DEPARTMENT OF COMPUTER SCIENCE

COURSE CURRICULUM & MARKING SCHEME

B.Com. Part - III

COMPUTER APPLICATION

SESSION : 2023-24

ESTD : 1958

GOVT. V.Y.T. PG AUTONOMOUS COLLEGE, DURG, 491001 (C.G.)

(Former Name – Govt. Arts & Science College, Durg)

NAAC Accredited Grade A+, College with CPE - Phase III (UGC), STAR COLLEGE (DBT)

Phone : 0788-2212030

Website - www.govtsciencecollegedurg.ac.in, Email – autonomousdurg2013@gmail.com

B.Com. (Computer Application)

DEPARTMENT OF COMPUTER SCIENCE
GOVT. V.Y.T. PG. AUTONOMOUS COLLEGE DURG

Approved syllabus for B.Com Computer Application by the members of Board of Studies
Fourth Session 2023-24
The syllabus with the paper combinations is as under

B.Com.-III:

Paper I: COMPUTER APPLICATION PROGRAMMING IN VISUAL BASIC	**Paper II: COMPUTER APPLICATION SYSTEM ANALYSIS DESIGN& MIS**
Paper III: COMPUTER PRACTICAL	

The syllabus for B.Com Computer Application is hereby approved for the session 2023-24.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert 17.04.2023	1. **HOD: Mr. Dileep Kumar Sahu**..... 17/4/23
Subject Expert.....	2. **Mrs. Latika Tamrakar**..... 17.04.2023
Alumni(member).....	3. **Dr. Sanat Kumar Sahu**..... 17/04/23
Prof. from other Dept. of Sc. Faculty..... 17.04.2023	
Specialist from Industry	

Syllabus and Marking Scheme for BCOM (CA)-PART-III
Session 2023-24

Paper No.	Paper Code	PROGRAM NAME	Title of the Paper	Marks Allotted in Theory	
				Max	Min
I	BCOCA-301	BCOM (COMP. APPLICATION) PART-III	**COMPUTER APPLICATION-PROGRAMMING IN VISUAL BASIC**	50	17
II	BCOCA-302	BCOM (COMP. APPLICATION) PART-III	**COMPUTER APPLICATION SYSTEM ANALYSIS DESIGN& MIS**	50	17
III	BCOCA-303	BCOM (COMP. APPLICATION) PART-III	**Lab course/ Practical**	50	17
			Total	**150**	**51**

1. **Theory papers** - **100**
2. **Practical** - **50**

Total Marks - **150**

Name and Signatures

V.C. Nominee .....

Subject Expert .....

Subject Expert.....

Alumni(member).....

Prof. from other Dept. of Sc. Faculty .....

Specialist from Industry .....

Departmental members

1. **HOD: Mr. Dileep Kumar Sahu**.....
2. **Mrs. Latika Tamrakar**.....
3. **Dr. Sanat Kumar Sahu**.....

GOVT.V.Y.T.P.G. AUTO. COLLEGE, DURG(C.G.)

SYLLABUS FOR: (2023-24)
B.COM PART-III
Subject Code: BCOCA-301, PAPER - I
COMPUTER APPLICATION
(PROGRAMMING IN VISUAL BASIC)

Max Marks: 50 **Min Marks: 17**

Course Objective:

1. The course is designed to guide the beginning programmer in developing applications using the Visual Basic programming languages.
2. The ability to program using object-oriented tools is beginning to be treated as fundamental knowledge of the VB.
3. Students will be introduced to object-oriented programming concepts of VB.

Course Outcomes:

Upon completion of the course the participant will be able to:

1. Understand The Visual Basic Integrated Development Environment (IDE) and its wealth of development tools.
2. Build effective user interfaces with Visual Basic controls, forms, and other GUI components.
3. Learn the use of the debugging and testing tools available in Visual Studio.
4. Use the Packaging and Deployment tool to deliver completed applications to end users.
5. Use Database access using Visual Basic's ADO Control and data-aware components like the Data Grid and Data Environment Designer.

UNIT-I INTRODUCTION TO VISUAL BASIC, PROGRAMS, VARIABLES- Editions of Visual Basic. Event Driven Programming, Terminology, Working environment, project and executable files, Understanding modules, Using the code editor window, Other code navigation features, Code documentation and formatting, environment options, code formatting option automatic code completion features. Introduction to objects, Controlling objects, Properties, methods and events, Working with forms, interacting with the : MsgBox function, Code statements, Managing forms, Creating a program in visual Basic, Printing, Overview of variables, user-defined data types, constants working with procedures, Working with dates and times, Using the Format Function, Manipulating text string.

UNIT-II CONTROLLING PROGRAM EXECUTION,WORKING WITH CONTROL- Comparison & logical operators, If…Them statements, select case statement looping structures, using Do…Loop structures, For Next statement, exiting a loop. Types of control, Overview of standard control , Combo Box and List Box , Option Button and Frame controls Menu, Status bars, Toolbars, Advanced standard controls, ActiveX controls, Insert table objects, Arrays, Dynamic Arrays.

UNIT-III PROCEDURE, FUNCTION ERROR TRAPPING & DEBUGGING-

Procedure, Function, call by value, call by reference, Type definition, with object, Validation, Overview of run-time errors, error handling process, The Err object, Errors and calling chain, Errors in

an error-handling routine, inline error handing, Error handling styles, General error-trapping options Type of errors, Break mode Debug toolbar, Watch window, Immediate window, Local window, Tracing Program flow with the Call Stack.

UNIT-IV **SEQUENTIAL AND RANDOM FILES**– Saving data to file, basic filling, data analysis and file, the extended text editor, File organization Random access file, The design and coding, File Dialog Box, Picture Box, image box, Dialog Box, using clipboard, Copy, Cut, Paste of Text & Picture in Clipboard, Use of Grid control Multiple document interface, Single documents interface.

UNIT-V **DATA ACCESS UNSING THE ADO DATA CONTROL & REPORT GENERATION-** Overview of Active-x data Objects, Visual Basic data access features, Relational database concepts Using the ADO Data control to access data, Overview of DAO RDO, Data Control, structured query language (SQL), Manipulating data Using Data Form Wizard. Overview of Report, Data Report, Add groups, Data Environment, connection to database introduction to Crystal Report Generator.

BOOK REFERENCE:

1. VISUAL BASIC PROGRAMMING – REETASAHU, B.P.B.PUBLICATION.
2. MASTERING IN VISUAL BASIC – BY BPB PUBLICATIONS.
3. VISUAL BASIC PROGRAMMING – MARK BIT.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert	1. **HOD: Mr. Dileep Kumar Sahu**.....
Subject Expert.....	2. **Mrs. Latika Tamrakar**.....
Alumni(member).....	3. **Dr. Sanat Kumar Sahu**.....
Prof. from other Dept. of Sc. Faculty.....	
Specialist from Industry	

GOVT. V.Y.T.PG. AUTO. COLLEGE, DURG(C.G.)
SYLLABUS FOR: (2023-24)
B.COM PART-III
Subject Code: BCOCA-302, PAPER -II
COMPUTER APPLICATION
(SYSTEM ANALYSIS DESIGN& MIS)

Max Marks: 50 **Min Marks : 17**

Course Objective: MIS's main goals are to help an organization's executives make decisions that improve the organization's agenda and incorporate the company's organizational structure and dynamics to better leverage the organization for a competitive advantage.

Course Outcomes:

After the completion of the course, Students will be able to

1. Know about the various steps of software devolvement life cycle.
2. Analyze the structure of a system using structured analysis tools such as DFD, ER diagram, Data dictionary etc.
3. Learned about the importance of feasibility study in development model.
4. Learned about the system maintenance and its various types.
5. Translate the role of information systems in organizations, the strategic management processes, with the implications for the management.

UNIT-I **INTRODUCTION** – Systems Concepts and the information systems environment: Definition of system, Characteristics of system, elements of system, types of system, The system Development life cycle: consideration of candidates system. The Role of System Analyst: Introduction, the multiphase role of the analyst, the analyst/user interface, the place of the analyst in the MIS organization.

UNIT-II **SYSTEM ANALYSIS, TOOLS OF STRUCTURED ANALYSIS, FEASIBILITY STUDY-**

System Planning and initial investigation: Basis for planning in systems analysis, initial investigation, fact finding, fact analysis, determination of feasibility. Information Gathering: Kind of information gathering tools. Structured Analysis, flow chart , DFD, Data Decision Tree, Structured English, Decision Table, System Performance, Feasibility Study, Data analysis.

UNIT-III **SYSTEM DESIGN & SYSTEM IMPLEMENTATION –The process of Design Methodologies.** Input Design. Form Design, File Structure, File organization, data base design, System Testing, the test plan, quality assurance, data processing auditor, Conversion, post implementation review, Software Maintenance.

UNIT-IV **INTRODUCTION TO MIS & OTHER SUBSYSTEM** – Evolution of MIS, Need of MIS, Definition & Benefits of MIS, Characteristic, Role component of Information system, data base as a future of MIS, Decision making, logic of Management Information system, Structure of MIS.

UNIT-V **INFORMATION SYSTEM CONCEPT** – Deference between Transaction Processing, System (TPS) and Management Information System, How MIS works, MIS and Information Resource Management, Quality information Building Blocks for the information system, information system concept, Other system characteristic (Open & Closed System), difference between MIS -& Strategic System Adaptive system, Business function information system.

BOOK REFERENCE:

1. SYSTEM ANALYSIS AND DESIGN – ELIAS M.AWAD.
2. SYSTEM ANALYSIS AND DESIGN – ALAN DENNIS & BARBARA HALEY WIXO.
3. MANAGEMENT INFORMATION SYSTEMS – C.S.V. MURTHY, HIMALAYA PUBLICATION HOUSE.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert	**1. HOD: Mr. Dileep Kumar Sahu**.....
Subject Expert.....	**2. Mrs. Latika Tamrakar**.....
Alumni(member).....	**3. Dr. Sanat Kumar Sahu**.....
Prof. from other Dept. of Sc. Faculty.....	
Specialist from Industry	

GOVT. V.Y.T.P.G. AUTO. COLLEGE, DURG (C.G.)
SYLLABUS FOR: (2023-24)
B.COM PART-III
Subject Code: BCOCA-303, PAPER - III
COMPUTER APPLICATION
(PRACTICAL EXERCISES BASED ON PAPER I & II)

Practical to be done –

1. At least 20 Practical – exercises covering the contents of paper- I (e.g. Designing calculator, sorting of elements, Generating Fibonacci series)
2. Design the Project on one of the following – Application Software/Website Design/Accounting software/Inventory control System/System Software & other (e.g. library Management System, Medical management, Stock Management, Hotel Management, Website for your institute/Website of any Organization)
3. The Project cover the following topic – Objective, hardware & Software Requirements, Analysis, Design, Coding, input forms testing, Reports, Future enhancement of s/w.
4. Practical exam is based on the Project Demonstration & report.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert	1. **HOD: Mr. Dileep Kumar Sahu**.....
Subject Expert.....	2. **Mrs. Latika Tamrakar**.....
Alumni(member).....	3. **Dr. Sanat Kumar Sahu**.....
Prof. from other Dept. of Sc. Faculty.....	
Specialist from Industry	

DIRECTIVES FOR STUDENTS, FACULTY AND EXAMINERS

1. There shall be three sections (Section A, B, and C) in each theory paper.
2. Section A shall contain very short answer type questions (One or two line answer) or objective type questions (fill in the blank). **(not multiple choice questions)**
3. Section B shall contain short answer type questions with the limit of 150 words
4. Section C shall contain long answer/ descriptive type questions. The students are required to answer precisely and the answer should not exceed the limit of 350 words.
5. The students are required to study the content mentioned in the curriculum exhaustively.

EVALUATION PATTERN

- **Theory 50 marks**
- **Practical 50 marks**

Question Type	MM 50 (Marks X No .of Q.)
A (Very short Ans.)	1X10 = 10
B (Short Ans.)	3X5 = 15
C (Long Ans.)	5X5 = 25

PRACTICAL MARKS DISTRIBUTION

Practical paper
Total marks - 50

Practical - 25 (prog1 – 12 marks & prog2 – 13 marks)
Internal - 15
Viva - 10

Total - 50

Practical test will consist of 3hrs.

Corrigendum for UG Classes

1. **Section –A (very short answer question)**

   There shall be 8/9/10 objective type questions (No multiple choice). All questions are compulsory; at least one from each unit.

2. **Section B, Section C**

   There shall be 10 questions, two questions from each unit.

   The candidate has to attempt one question from each unit.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert	**1. HOD: Mr. Dileep Kumar Sahu**.....
Subject Expert.....	**2. Mrs. Latika Tamrakar**.....
Alumni(member).....	**3. Dr. Sanat Kumar Sahu**.....
Prof. from other Dept. of Sc. Faculty.....	
Specialist from Industry	

GOVT. V. Y.T. P. G. AUTO. COLLEGE, DURG
SYLLABUS FOR: (2023-24)
B. COM. - PART II, III
(COMPUTER APPLICATION)

PRACTICAL MARKS DISTRIBUTION

Practical paper
Total marks - 50

Practical	**- 25 (prog1 – 12 marks &prog2 – 13 marks)**
Internal	**- 15**
Viva	**- 10**
Total	**- 50**

Practical test will consist of 3hrs.

Name and Signatures

V.C. Nominee	**Departmental members**
Subject Expert	1. **Head /Mr. Durgesh Kumar Kotangle** .....
Subject Expert.....	2. **Mr. Dileep Kumar Sahu**.....
Alumni (member).....	3. **Mrs. LatikaTamrakar**.....
Prof. from other Dept. of Sc. Faculty	3. Dr. Sanat Kr. Sahu
Specialist from Industry	