## Govt. Digvijay College Rajnandgaon Department of Computer Science Course Outcomes

### BCA-I Year

On completion of the course students will be able to

- 1. Knowledge of discrete maths , calculus & statical analysis
- 2. Understand the basic electronics
- 3. Knowledge of computer fundamentals, parts ,generation types, Software, operating system etc.
- 4. Develop the software in C language
- 5. Working in computer using MS-Office(Word, Excel, Power point, Access) and also working with internet and develop HTML pages.
- 6. Programming in visual basic-6 language
- 7. Develop communication skill in English Language.

#### BCA-II Year

On completion of the course students will be able to

- 1. Knowledge of Numerical analysis and Differentiation and Integration.
- 2. Understand the data structure which help to data organized and using in different types with different algorithms.
- 3. Understand about Data Base management system. Rum SQL(Structure Query Language ) quires.
- 4. Develop software in C++ Language. And also know the function of Visual C++ Language.
- 5. Understand about the Networking, its function, Types and internet Technology
- 6. Working in Linux/Unix Operating system and develop shell scripting.
- 7. Develop management .

#### BCA - III Year

On completion of the course students will be able to

- 1. Knowledge of calculus and Geometry, Differential Equation and Fourier Series.
- 2. Understand the internal organizing parts of computer with computer system architecture.
- 3. Develop software in core java , java script and applets.
- 4. Knowledge of Operating system its concept, types, working, mechanism and help how to write new operating system.
- 5. Understand Software engineering.
- 6. Knowledge of multimedia its tools, Flash design and its application.
- 7. Understand about the financial Management and Accounting.
- 8. Knowledge of complete software project development and its documentation.

### B.Sc. I (Computer Science)

On completion of the course students will be able to

- 1. To introduce, the computer PC's and clones to the students.
- 2. To introduce and explain terms, various' parts of computer, which will be helpful in understanding of computer hardware & use of computer.
- 3. To introduce an idea of digital electronics and digital circuits for building up-the computer.
- 4. To introduce the basic knowledge of software require for running the computer.
- 5. To introduce the basic knowledge of programming in Hall, BASIC for solving-the problem.
- 6. To introduce the WORD PROCESSOR package for document processing and mail merge.

### B.Sc. II (Computer Science)

On completion of the course students will be able to

- 1. To introduce the overall organization of the microcomputer.
- 2. To introduce the common peripheral devices used in computers
- 3. To introduce the hardware components, use of micro processor and function of various chips used in microcomputer.
- 4. To introduce the internet & web related technology & learn the intricacies of web-page designing using HTML.
- 5. To introduce the object oriented programming concept using C++ language.
- 6. To introduce the problem solving methodology using the C++ programming features.

### B.Sc. III (Computer Science)

On completion of the course students will be able to

- 1. To introduce the overall organization of the microcomputers and operating systems.
- 2. To introduce the interaction of common devices used with computers with operating software, excluding the Assembly languages, with special reference to DOS/WINDOWS.
- 3. To introduce the working of hardware components, Micro-Processors and various chips used in micro-computers by operating system, without the use of electronic circuitry.
- 4. To introduce the use of operating systems architecture with IBM-PC &clones, excluding Assembly language, with forms an important part of hardware.
- 5. To introduce Data Base Management System concepts.
- 6. To introduce the Relation Database management System and Relation Database design.
- 7. To introduce the RDBMS software and Utility of query language.
- 8. To introduce basic concept of GUI Programming and database connectivity using visual Basic.

### M.Sc. (Computer Science) – I Semester

- 1. Knowledge of mathematical foundation of computer science
- 2. Understand about the advance computer operating system.
- 3. Advance knowledge of data structure and its algorithm using in 'C" Language.
- 4. Develop the C++ computer software with Object oriented concept.

5. Understand computer system architecture.

M.Sc. (Computer Science) – II Semester On completion of the course students will be able to

- 1. Understand Relational Database Management System
- 2. Knowledge of advanced computer Networking.
- 3. Development software in Visual Basic 6 programming Language.
- 4. Understand working and mechanism of compiler and design .
- 5. Knowledge of Numerical analysis & its application .

M.Sc. (Computer Science) – III Semester

On completion of the course students will be able to

- 1. Development advanced software in JAVA Language.
- 2. Understand working, mechanism and algorithms of computer graphics.
- 3. Working in LINUX operating system and shell scripting.
- 4. Knowledge of Image processing and its application.
- 5. Understand Object Oriented Analysis and Design.

M.Sc. (Computer Science) – IV Semester

On completion of the course students will be able to

- 1. Understand Software Engineering.
- 2. Knowledge of Artificial intelligence and expert system .
- 3. Understanding data mining and data warehousing.
- 4. Complete computer software project development with documentation.

# Govt. Digvijay College Rajnandgaon Department of Computer Science Programme Outcome

### BCA

After Completing the Bachelors of Computer Applications (BCA) Students are able to:

- 1. It is a 3 year course with complete emphasis over computers only.
- 2. Its syllabus only includes important topics related to computers.
- 3. It is a professional course made with a view of improving students mindset towards computers.
- 4. It covers more technical topics than any other computers degree, the syllabus consists of a large number of programming languages in order to improve students knowledge.
- 5. Its more software oriented than hardware.
- 6. This course is help student to become software developer.
- 7. Understand the fundamental concepts of Computers, Business environment and IT Applications in Business
- 8. Successfully understand & analyze technical data to reach actionable conclusions, including technological solutions to the business.
- 9. Learn technologies & IT languages, so the business problems could be addressed.
- 10. Develop competent technical writing skills so as to enable the graduate to communicate business ideas to senior management and general public.
- 11. To identify and sharpen their IT/ programming skills.

### B.Sc. (Computer Science)

On completion of the B.Sc.(Computer science) students are able to:

- 1. Understand to computer hardware organization & Computer digital electronics
- 2. Knowledge of computer software organization & use for use for solving any Problem by Computer
- 3. The emphasis in on the design concepts & organizational details of the common PC ,learning the complicated electronics of the system of the computer Engineers.
- 4. Introduction to the web-language –HTML & problem solving through the concept of object oriented programming.
- 5. The emphasis is on the design concepts and organizational details of the common PC, leaving the complicated Electronics of the system to the computer engineers.
- 6. To introduce DBMS and RDBMS using Back- end tool and Front-end tool. Object of the Course:
- 7. Serve as the Asstt. Programmers or the Software Engineers with the sound knowledge of practical and theoretical concepts for developing software.
- 8. Serve as the Computer Engineers with enhanced knowledge of computers and its building blocks.
- 9. Work as the Hardware Designers/Engineers with the knowledge of Networking Concepts.

- 10. Work as the System Engineers and System integrators Serve as the System Administrators with thorough knowledge of DBMS.
- 11. To Give Technical Support for the various systems.
- 12. Serve as the IT Officers in Banks and cooperative societies.
- 13. Work as DTP Operator in small-scale industries.
- 14. Serve as the Web Designers with latest web development technologies.

#### M.Sc. (Computer Science)

On the completion of the M.Sc. (Computer science) students are able to work as:

- 1. Programmer or Software Engineer
- 2. Computer Engineer
- 3. Web Designer
- 4. Hardware Designer/Engineer
- 5. Systems Engineer
- 6. System integrator
- 7. System Administration
- 8. Technical Support
- 9. Support Engineer
- 10. Technical Writer
- 11. Consultant
- 12. Management
- 13. Administration
- 14. IT Sales and Marketing
- 15. IT Officer
- 16. Computer Scientist
- 17. Research Staff Member
- 18. Systems Analyst
- 19. Logic Designer
- 20. Computer Scientist in research and R & D laboratories.
- 21. Computer Science Graduates Earn Higher Salaries

## Govt. Digvijay College Rajnandgaon Department of Computer Science Programme Specific Outcome

### BCA

After Completing the Bachelors of Computer Applications (BCA) Students are able to:

- 1. Improve their computer literacy, their basic understanding of operative systems and a working knowledge of software commonly used in academic and professional environments.
- 2. Develop criteria to organize and present different type of works in academic and professional environments.
- 3. Learn how to organize information efficiently in the forms of outlines, charts, etc. by using appropriate software.
- 4. Develop the skills to present ideas effectively and efficiently.
- 5. Do Academic and Professional Presentations Designing and delivering effective presentations and developing the various IT skills to the electronic databases.
- 6. Use the Systems Analysis Design paradigm to critically analyze a problem.
- 7. Solve the problems (programming networking database and Web design) in the Information Technology environment. Function effectively on teams to accomplish a common goal and demonstrate professional behavior.
- 8. Develop IT-oriented security issues and protocols.
- 9. Design and implement a web page.
- 10. Improve communication and business management skills, especially in providing technical support.

### B.Sc. (Computer Science)

On completion of the B.Sc. (Computer Science) programme, students will be able to

- 1. Ability to apply knowledge of computing, mathematics, and basic sciences that may be relevant and appropriate to the domain
- 2. Ability to analyze a problem, identify and define the computing requirements, which may be appropriate to its solution
- 3. Ability to design, implement, and evaluate computer-based system, process, component, or program to meet desired needs
- 4. An ability to function effectively on teams to accomplish a common goal
- 5. Ability to analyze the local and global impact of computing on individuals, organizations, and society
- 6. Recognition of the need for and an ability to engage in continuing professional development
- 7. Ability to use current techniques, skills, and tools necessary for computing practices.
- 8. Ability to use and apply current technical concepts and practices in the core development of solutions in the form of Information technology
- 9. Ability to incorporate effectively integrates IT-based solutions to applications.

10. An ability to assist and manage the execution of an effective project plan.

### M.Sc. (Computer Science)

On the completion of the M.Sc. (Computer science) students are able to

- 1. Understand applications of C++ like Smart Pointer, Generic Pointer, Object Validation and Reference Counting.
- 2. Get hands on various Linux commands and shell script for different application.
- 3. Explore programming techniques of Java beans and swing.
- 4. Understand network fundamentals with TCP/IP architecture.
- 5. Understand artificial intelligence and AI problem solving techniques.
- Explore logic for solving various AI problems.
  Understand data warehousing for business analysis using OLAP, OLTP, MOLAP and ROLAP.
- 7. Explore the concepts of data mining and data preprocessing.
- 8. Ability to identify and analyze user needs and take them into account in the selection, creation, evaluation, and administration of computer-based systems
- 9. Able to go for higher education teaching job and eligible for NET/SET test.