, declaring union and union variable

CO4: Definition of pointers, pointer declaration, using & and \* operators, Void pointer, dynamic memory allocation functions – malloc, calloc, realloc and free, pointers vs. Arrays, pointer to structure, dynamic array.



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CO5: File handling: file pointer, file accessing functions, fopen, fclose, fputc, fgetc, fprintf, fflush, rewind, fseek, ferror. File handling through command line argument. Introduction to C preprocessor #include, #define, conditional.

**Paper IV: PC Software and Multimedia**

CO1: MS Word: Word Processing, Page Formatting, Mail Merge, Word Art, Images, Header, Footer, Tables, Hyperlink, Opening and Printing Document, Heading1, Heading2, Spelling & Grammar Check

CO2: MS Excel: Formulas, Goal Seek, Macro, Page Break, Protect Sheet, working with Functions & Formulas, using absolute reference, referencing cell by name, using cell label, giving name to cell and ranges

CO3: Creating presentation, working with slides, different types of slides, setting page layout, selecting background and applying design, adding graphics to slide, adding sound and movie

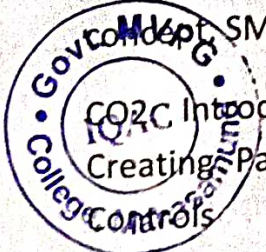
CO4: MS Access: Introduction to DBMS, Relationships, Importing Data, Pivot Table, Reports, creating tables in Access, defining datatypes, creating relationships, manipulating records

CO5: Basic concept of 2D/3D animation, principle of animation, various file format, animate text, transformation, basic action scripts, importing sound through flash

**Paper V: Web Technology and E-Commerce**

CO1: History, evolution, internet applications, WWW, OSI and TCP/IP model, Email Client, SMTP, TELNET, Chat services, Internet messaging.

CO2: Introduction to HTML, HTML versions, Headings on web pages, Hyperlinks, Creating Paragraph, Images, Links, Tables, Frame, Creating an HTML



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CO3: DHTML Introduction, CSS, Inline Style Sheet, Event Handling, Java Script, Embedding JavaScript into HTML Pages, Handling events

CO4: Features and Advantages of PHP, Installing, Creating and running PHP, working with variables, Array, User Defined Function.

CO5: Definition of Ecommerce, Scope, E Payment System, Security Threats, Types of Ecommerce, B2B, B2C, Business to Business to Consumer, C2C

**Paper VI: Communication Skills**

CO1: Structure of Sentences: simplex, Complex, Compound, Clause, Tenses, Model, Participle: Non-finite and finite, infinitive

CO2: Transformation of sentences, Active to Passive, Affirmative to Negative, Explanative to Assertive, Interrogative to Assertive.

CO3: Report writing, Essay Writing, Application Writing, Description of events, Letter Writing.

CO4: Precis writing, reading comprehension, summarizing, presentation skills, paraphrasing.

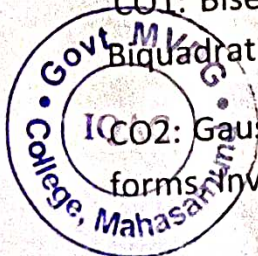
CO5: Official communication: notice, Circular, Minutes of the meeting, Agenda of meeting, Modern media of communication.

**BCA II Year**

**Paper I Part-I: Numerical Analysis**

CO1: Bisection method, Regula false method & Newton's method, Solution of Cubic & Biquadratic Equation

CO2: Gauss-Jordan method, Cholesky's method, Reduction to lower or upper Triangular forms, Inversion of matrix, method of partitioning.



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CO3: Newton's Interpolation formula, Newton's Forward and Backward Difference Interpolation Formula, Lang ranges Interpolation formula, Newton's Divided Difference

CO4: Newton - cotes integration formula, Trapezoidal Rule, Simpson's One- Third and Three-Eight Rule, Waddle's Rule.

CO5: Numerical Solution of first order Ordinary Differential Equations, one step method, Euler's, Picard's and Taylor's series Methods, Picard's Methods for successive approximations, Runga-Kutta Method

**Paper I:Part-II: Differentiation and Integration**

CO1: Successive Differentiation, Leibnitz's Theorem, Rolle's Theorem, Lagrange's and Cauchy Mean Value Theorem, Taylor's Theorem, Expansion by Taylor's and Maclaurin's series

CO2: Asymptotes, Curvature, Test of Convexity and Concavity, Point of Inflexion, Tracing of Curves in Cartesian and Polar form.

CO3: Partial and Directional Derivatives of functions of two and three variables, Jacobian's Theorem

CO4: Integration of functions by parts, by substitution and by partial fraction; Definite Integral and its properties.

CO5: Integration of functions of two and three variables, Change of order of Integration, Determination of Area and Length

**Paper I: Part-III: Data Structure**

CO1: Introduction, Basic terminology, Elementary data organization, Data structure, Data structure operation

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**CO2: Basic Terminology, Linear Array; Sorting: Bubble Sort; Searching: Liner Search, Binary Search, Pointers: Pointer Array; Records: Record Structures.**

**CO3: Link lists, traversing a linked list, searching a linked list; Insertion into a linked List, Deletion from a Linked List, Stacks, Array Representation of Stack; Queues.**

**CO4: Types of Trees, Binary Trees, Representing Binary, traversing binary tree, Searching and Inserting in Binary Tree, Deleting in Binary tree.**

**CO5: Sorting, Insertion Sort, Selection Sort, Merging, Merge.**

**Paper II: DBMS (Oracle, SQL)**

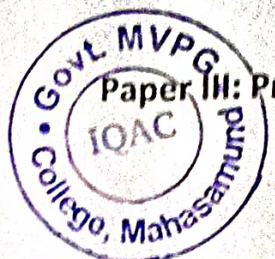
**CO1: Database, Definition of DBMS, Purpose of Database System, Data abstraction, Instances, Schema, Data Independence, Data administration roles, DBMS users**

**CO2: Entity - Relationship model as a tool for conceptual design-entities attributes and relationships. ER diagrams; Concept of keys: candidate key.**

**CO3: Relational Algebra: select, project, cross product different types of joins (Inner join, outer joins, self join); set operations, Simple and complex queries using relational algebra.**

**CO4: Normalization concept in logical model; Pitfalls in database design, update anomalies: Functional dependencies, Join dependencies, Normal forms.**

**CO5: Introduction to Commercial database query language, SQL & Its environment. SQL as a data definition language- creating tables, altering tables, drop tables. SQL as data manipulation language- Inserting, Deleting, Retrieving and updating data in a table.**



**Paper III: Programming in C++ and VC++**

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CO1 Need for Object Oriented programming; Procedural Languages; The Object Oriented approach; advantages of Object-Oriented Programming; characterization of Object-Oriented Languages

CO2: Object and Class, Using the class, class construct, class destructors, object as function argument, struct and classes, array as class member, operator overloading.

CO3: Overview of C++ Programming; Loops and decisions; Structures and functions. Arrays and Pointers, Inheritance, Overloaded Function, Inline Function, Virtual Functions, pure virtual Functions Streams.

CO4: Object structure concepts; Object type; Attribute types; relationship type; Object behavioural concepts; Methodology for Object Oriented Design; Brooch methodology Relational Vs Object Oriented Databases.

CO5: Introduction to VC++ - C under windows, Overview of VC++, VC++ workspace & projects, Introduction to MFC- The part of VC++ programs, the application object, the main window object.

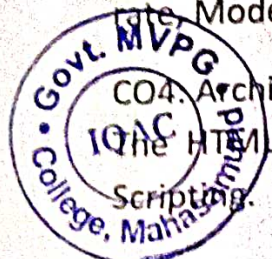
**Paper IV: Computer Networking & Internet Technology**

CO1: Data Communication, Networks - Distributed Processing, Network Criteria, Applications; Protocols, Standards, Standard Organization.

CO2: The model - Layered architecture, functions of the Layers-Physical layer, Data Link layer, Network layer, Transport layer, session layer, Presentation layer, Application layer.

CO3: Analog and Digital, digital data transmission - parallel transmission, serial transmission, data circuit terminating equipment, standards, modems- Transmission Modem standards.

CO4: Architecture of Internet, Client server model, www, The concept of web publishing, The HTML Basics Review, Tables, frames, image maps, forms & Introduction to CGI Scripting.



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CO5: What is java, Introduction to java applet, Adding applet to web page, JavaScript, Structure of Java Script. Defining styles within HTML tags. Features of Style sheet, Web server, Publishing website, Case Studies

## Paper V: Linux

CO1: Introduction to Linux system, History and Emergence, Features of Linux system, Features of Linux file system, File types and permissions, getting started, Logging in /out with the concept of home directory.

CO2: Introduction to Text Processing, Vi editor, Vi Features, Vi Commands, Yanking, running shell commands, from within Vi, Command macros

CO3: Introduction to Shell & Shell Programming: Features of a Shell, Different types of a Shell, why use more shell, the environment, set, setenv.

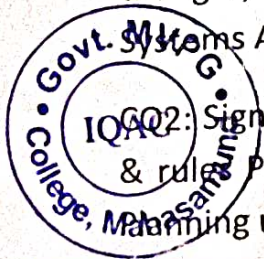
CO4: x-windows: what is X-windows, Microsoft windows verses x-windows, Using the GNOME & KDE desktop environment: starting the GNOME desktop environment, the GNOME panel.

CO5: Installation & system Administration of Linux: responsibilities of a system administrator, start up and shutdown process, inittub and profile file importance, security file access permission, user and group related jobs

## Paper VI: A. Principles of Management

CO1: Concept, Nature and Scope of management. The evolution of Management thought, Approaches of management, New classical school, Behavioural Approach and Systems Approach.

CO2: Significance, Objectives Types of Plans, Strategies & Polices, Proceeding's methods & rule Project Management, Planning Evaluation, Feasibility Report, Planning Process & rule Planning under systems approach



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CO3: Significance, objectives, Major approaches to organizational theory, Organizational Structure and Design, the organizational Process, span of control or Departmentation, Delegation of Authority

CO4: Significance and issue in managing human factors. Motivation, nature and significance theories and techniques, Leadership styles and influence process, Leadership challenges.

CO5: Definition and elements, Control Techniques, Coordination and determinants of an effective control System, Organizational, Context of Decisions, Decision Making Techniques and Processes

**Paper VI: B. English Language**

CO1: Short answer questions.

CO2: Reading Comprehension of unseen passage, Vocabulary.

CO3: Report Writing

CO4: Expansion of an idea.

CO5: Grammar and Vocabulary.

**BCA III Year Paper I**

**Part-I: Calculus and Geometry**

CO1: The Riemann Integral, Existence of the Riemann Integral, Properties of Riemann Integrals, Fundamental Theorem of Integral Calculus.

CO2: Maxima and minima of functions of two and three variables. LaGrange's method of undetermined multipliers.

CO3: Improper integrals, meaning of integrals of type  $\int_a^\infty f(x) dx$ ,  $\int_a^b f(x) dx$ , where  $f(x)$  is not defined at  $a$  and/or  $b$ . Tests of convergence for improper integrals.

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M.V.P.G. College  
Mahasamund (C.G.)

# SHASKIYA MAHAPRABHU VALLABHACHARYA SNATKOTTAR MAHAVIDYALAYA, MAHASAMUND (C.G.) 493445



Accredited With Grade "C" by NAAC

Registered Under Section 2f & 12 (B) of UGC Act, AISHE Code C-21676

Affiliated to Pt. RavishankarShukla University, Raipur (C.G.)

Website -<http://mvpgcollege.org>, Email -[pgcollege.mahasamund@gmail.com](mailto:pgcollege.mahasamund@gmail.com), Phone- (07723) 299100

CO4: Equation to cone with given base, Generators of Cone, condition for three mutually perpendicular generators, Right Circular Cone, Equation of a cylinder.

CO5: Polar Coordinates, Polar equation to straight line, Circle. Polar equation of a Conic

## Paper I: Part-II: Differential Equation & Fourier Series

CO1: Concept of Differential equation. Recall of first order and first-degree differential equations. Equation of first order but of higher degree. Homogeneous and exact differential equations

CO2: Geometric representation, Family of curves and orthogonal trajectories. Linear differential equation with constant coefficients. Operational rules of D. Homogeneous linear equations.

CO3: Partial differential equations of first order, Standard forms, Linear partial differential equations of higher order with constant coefficients

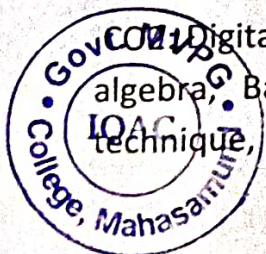
CO4: Periodic Function, Fourier Sine and Cosine Series, Even and Odd Functions, Full Range and Half Range Fourier Series.

CO5: Convergence of Fourier Series, Gibbs Phenomenon, Operations on Fourier Series, Applications of Fourier Series to Differential Equation

## Paper I: Part-III: Computer System Architecture

CO1: Data Representation – Data Types, Number System, Fixed Point Representation – 1's, 2's complements, Binary operation, Overflow & Underflow

CO2: Digital Logic Circuits –Gates & their truth tables, NOR, NAND& XOR Gates, Boolean algebra, Basic Boolean Law, Doorman's theorem, Map Simplification, Minimizing technique, K Map.



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CO3: CPU organization, ALU & Control circuit, Idea about arithmetic circuits, Program control, Instruction sequencing, Microprocessor architecture, System buses.

CO4: Input output organization, I/O Interface, Properties of simple I/O Devices and their Controller, isolated versus Memory mapped I/O, Modes of Data transfer.

CO5: Auxiliary memory - Magnetic drum, Disk & Tape, Semiconductor memories, Memory Hierarchy, Associative memory, Virtual memory, address space & memory space, Address mapping, Page table.

**Paper II: Programming in Java**

CO1: Genesis of java, Importance to the Internet, overview of features, OOP features, data types, control structures, arrays, methods and classes, nested & inner classes

CO2: Basics type, method Override, using abstract and final classes, using super, Defined CLASSPATH, importing packages, Implementing interface.

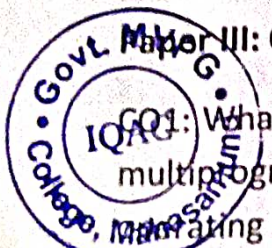
CO3: exception types, using try and catch, throwing exceptions, defined exceptions, Java spread model, creating threads, and thread priorities, synchronization. Suspending resuming and stopping threads

CO4: Basic Streams, Byte and Character Stream, predefined streams, reading and writing from console and files, TCP/IP client & server sockets, URL connection., Setting the JDBC connectivity with backend database

CO5: Fundamentals, life cycle, overriding update, HTML APPLET tag, passing parameters Developing single applets, Window fundamentals, creating windowed, programs waking with graphics

**Paper III: Operating System**

CO1: What is operating system, basic concept, terminology, batch processing, spooling, multiprogramming, time-sharing, real-time systems, protection, multiprocessor system, Managing system as resource manager



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CO2: Reviewing of multiprogramming concept, scheduling concept, basic concept, CPU I/O burst cycle process state, PCB, scheduling queries, schedulers, scheduling algorithms.

CO3: Preliminaries of memory management, memory handling in M/C, relocation, swapping and swap time calculation, multiple partitions, partitioned allocation MFT, fragmentation, MVT, compaction, paging, job scheduling implementation of page tables.

CO4: File concept, file type, typed based system, disk-based system, general model of file system, file directory maintenance, symbolic file system, basic file system, physical file system, file support device directory.

CO5: The Dead Lock problem - Dead Lock definition, Dead Lock detection, detection algorithm usage, Dead Lock characterization, resource allocation graph, Dead Lock prevention, mutual exclusion, hold and wait.

**Paper IV:Software Engineering**

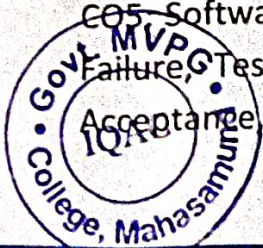
CO1: Introduction to Software Engineering, Definition, Need and Software problem, Software Crises, Software Engineering Problem, Software Engineering Approach.

CO2: Project Management, The Phase Management Process, Software Metrics, Size Oriented Metrics, Function Oriented Metrics.

CO3: Software Requirement and Specification, Introduction and Need of SRS, Structured Analysis, Data Flow Diagram, Context Diagram, Data Dictionary.

CO4: Software Design & Coding, Principle of Software Design, Partitioning, Abstraction, Top Down and Bottom-up Strategies, Concept of Module, Coupling, Cohesion, Structured Chart, Coding.

CO5: Software Testing and Maintenance, Definition, Testing Fundamentals, Error, Fault, Failure, Test Oracles, Types of Testing, Level of testing- Unit, Integration, System, Acceptance, Introduction of Maintenance



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**Paper IV: Multimedia Tools and Application**

CO1: Needs and areas of use, Development platforms for multimedia – DOS, Windows, Linux. Identifying Multimedia elements, Concepts of plain &

CO2: Sound and its Attributes, Mono V/s Stereo sound, Sound channels, Sound and its effect in multimedia, Analog V/s Digital sound, Basics of animation, Principle, Animation on the Web – features and limitations

CO3: Basics of Video – Analog and Digital Video, Introduction to graphics accelerator cards, Introduction to video capturing Media & instrument

CO4: Type of multimedia authoring tools, key factors of selecting CD based multimedia authoring tools.

CO5: Multimedia on the Web: Bandwidth relationship, broadband technologies, Text in the web – Dynamic and embedded font technology, Audio on the Web – Real Audio and MP3/MP4

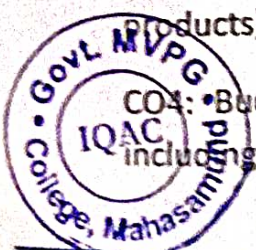
**Paper VI: Financial Management & Accountancy**

CO1: Financial Accounting: Meaning and Nature, Accounting Principles underlying the preparation of financial statements, A Synoptic View-Profit and Loss account, Balance Sheet

CO2: Financial statement Analysis, Ratio analysis, Conceptual Framework of Cost Accounting Meaning nature and need of cost accounting, Elements of cost, Preparation of cost

CO3: Cost – volume Profit (CVP) relationship Break-even analysis; (single and multiple products), Determination of sales volume to attain desired profits

CO4: Budgeting: Definition and objective. Preparation of various types of budgets including cash budget .Fixed and flexible budgets.



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CO5: Cost Accumulation System, Job and Process, Variable and absorption costing systems Comparison for income determination

**Paper VI: B. Foundation Course**

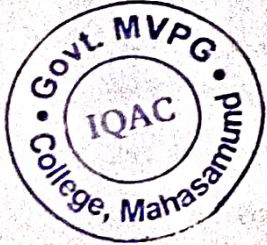
CO1: Essay type answer in about 200 words. Four essays. Type question to be asked and two to be attempted

CO2: Writing skills for composition- Essay writing

CO3: Precis Writing

CO4: Reading Comprehension of an unseen passage

CO5: Vocabulary based on text, Grammar- Advanced Exercises.



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**P.G.Diploma in Yoga Education and Philosophy**

**SEMESTER -I Paper -1 Theoretical Yoga Vijnan**

Unit-I : Introductio to Yoga : The concept,meaning ,definition and tradition of Yoga, Guru- Shishya ( types and meaning )

Unit-II : Basic texts of Yoga --Yoga Sutra(Samadhi and Sadhana Padas), Hathyoga Pradipika.

Unit-III : Kinds of yoga : Bhakti yoga ,Karma yoga, Mantra yoga and Raj yoga.

Unit-IV : Study of Ida,Pingala, Sushumna,Seven Chakras ,Five Koshas, and Five Pranas.

Unit-V : Contemporary Yogis --Shri Aurobindo,Satyananda and Shivananda.

**Paper -2. Applied Yoga Vijnan.**

Unit-I : Meaning ,definition and importance of Yoga and Health in life. Theories of Health, Various exercises benefits of Yoga- asanas and their values vis-a-vis other systems.

Unit -2 : Practice of Yoga - Preparation . Food , Dress, Sequence , Climatic Changes daily routine Vratas for health, positive and negative factors.

Unit -3 : Life pattern and Yoga --Effects of yoga upon bodily functions,Role of yoga asanas in modern living.

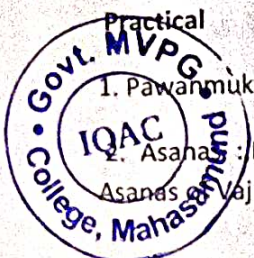
Unit - 4 : Physiology- Constitution Nervous system , Respiratory system, Circulatory system and ESndocrine glands

Unit- 5 : Aspects of Mind ( Topographicals and Dynamic ) Id,Ego and Super Ego, Conciou , Sub- concious and Un-conciou . Yogic concept of mind and mental process.

**Practicals**

Practice Teaching (Indoor)

Asanas Kriyas, Pranayamas Class arrangement. Meditation



1. Pawanmuktasana Part-1,2 &3

2. Asana : Relaxation,Pre-meditative,backward and forward bending, Spinal Cord Twisting and balancing,

Asanas of Vajrasana group & Standing pose

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3. Nadishodhan and Pranayamas : Sheetal Pranayama, Sheetakari Pranayama, Ujjayi Pranayama & Bhramari Pranayama.

4. Mudra : Hastmudra, Manmudra and Kayamudra.

5 Bandha : Moolbandha & Jalandhar Bandha.

6. Shawaasana.

**SEMESTER-II**

**Paper -I Yoga Philosophy**

Unit-I The subject matter of Yoga philosophy- Samkhya: Prakriti, Purusha and Cosmology. Vedanta :Brahman Soul and Maya.

Unit-II Different systems of philosophy : Pancha Mahavrata – Jainism. Ashtang Marg – Buddhism Integral Yoga – Shri Aurobindo

Unit-III Yoga Sutra : Nature of Chitta, Chitta vrittis and Bhoomis

Unit-IV Kinds of Yoga : Hatha Yoga, Kundalini, Jnana, Laya.

Unit-V Psychosomatic disorders(meaning and types) their management through Yoga, Aging –Its problems and management through Yoga.

**Paper II. Hatha Yoga.**

Unit-I Introduction to the HathPradipika and Gherand Samhita.

Unit-II Pranayama–Its meaning methods,kinds,Precaution and benefits.

Unit-III Shuddhi kriya–Shatkarma,its method and utility.

Unit-IV Bandha and Mudras –methods and benefits.

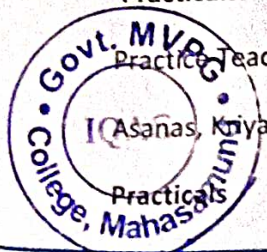
Unit-V Samadhi , Different systems of Meditation.

**Practicals.**

Practice Teaching (Indoor)

Asanas, Kriyas, Pranayamas, Class arrangement & Meditation.

Practicals



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1. Balancing Asanas.
2. Asanas of Higher group.
3. Surya Namaskar.
4. Pranayama : Suryabheda Pranayama, Bhastrika Pranayama, Kapalabhati Pranayama & Moorchha Pranayama.
5. Bandha : Uddiyan Bandha & Mahaabandha.
6. Mudra : Bandha Mudrayen & Aadhaar Mudrayen.
7. Shatkarma.
8. Dhaayana & Yoganidra



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