



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1) Academic Year 2019-20

Name of Teacher: Shaikh.Y.S

Department: Computer Science

Program: B.sc 1st yr Sem-I

Subject: Computer Science

Course Code: OCS-101

Paper Title: Programming Logic Concept

Unit Number	Unit Name	Topics	Unit-wise Outcome
I		Introduction, Generation of computer, Classification of computers, Hardware, Software, Application of computers, Computer Architecture: Central Processing unit; Arithmetic unit, Control unit, Main memory unit, Types of Memory , Input and Output Devices:	Student Understand the Basic Knowledge's of computer.
II		Introduction to number systems, The problem solving aspects, top-down design, introduction to Algorithms, implementation of algorithm, The efficiency of algorithms, The analysis of Algorithms, flowchart and it's symbols.	Student Design & create the Algorithm & Flow chart.
III		Exchanging the value of two variables, Counting, Summation of set of numbers, Factorial computation, Generation of the Fibonacci sequence, reverses the Digits of an integer.	Student solve the factorial & counting number system.
IV		The Smallest divisors of an integer, Generating prime numbers, Definition and Memory Representation of array , Array order reversal, Array counting,	Student to develop understanding of basic data structure such as arrays.

		Finding the Maximum number in a set, Sorting by exchange, Binary Search.	
--	--	--	--

Specify Course Outcome:

- 1) Student will be able to design algorithm to solve different problems.
- 2) Student will understand how to solve problems using computer

Specify Program Outcome:-

- 1) To develop understanding of problem solving using computers.
- 2) To develop understanding of basic data structures such as arrays.
- 3) Learn techniques of responsive web design, including media.
- 4) To solve problems using data structures such as linear lists, stacks, queues, hash Tables, binary trees, heaps, binary search trees, and graphs and writing programsfor
- 5) Able to write well-structured procedure-oriented programs.
- 6) It aims to train the student to the basic concepts of the C-programming language.
- 7) Develop skills in analyzing the usability of a web site.
- 8) Understand how to plan and conduct user research related to web usability.

Signature of Teacher



Dharmabad Shikshan Sanstha's

Lal Bahadur Shastri Mahavidyalaya, Dharmabad.

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher :- Miss. Khare Manali

Department :- Computer Science

Program :- B.Sc1st yr Sem-I

Subject :- Computer Science

Course Code :- OCS- 102

Paper Title :- Designing of Pages Using HTML

Unit Number	Unit Name	Topics	Unit-wise Outcome
I		Internet, The important of the Internet, World Wide Web, URLs, Web Brewers, Web Server, Internet Services, The Web Flow, objectives of the website, basic interface design, developing a store board for the Website, navigation and links within the site, checklist for designing.	Student use the internet & how to create Web pages.
II		HTML, Basic elements, Lists, Linking HTML pages, Linking to URLs, Text formatting, Text Alignment, Character Styles, Forts and Font Sizes, Using Colors for the Web, Preformatted text, Horizontal Lines, Line break, displaying special characters.	Student will be understand using the HTML.
III		Images in HTML Pages, Tables in HTML, Frames, Creating Frames, Frame attribute linking, complex framesets, Inline frames, Image maps	Student be able to understand the principles of creating an effective Web pages.
IV		Form designing, Additional Layout features, Intro to CGI Scripting, Active Server Pages, Introduction to Embedding Multimedia and Java Applets, Inserting Sound/Audio into Web Pages, Video file formats, Creating Marquee, Into to JavaScript and Dynamic HTML, Structure of JavaScript.	Student will understand the basic knowledge of scripting & Applets.

Specify Course Outcome:

1. Be able to use the HTML programming language.
2. Understand the principles of creating an effective web page.
3. Develop skills in analyzing the usability of a web site.

Specify Program Outcome :-

- 1) To develop understanding of problem solving using computers.
- 2) To develop understanding of basic data structures such as arrays.
- 3) Learn techniques of responsive web design, including media.
- 4) To solve problems using data structures such as linear lists, stacks, queues, hash Tables, binary trees, heaps, binary search trees, and graphs and writing programs for
- 5) Able to write well-structured procedure-oriented programs.
- 6) It aims to train the student to the basic concepts of the C-programming language.
- 7) Develop skills in analyzing the usability of a web site.
- 8) Understand how to plan and conduct user research related to web usability.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Khare Manali

Department: Computer Science

Program: B.sc 1st yr Sem-II

Subject: computer science

Course Code: OCS-103

Paper Title: Introduction to data structure

Unit Number	Unit Name	Topics	Unit-wise Outcome
I		Definition of Data structure, Elementary data organization, Data structure operation, Algorithmic notation, control structure.	Student will understand the basic knowledge of data structure.
II		Introduction to linked list, Representation of linked list in memory, Traversing , searching in unsorted linked list , overflow and Underflow, Inserting at the beginning of a list ,deleting node following a given node.	Student develop application using data structure including the Insertion, Searching, Linking, Deleting.
III		Stack: Introduction, Memory representation of stack, Insert element in stack i.e PUSH operation, Delete element from stack i.e POP operation. Queue: Introduction, Memory representation, Insert and Delete operation in Queue.	Students implement of algorithm for the creation of insert & Delete operation.
IV		Tree: Introduction, Definition of a Binary tree & its memory representation, Traversing a Binary tree, PREORDER, INORDER, POSTORDER traversal, Threaded binary tree. Graph: Introduction , Memory representation of graph.	To solve the problems using Binary trees , graphs PREORDER,POSTORDER, INORDER.

Specify Course Outcome:

- 1) To develop application using data structure .
- 2) Student develop knowledge of applications of data structures the

Ability to implement algorithms for the creation , insertion, deletion, searching.

Specify Program Outcome:

- 1) To develop understanding of problem solving using computers.
- 2) To develop understanding of basic data structures such as arrays.
- 3) Learn techniques of responsive web design, including media.
- 4) To solve problems using data structures such as linear lists, stacks, queues, hash Tables, binary trees, heaps, binary search trees, and graphs and writing programs for
- 5) Able to write well-structured procedure-oriented programs.
- 6) It aims to train the student to the basic concepts of the C-programming language.
- 7) Develop skills in analyzing the usability of a web site.
- 8) Understand how to plan and conduct user research related to web usability.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Shetty Sneha .S

Department: Computer Science

Program: B.Sc 1st yr Sem-II

Subject: Computer Science

Course Code: OCS-104

Paper Title: Programming in C language

Unit Number	Unit Name	Topics	Unit-wise Outcome
I		Introduction to C, Character set, C tokens, Constant & Variables, Data types, Declaration of variables, Assigning values to variables, Input/output statement, All Operators & Structure of C program.	Student will be understand the basic knowledge of the computer.
II		If statement, If-else statement, Nesting of If-else statement, Switch statement, Goto, Looping statement, While loop, Do-while, For loop, Nested loop.	Student implement of how to solve of condition using statement & looping.
III		Introduction to array , Types of array, declaration & initialization, Introduction to function ,Recursion, Standard library string handling function: Strlen(), Strcpy(), Strcmp(),Strcat()., Storage classes: auto, static, register, extern.	To develop logics which will help them to create programs.
IV		Introduction to Function, Introduction to Structure & Union, Defining Structure & Accessing Structure members, Introduction to Concept of File handling.	Student will understand the more advanced features such as function, structure, Union.

Specify Course Outcome:

- 1) Introduces the more advanced features of the C language.
- 2) Course is designed to provide complete knowledge of C language.
- 3) To develop logics which will help them to create programs.

Specify Program Outcome:

- 1) To develop understanding of problem solving using computers.
- 2) To develop understanding of basic data structures such as arrays.
- 3) Learn techniques of responsive web design, including media.
- 4) To solve problems using data structures such as linear lists, stacks, queues, hash Tables, binary trees, heaps, binary search trees, and graphs and writing programs for
- 5) Able to write well-structured procedure-oriented programs.
- 6) It aims to train the student to the basic concepts of the C-programming language.
- 7) Develop skills in analyzing the usability of a web site.
- 8) Understand how to plan and conduct user research related to web usability.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss. Khare Manali

Department: computer science

Program: B.Sc 2nd yr Sem-III

Subject: computer science

Course Code:-VI

Paper Title: Operating System-VI

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Overview of Operating System	Introduction, What Operating system Do, Computer system organization, Computer system Architecture, Special –purpose systems ,Operating –system structure, Operating-system operations, Process management, Memory management, Storage management, Protection & Security, Distributed systems, Special –purpose systems , Computing environments.	Student will be understand the basic knowledge of Computer system 7 memory management, Storage management.
II	Exploring Operating system	Operating system services, User operating system interface, system calls, Types of system calls, System programs, Operating system design & implementation, Operating- system structure, Virtual machines, Operating system Generation, System Boot.	Student will be understand the operating system design & implement system structure.
III	Process & Threads	Process concept, Process scheduling operation on Processes, Inter-Process Communication Examples of IPC systems, Communication	Student use the multithreading models

Unit Number	Unit Name	Topics	Unit wise outcome
		in Client-Server Systems, Overview of threads, multithreading Models.	
IV	Memory	Background, Swapping, Contiguous Memory Allocation, Paging, Structure of the page table Segmentation, Virtual memory	To learn the Swapping, Memory allocation ,virtual memory.
V	File system	File concept , access methods, Directory structure, File system, File-system Mounting, File sharing, Protection, File system structure.	Student to understand the structure & organization of the file system.
VI	Protection in Operating systems	Goals of protection, Principles of protection, Domain of protection, Access Matrix, Implementation of access, Control, Revocation of access rights, Capability-Based systems, Language-Based protection	to learn the principles of protection, Access Matrix.

Specify Course Outcome:

- 1) Student will be able to the basic components of a computer operating system.
- 2) To learn fundamentals of operating system.

Specify Program Outcome:

- 1) To learn mechanism of OS.
- 2) To understand how C++ improves C .
- 3) To learn how to design C++ classes for code reuse .
- 4) To learn why Java is useful for the design of desktop and web applications.
- 5) To learn how to implement object-oriented designs with Java.
- 6) To identify Java language components and how they work together in applications.
- 7) To understand the services provided by and the design of an operating system .
- 8) To understand the structure and organization of the file system.
- 9) To understand what a process is and how processes are synchronized and scheduled.
- 10) To understand how C++ improves C with object-oriented features .

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Shetty Sneha .S

Department: computer science

Program: B.Sc 2nd yr SemIII

Subject: computer science

Course Code: VII

Paper Title: Object Oriented Programming using C++

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Object Oriented Programming & C++	Object oriented Programming Paradigm, Basic Concept of OOP, Benefits of OOP, Object Oriented Languages, Application of OOP, A simple C++ program, More C++ statements, Structure of C++ program.	Student implement the concept of object oriented programming. Assemble programs in C++.
II	Basics of C++	Introduction, Tokens, Keywords, identifiers & Constants, Basic data types, User defined data types, Derived data types, variables Declaration & dynamic initialization, Reference variables, Operators in C++: Scope resolution, Manipulators, Operator Precedence, Decision Control & Loop Control structures: If, If-else, Nested If, Else-If ladder, Switch, goto, Break statement, While, Do-while, For.	Develop programs using the basic elements like control statement, & Conditional statement.
III	Functions in C++	Introduction, Function prototyping, Call by value & Call by reference, Inline function, default arguments, Function Overloading, Library function.	Implement C++ programming function overloading & library function.

IV	Classes & Constructors in C++	Introduction , structures, Specifying a class , defining member functions, Memory allocation for objects, Static data members, Static member functions, Objects as function arguments, Friend Functions. Introduction to Constructors, Parameterized constructors, Copy constructors, Multiple Constructors in a class, Destructors.	Write program using C++ features such as static data member ,static member function.
V	Operator Overloading	Introduction, Defining Operator overloading, Overloading Unary Operators, Overloading Binary Operators, Overloading binary operator using friend, Rules for Overloading operators.	Write program using C++ such as operator overloading, unary overloading, Binary overloading.
VI	Inheritance in C++	Introduction, Defing derived classes, Single inheritance, Multilevel inheritance, Multiple inheritance, hierarchical inheritance , Hybrid inheritance, Virtual base classes, Abstract classes.	Student will be understand the old class to new class. Write program using C++ such as Inheritance.

Specify Course Outcome:

1. Upon completion of this course, students will able to do programming independently and will also be able to built small application,
2. Introduces the more advanced features of the C++ language.

Specify Program Outcome:

- 1) To learn mechanism of OS.
- 2) To understand how C++ improves C
- 3) To learn how to design C++ classes for code reuse
- 4) To learn why Java is useful for the design of desktop and web applications.
- 5) To learn how to implement object-oriented designs with Java.
- 6) To identify Java language components and how they work together in applications.
- 7) To understand the services provided by and the design of an operating system .
- 8)To understand what a process is and how processes are synchronized and scheduled.
- 9)To understand how C++ improves C with object-oriented features .

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Khare Manali

Department: computer science

Program: B.Sc 2 nd yr Sem-IV

Subject: computer science

Course Code: VIII

Paper Title: Computer Network -VIII

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Introduction to Network	Definition & Applications of Computer Network, Data transmission Modes, protocol Hierarchies, Design issues for layers, Connection Oriented & Connectionless services, service primitives, Network Models- OSI/ISO Reference Model & TCP/IP Model.	Study basic structure of computer system.
II	Network Hardware	Network Topologies, Network Devices- NIC cards, Hub, switch, Bridges, Wireless Access points, router , Gateways, ISDN Terminal Adaptor, Repeaters, types of Networks.	Study different devices used in network.
III	Transmission Media	Magnetic Media, Twisted Pair, Co-axial cable, fibre optics, Radio transmission, wireless transmission , Bluetooth.	Study different cables in network.
IV	Telephone Systems	Structure of telephone system , Transmission & switching, Trunks & multiplexing, Type of Switching, Introduction to mobile telephone systems.	Study the telephone system ,Trunks & multiplexing.
V	Internetworking Protocols	web server, Browsers, addresses, IPv6, Introduction	Student study the Web server, Browser.
	Network Security	Introduction to security &	Study different

VI	& Cryptography	Cryptography , security concepts-Computer security, Network security, Information Security, Firewall, Working of Firewalls, Conventional Cryptography, Casesar's Cipher, public key Cryptography.	technique in security, Cryptography.
----	----------------	---	--------------------------------------

Specify Course Outcome:

- 1) Study network devices, Structure of network.
- 2) Study security & protocols of operating system.

Specify Program Outcome:

- 1) To learn mechanism of OS.
- 2) To understand how C++ improves C
- 3) To learn how to design C++ classes for code reuse
- 4) To learn why Java is useful for the design of desktop and web applications.
- 5) To learn how to implement object-oriented designs with Java.
- 6) To identify Java language components and how they work together in applications.
- 7) To understand the services provided by and the design of an operating system .
- 8) To understand what a process is and how processes are synchronized and scheduled.
- 9) To understand how C++ improves C with object-oriented features .

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Shaikh Y.S

Department: computer science

Program: B.Sc 2nd yr Sem-IV

Subject: computer science

Course Code:-IX

Paper Title: Programming in Java

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Java Evolution	Java History , Java Features, How Java differs from C & C++, java & Internet, Java & WWW, Web Browsers, Java support systems, java Environment.	Learn the history of JAVA.
II	Overview of Java	Introduction, simple Java program, More JAVA statements, An application with two classes, Java program structure, Implementation of a Java program, JAVA virtual Machine, Command Line Arguments. Java Tokens, Constants ,variables, Datatypes, declaration of variable, giving values to variables, Scope of variables, Symbolic constants, Type casting, Getting values of variables, Standard default values, Java statement.	Study the JAVA program structure & implementation of JAVA program. Study the JAVA tokens, Variables, Data types.
III	Classes, Object & Methods	Introduction, Defining a class, Adding variables, Adding methods, Creating objects, Accessing Class Members,	Study the Class & Method Overloading Inheritance.

		Constructors, Method Overloading, Static Members, Nesting of Method, inheritance :Extending a class, overriding Method, final variable & Methods.	
IV	Interfaces-Multiple Inheritances	Introduction, Defining Interface, Extending interface, Implementing Interface, Accessing Interface variables.	Study interface & implement in JAVA.
V	Arrays & String	Introduction, One – dimensional Array creating an one dimensional array, Two dimensional arrays, Creating an two dimensional array, String arrays, string Methods.	Study the Array & String of JAVA Such as One dimensional array, Two dimensional array, String array.
VI	Packages & Applets	Introduction, Java API packages, Using system packages, Naming Conventions, Creating packages Accessing a package, Adding a class to a package. Introduction, How applets differ from applications, Preparing to write applets, building applet code, Applet life cycle.	Study the JAVA packages & Applets.

Specify Course Outcome:

- 1) On completion of the course the student would be able to use Java integrated development environment to write, compile, run, and test simple object-oriented Java programs.
- 2) Further, they would be able to make elementary modifications to Java programs that solve real-world problems.

Specify Program Outcome:

- 1) To learn mechanism of OS.
- 2) To understand how C++ improves C
- 3) To learn how to design C++ classes for code reuse
- 4) To learn why Java is useful for the design of desktop and web applications.
- 5) To learn how to implement object-oriented designs with Java.
- 6) To identify Java language components and how they work together in applications.
- 7) To understand the services provided by and the design of an operating system .
- 8)To understand what a process is and how processes are synchronized and scheduled.
- 9)To understand how C++ improves C with object-oriented features .

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Shetty Sneha .S

Department: Computer Science

Program: B.Sc 3rd yr Sem-V

Subject: Computer Science

Course Code: XII

Paper Title: Software Engineering

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	The Nature of Software & Software Engineering	The Nature of Software, The Changing nature of software, Defining the Discipline, Software engineering process, Software Engineering practice, Software Myths.	Prepare detailed plans & design as per customers demands, carry out testing, develop intuitive user interfaces all these activities into a system.
II	Software Process Structure & Models	A Generic process model, Defining a framework activity Process Patterns Assessment & improvement, Prescriptive Process models, Personal & team process models .	Understand Software Engineering process.
III	Agility development & Human Aspects	Introduction to agility, Agility & cost of change, Agility Principles, Extreme Programming ,Characteristics of Software engineer, Psychology of software engineering, Software team structures.	Understand Software Design & Software testing fundamentals, Agility & cost of change.
IV	Understanding Requirement & Design concept	Requirement Engineering, Building the analysis model, Requirement Analysis, Design within the context of software engineering, The design process, Design model, Software Architecture, Element of Quality assurance, Software testing fundamentals.	Understand Requirement & Components of software Architecture , Elements of Quality.

Specify Course Outcome:

- 1) Confidence of becoming a Software developer in order to get placement as well as In research activities and Knowledge of Software.
- 2) Software engineering is art of software designing. It aims to prepare detailed plans and Designs as per customer's demands.

Specify Program Outcome:

- 1) Understand the software Engineering process.
- 2) Understand Requirement & Component of Software Engineering.
- 3) Understand Software Design & testing.
- 4) Implement VB programs to solve simple problems.
- 5) course covers fundamental issues and first principles of security and information assurance.
- 6) Understand Software Testing Process
- 7) Understand Various types of software testing
- 8) Understand how to handle testing process
- 9) Develop skills in analysing the usability of a web site.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Shaikh Y.S

Department: Computer Science

Program: B. Sc 3rd yr Sem-V

Subject: Computer Science

Course Code: XIII[A]

Paper Title: Visual Programming

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Getting Started with VB	The IDE, The elements of user interface, Designing user interface, Programming an Application Visual Development & Event Driven Programming	Study Basic parts of IDE.
II	Visual Basic The Language	Variable, Constants, Operators, Data types, Array, Collection, Procedures, Control flow & Loop Statements.	Study the Variables, Operators, Data types, Array.
III	Working With Forms	Form types, Appearance of forms, form properties, Designing menu structure, Building dynamic forms at run time, Introduction to MDI forms.	Student study the different forms.
IV	Basic Active X controls	Command button, Control – Properties, Text Box control- Properties, List Box & Combo Box Control- Properties, Combo Box Control- Properties, Scroll Bar Control- Properties, Slider Control- Properties, Understanding Visual data manager.	Student study the controls of properties, Text box, combo box control properties, understanding the visual data manager.

Specify Course Outcome:

- 1) Confidence of becoming a Software developer in order to get placement as well as in research activities.
- 2) Knowledge of Programming

Specify Program Outcome:

- 1) Understand the software Engineering process.
- 2) Understand Requirement & Component of Software Engineering.
- 3) Understand Software Design & testing.
- 4) Implement VB programs to solve simple problems.
- 5) course covers fundamental issues and first principles of security and information assurance.
- 6) Understand Software Testing Process
- 7) Understand Various types of software testing
- 8) Understand how to handle testing process
- 9) Develop skills in analysing the usability of a web site.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Shaikh Y.S

Department: Computer Science

Program: B.Sc 3rd yr Sem-VI

Subject: Computer Science

Course Code: XIV

Paper Title: - Relational Database Management Systems & PL/SQL

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Introduction	Introduction to DBMS, Application of DBMS, Data models, Database Architecture, Database Users & Administration, Entity, Attribute & Entity Set, Database Language, DDL, DML, DCL.	Student study the different basic parts of DBMS.
II	Relational Algebra & Calculus	Introduction to selection, Projection, Union & Joins, introduction to SQL, Basic SQL query & Examples of SQL Queries: select, Where, From, Introduction to views, Aggregate Operators Group by & Order by Clause.	Student study the Union Joins, & different Queries such as select, Where, From & Order by clause.
III	Integrity Constants	Introduction, Domain Constraint, Primary key, Unique key, Foreign key.	Student study the different key such as primary key, unique key, Foreign key.
IV	Introduction to PL/SQL	Introduction, Architecture of PL/SQL, Data types, Operators, Decision Making & looping statement, Simple PL/SQL programs, Introduction to Triggers.	Student study the Architecture of PL/SQL, Looping statement & Triggers.

Specify Course Outcome:

- 1) RDBMS alone give good Placement to student in IT industry.
- 2) To learn Relational Database Management system and database languages.
- 3) To learn Relational Algebra and Calculus.
- 4) To study Integrity Constraints and PL/SQL
- 5) To develop an application using PL/SQL.

Specify Program Outcome:

- 1) Understand the software Engineering process.
- 2) Understand Requirement & Component of Software Engineering.
- 3) Understand Software Design & testing.
- 4) Implement VB programs to solve simple problems.
- 5) course covers fundamental issues and first principles of security and information assurance.
- 6) Understand Software Testing Process
- 7) Understand Various types of software testing
- 8) Understand how to handle testing process
- 9) Develop skills in analysing the usability of a web site.

Signature of Teacher



Dharmabad Shikshan Sanstha's
Lal Bahadur Shastri Mahavidyalaya, Dharmabad. 431809

Pro-forma for program and course outcomes (2.6.1)

Name of Teacher: Miss Shetty Sneha .S

Department: Computer Science

Program: B.Sc 3rd yr Sem-VI

Subject: Computer Science

Course Code: XV[B]

Paper Title: E- Commerce

Unit Number	Unit Name	Topics	Unit-wise Outcome
I	Electronic Commerce	Introduction, E-Commerce types, Value Added Networks, Electronic Commerce over the Internet.	Student study the basic information & types of E- Commerce.
II	Intranet	Introduction to Intranet, Intranet services, Intranet Implementation.	Student study the Basic information of Intranet & Intranet services.
III	Internet	Internet Introduction, Internet Engineering task force, Internet Architecture Board, Internet Communication Protocols, Internet Search Tools: Telnet, FTP, World Wide Web, Gropher, HTTP, Concerns About Internet.	Student study the information of Internet ,Internet Architecture Board, Protocols & different tools.
IV	Electronic Data Interchange	EDI Introduction, Cost & Benefits of EDI, Components of EDI system: EDI standards, EDI Softwares, EDI Communication Network,, EAN system, EAN/COM, Article numbering system, Bar-Coding, Serial Shipping Container Code & EAN label.	Student understand the Electronic Data Interchange.

Specify Course Outcome:

- 1) To learn Electronic commerce market place & internet.
- 2) Understand Electronic Data Interchange.

Specify Program Outcome:

- 1) Understand the software Engineering process.
- 2) Understand Requirement & Component of Software Engineering.
- 3) Understand Software Design & testing.
- 4) Implement VB programs to solve simple problems.
- 5) course covers fundamental issues and first principles of security and information assurance.
- 6) Understand Software Testing Process
- 7) Understand Various types of software testing
- 8) Understand how to handle testing process
- 9) Develop skills in analysing the usability of a web site.

Signature of Teacher