

LIST OF EXPERIMENTS**(1) 3310703 (Fundamental of Computer Applicaton)**

SR.NO.	NAME OF PRACTICAL
1	To Study about Computer Fundamentals.
2	Introduction to DOS Commands.
3	Execute DOS commands using example.
4	Introduction to Windows.
5	Introduction to Microsoft Office.
6	Introduction to Ms-Word.
7	Introduction to MS-Excel.
8	Introduction to MS-PowerPoint.
9	Gujarati Indic IME 1 Version 5.1 & TBIL
10	Design web page using formatting attributes using HTML
11	Introduction about scripting language i.e. JavaScript
12	To Study about Computer Fundamentals.
13	Introduction to DOS Commands.
14	Execute DOS commands using example.
15	Introduction to Windows.
16	Introduction to Microsoft Office.
17	Introduction to Ms-Word.

3310701 (Computer Programming)

SR. NO.	TITLE
1.	Draw Flow Chart and Write algorithm for minimum 5 basic program.
2.	WAP explaining constants,variables.
3.	WAP to understand Data types modifiers and type conversion
4.	WAP providing insight to formatted and unformatted input and output in 'C'
5.	Write C Program to compute
6.	WAP to print arithmetic operation
7.	WAP using logical & relational operator
8.	WAP to print percentage and grade of student
9.	WAP to compute real roots of quadratic equation
10.	WAP to calculate gross salary of employee
11.	WAP using switch-case
12.	WAP to print sum of even and sum of odd no
13.	WAP using loop
14.	WAP to print reverse no and sum of all digit in a given number
15.	WAP to print various patterns & Fibonacci series
16.	WAP to check whether no is prime or not
17.	WAP to count positive, negative no until user inputs zero
18.	Write a Program to enter the five element using Array and print it on the screen.

3320702(Advanced Computer Programming)

	Sub. No.	Title of practical
1	1.1	W.A.P. Explainin g insertion operation.
	1.2	W.A.P. Explaining searching operation.
	1.3	W.A.P. Explaining merging operation.
	1.4	W.A.P. Explaining sorting operation.
	1.5	W.A.P. Explaining deletion operation.
2	2.1	W.A.P. to find length of a string using strlen()function.
	2.2	W.A.P. to compare 2 string using strcmp()function.
	2.3	W.A.P. to copy 1 string to another string using strcpy()function.
	2.4	W.A.P. showing the use of strlwr()function.
3	3.1	W.A.P to find largest number at specific position.
	3.2	W.A.P to read the marks of one subject of 10 student and computes the number of students in categories FAIL, PASS, FIRST CLAS AND DISTICTION using enum data types.
	3.3	W.A.P to perform addition of two matrixes in third one in two dimensional arrays.
	3.4	W.A.P to display two-dimensional array elements together with their address.
	3.5	W.A.P to to demonstrate insert operation of element with two-dimensional array.
	3.6	W.A.P to to demonstrate delete operation of element with two-dimensional array.
4	4.1	Programs usingstrupr(), strchr(), strcat() functions.
5	5.1	Write a program to print the value of variables in different ways. How would you use '*' and '&' operator for accessing the values.
	5.2	Write a program to show the effect of increment on pointer variables. Display the memory location of integer, character and floating point numbers before and after the increment of pointers.
	5.3	Write a program to access elements of an array through different ways using a pointer.
	5.4	Write a program to copy the elements of one array to another using array.
	5.5	Write a program to store address of different elements of an array using array of pointers.
	5.6	Write a program to use different levels of array of pointers to pointer and display the elements.
6	6.1	W.A.P. using function to add 2 numbers.
	6.2	W.A.P. using function to swap value (1)using call by value (2)call by reference
	6.3	W.A.P. using function that takes array as arguments print max & min number.
	6.4	W.A.P. using nesting of function.
7	7.1	Write a program using Structure.
	7.2	Write a program using array of structure.
8	8.1	W.A.P. using recursion.

9	9.1	W.A.P to read data from file & display the data on the screen.
	9.2	W.A.P. to copy ne file into another file
10	10.1	W.A.P. using union.
	10.2	W.A.P. using union of structure.
11	11.1	W.A.P. explaining the use offprintf(),fscanf()
	11.2	W.A.P. explaining the use of getch(),putch()
	11.3	W.A.P. explaining the use of fgetch(),fputch()
	11.4	W.A.P. explaining the use of fseek(),feof()
	11.5	W.A.P using MACRO
	11.6	W.A.P using #include.

3320703 Static Web page Designing

Sr. No	TITLE
1	Web site development essentials
2	Hyper Text Markup Language 2.1 Develop basic HTML Pages with Tables. 2.2 Develop basic HTML Pages with. Hyperlinks. 2.3 Develop HTML Pages with frames.
3	Dreamweaver basic 3.1 Explain various features of Dreamweaver Interface 3.2 Setting up a site with Dreamweaver interface. 3.3 Insert Text, images and creating links using Dreamweaver
4	Cascading Style Sheets 4.1 develop various pages using CSS Selectors And internal style sheets. 4.2 develop various pages using CSS Selectors And external style sheets.

	4.2 develop various pages using CSS Selectors And inline style sheets.
5	Using CSS with Tables 5.1 Styling Table with the help of normal HTML tag. 5.2 Styling Table with the help of CSS.
6	Design your own customize static web site. With use of all CSS tags and attributes.

3330701(Operating System)

SR. NO.	TITLE
1	To study different commands of UNIX
2	To run UNIX commands on file and directory Manipulation
3	File searching and system related commands
4	To study compound UNIX commands
5	To study queries with Grep & sort command
6	To study different shell scripts
7	To write Shell script using control structures
8	To write script using loop
9	To write shell script for file test
10	To write shell script using command line argument

3330702(Programming in C++)

SR. NO.	TITLE
1	Write C++ Program to compute $x=a^2-2ab+b^2/2ab$
2	WAP to print arithmetic operation
3	WAP to print percentage and grade of student
4	WAP using logical & relational operator
5	WAP to compute real roots of quadratic equation
6	WAP to calculate gross salary of employee
7	WAP using switch-case
8	WAP to print sum of even and sum of odd no
9	WAP using loop
10	WAP to print reverse no and sum of all digit in a given number
11	WAP to print various patterns & Fibonacci series
12	WAP to check whether no is prime or not WAP to print prime no between 2 to 100
13	WAP to count positive, negative no until user inputs zero
14	WAP to sort array in ascending & descending order
15	WAP to print matrix addition

16	WAP using function to add two numbers 1) void add(int,int) II) int add(int,int)
17	WAP to swap value using i) call by value & ii) call by reference
18	WAP using function that takes array as argument & print max & min no
19	WAP using nesting of function
20	WAP using recursion
21	WAP using pointer to print sum & average of five numbers
22	WAP to print reverse string & check whether string is palindrome or not
23	WAP using pointer to count character in a given string
24	WAP using structure
25	WAP using array of structure
26	WAP using file that read/write string
27	WAP to copy one file into another file
28	WAP using command line argument

3330703(Database Management System)

SR. NO.	TITLE
1	To Execute Various Query using DDL & DML
2	To Execute Various Query using DDL & DML

3	To Execute Various Query using DDL & DML
4	To Execute Various Query using DDL & DML
5	To Execute Various Query using Function & Set operation.
6	To Execute Various Join Operation using Table
7	To Execute Various Set Operation using Table
8	To Execute Various Query using Various function.
9	To Execute Various Query using Various function.
10	To Perform Different Sub Queries & Co-relate Query.
11	Write Queries using Relational Algebra.
12.	To Execute Various Constraints using Tables.
13	To Generate Report using Different Command.

3330704(Data structure and Management)

SR. NO.	TITLE
1	Write an algorithm and a program for insert and delete operation of array element using array data structure.
2	Write an algorithm for push and pop Stack operations And write a program using array data structure
3	Write an algorithm for push and pop Stack operations And write a program using pointer
4	Write an algorithm for insert and delete Queue operations And write a program using array data structure
5	Write an algorithm for insert and delete Queue operations And write a program using pointer
6	Write an algorithm And a Menu-Driven program for following Ordered Singly Linked List Operations : 6.1 Addition into the list

	6.2 Deletion from the list and Display
	6.3 Searching into the list and Display
	6.4 Display the list
7	Write an algorithm And a Menu-Driven program for following Binary Tree Operations : 7.1 Addition new nodes into the tree
	7.2 Deletion nodes from the tree
	7.3 Searching a node into the tree
	7.4 Display current node of the tree
8	Write an algorithm and a program for Sequential Search
9	Write an algorithm and a program for Binary Search
10	Write an algorithm and a program for Bubble Sort
11	Write an algorithm and a program for Insertion Sort
12	Write an algorithm and a program for Selection Sort
13	Write an algorithm and a program for Shell Sort
14	Write an algorithm and a program for Merge Sort

15	Write an algorithm and a program for Quick Sort
16	Write an algorithm and a program for Radix Sort
17	Write an algorithm and a program for 17.1 Finding a length of a given sting
	17.2 Copying a string into another string
	17.3Concatenating two string and compare it
	17.4Finding a substring into a given string

3340701(Advanced Database Management System)

SR. NO.	TITLE
1	Create Synonym & Sequence.
2	Create Index.
3	Create, alter and update view.
4	To execute queries using Grant and Revoke, and create user.
5	Write PL/SQL block using Control Statement.
6	Write PL/SQL block using Loop Statement & Exception Handling.
7	Write PL/SQL block using TCL.
8	Write PL/SQL block using Pre-defined Exception Handling.

9	Write PL/SQL block using User-defined Exception Handling.
10	Write PL/SQL block using Implicit Cursor.
11	Write PL/SQL block using Explicit Cursor.
12	Write PL/SQL block using Function & Procedure.
13	Write PL/SQL block using Package
14	Create Before Trigger.
15	Create After Trigger.
16	To Study Database Design using Normalization

3340702(Computer Network)

SR. NO.	TITLE
1	Install & Test Network Interface Card.
2	i. Prepare and Test Straight UTP Cable. ii. Prepare and Test Cross UTP Cable.
3	Develop a small Network. (Hands on Training.)
4	Install and configure File Server.
5	Install and configure Print Server.
6	Install and configure Mail Server.

7	Install and configure Proxy Server.
8	Install and configure Web Server.
9	Install and Test Router, Repeater and Bridge.
10	Install a small wireless network using access points.

3341603(Fundamental of software desing)

SR. NO.	TITLE
1	Study of SDLC.
2	Write and Explain Requirement gathering for software
3	Draw classical and iterative waterfall model
4	Draw spiral model of software development
5	Draw Gantt chart for the given project
6	Develop an SRS for the Railway Reservation System
7	Develop an SRS for Online Examination System
8	Develop an SRS for Online Shopping
9	Develop SRS for Library Management System
10	To Study about DFD.
11	To Draw DFD for Student Registration System.
12	To Draw DFD for Library Management System.

13	To Draw DFD for Payroll System.
14	To Draw DFD for Hotel Management System.
15	To Draw DFD for Inventory Management System.
16	To Draw DFD for Railway Reservation System
17	To Draw E-R Diagram for Hospital management system.
18	Draw UML Diagram for Library Management System
19	To Draw UML Diagram for ATM
20	To Draw UML Diagram for Order processing Management
21	To Draw UML Diagrams for Hospital Management System.
22	To Draw UML Diagram for Online Shopping

3340706(Web Development tools)

Sr.no	TITLE
01	Write various web terminologies.
02	Create one sample XML document using different XML technologies
03	Create Gmail Account and contacts. Test various mail utilities such as write mail, send mail, forward mail, reply mail, attach a file, creating signature, draft etc
04	Test advanced feature of gmail and Test calendar functionality
05	Test Google docs. Test Google drives and printer.
06	Create group, sharing information, sending messages to a group etc. Test DropBox
07	Download and install wordpressXampp server. 02
08	Work with administration menu and Dashboard: Logging in and looking around
09	Understand the different features themes and what a theme is. Installing them Pick a theme that works for what you want to create. Switch your theme, if you change Your mind. Make your theme beautiful on computers, phones, and tablets
10	Add personal touches to your blog, like as a custom header or background. Access more options to personalize your blog, such as unique fonts and colors
11	Add and configure widgets (and what widgets are).
12	Create a post or a page. Publish a post with text and images. Use different post

	formats depending on what you want to publish. Publish a page with text and images.
13	Create a menu to help visitors navigate your pages and posts
14	Install plugins and edit plugins.
15	Manage users to access your website
16	Add custom slider.
17	Install Alice and understand code editor, scene editor, methods panel, control panel and galleries.
18	Write, code, debug and test simple programs on alice.

3350701(Computer Maintenance and Troubleshooting)

SR. NO.	TITLE
1	Study of Maintenance Kit
2	Introduction to Computer Peripherals
3	Disassembling Faulty Computer system
4	Reassembling Computer system
5	Troubleshooting and Repairing of motherboard and Components on Motherboard
6	Troubleshooting and Repairing of Keyboard and Scanner
7	Troubleshooting and Repairing of Printer
8	Troubleshooting and Repairing of Hard Disk Drive
9	Troubleshooting and Repairing of CD-ROM drive/ CD-Writer/Combo Drive/DVD writer
10	Troubleshooting and Repairing of Pen drive

11	Troubleshooting and Repairing of Speaker and Web camera
12	Troubleshooting and Repairing of Mouse and SMPS

3335702(Dynamic Web Page Development)

SR. NO.	TITLE
1	Write a Simple HTML code & also write code to attach video on webpage using embed tag in html
2	Write HTML codes for displaying image and demonstrate hyper linking.
3	Create a contact form using form handling.
4	Write a code for design menu system using list tag
5	Write a PHP script to display Welcome message.
6	6.1 Write a PHP script to demonstrate arithmetic operators, Comparison operator, and logical operator.
	6.2 Write down a php program to find average number from all the given number using constant and variable.
7	7.1 Display or print the details of students in tabular format using associative and multidimensional array in sorted form.
	7.2 Write a program to calculate electricity bill using control structure.
	7.3 Write a program using loop structure to select a date using drop down listbox.
8	8.1 Write a PHP script to get type of variable using gettype() using settype()
	8.2 Write a PHP script to set type of variable using settype()
	8.3 Write PHP Script to find maximum number out of three Given numbers.
	8.4 Write PHP script to display date formats using date functions.

	8.5 Write PHP script to demonstrate Math functions.
	8.6 Write PHP script to demonstrate string function.
9	Write PHP Script for FOR EACH loop execution.
10	Write PHP script Using user defined function
11	11.1 Write a program for creating form using buttons, textboxes and other form elements using \$_POST method to retrieve data.
	11.2 Write a program for creating form using buttons, textboxes and other form elements using \$_GET method to retrieve data.
	11.3 Write php script to passing hidden information to the form processing script hidden form controls.
12	12.1 Write a php script to pass the variable using session.
	12.2 Write a php script to pass the variable using cookie.
	12.3 Write a php script to passing variable between pages using URL query string.
13	Allowing the user to upload their own images.
14	Write a PHP script to connect MYSQL server from your website.
15	Write a PHP script to create database.
	Write a PHP script to drop database.
16	16.1 Write steps to create database using phpMyAdmin.
	16.2 Write a program to read input data, from table and display all these information in table format on output screen.
17	Write a program to manipulate data from table and display all this information using table format.

3350703(Java Programming)

SR. NO.	TITLE
1	Write a simple “Hello World” or similar java program, compilation, debugging, executing using java compiler and interpréter.
2	Sorting a 5 element of array list.
3	Program to Print Numbers From 1 to 100 Using 2D Array
4	Develop programs to explor wrapper classes.
5	Write a program using class & object related programs
6	Develop programs based on overloading methods.
7	Write a Program using Final keyword, and static keyword.
8	Write a program using constructors
9	Write a Program using Command Line Arguments
10	Write a Program using simple Inheritance
11	Develop programs based on method overriding.
12	Write a Program using multilevel Inheritance
13	Write a Program using Interface, Creating Multiple Inheritance using Interface
14	Write a Program using Exception Handling using pre-defined Exception Class
15	Write a Program using Creating User-defined Exception Class
16	Write a Program using simple-Threading Programming
17	Write a Program using Multi-Threading Programming
18	Write a Program to find a length & compare two string using String handling
19	Write a Program to reverse string using String handling

20	Write a Program of string buffer class using String handling
21	Write a Program using creating packages
22	Write a Program using Importing Packages and the scope of data in packages

3350704(Computer And Network Security)

SR. NO.	TITLE
1	List and practice various "net" Commands on DOS & Linux.
2	Configure a system for various security experiments.
3	Configure web browser security setting.
4	Draw Diagram of DoS, backdoors, trapdoors.
5	Draw diagram of sniffing, spoofing, man in the middle & replay attacks.
6	Draw Diagram for Confidentiality, Integrity & Availability.
7	Write Ceaser's Cipher algorithm & Solve various examples based on Encryption & Decryption. And write, test and debug Ceaser Cipher algorithm in C.
8	Write algorithm for Shift Cipher & solve various examples on it.
9	Write algorithm for Hill Cipher and solve examples on it.
10	Write algorithm for Playfair Cipher and solve examples on it.
11	Write algorithm for Vernam Cipher and solve examples on it.
12	Write algorithm for Vignere Cipher and solve examples on it.
13	Write algorithm for one time pad and solve examples on it.
14	Draw diagram of public key infrastructure.
15	Draw diagram of Centralized/Decentralized Infrastructure.
16	Demonstrate cross-scripting.

17	Draw various security Topologies.
18	Demonstrate traffic analysis of different network protocols using tool i.e. Wire-shark.
19	Demonstrate Sniffing using packet tool i.e. snort.
20	Configure your e-mail account against various threats. i.e. spam attack, phishing, spoofing etc.
21	Draw diagram Host-based Intrusion Detection System.
22	Draw diagram Network-based Intrusion Detection System.
23	Demonstration of SQL-Injection.
24	Demonstration of readymade encryption/decryption code.

3360701 (Advanced Java Programming)

SR. NO.	TITLE
1	Write applet to print Hello world.
2	Write applet to drawLine, drawRect, circle, drawOval, drawRoundRect, fillRect, fillOval, fillRoundRect,drawString.
3	Write applet to draw human face.
4	Write applet to perform different Arithmetic operation.
5	Write applet to getting input from the user.
6	Write an applet that draws a circle. The dimension of the applet should be 500*300 pixels. The circle should be center in the applet and have radius of 100 pixels. Display your name centered in a circle.(using drawOval() method).
7	Draw ten red circle in a vertical column in the center of the circle.
8	Built an applet that displays a horizontal rectangle in it's center and fill the color in it.
9	Write an applet when the user enter the mouse. Draw oval filed with black at the current mouse position.

10	Write an applet that handle an action event for AWT button
11	Write an applet that use the mouse listener, which overrides only two methods which are mousePressed and mouseReleased.
12	Write a program using Event Handling for changing color according to button.
13	Write applet using Event Handling.(using button addition, subtraction,multiplication,division)
14	Write a program for applet using AWT classes,frame and File dialog.
15	Write applet that display a frame with a menubar. when user selects any menu item, display that selection.
16	Create a form of student detail and put 3 buttons of INSERT,UPDATE,DELETE.Create a JDBC connection.Record will be inserted in student table.If more than 1 hobby is selected ,it should be insert into the table seprated by comma.
17	Write a program to present a set of choice for user to select a product & display the price of product.
18	Write a simple servlet program which maintains a counter for the number of times it has been accessed since its loading, initialize the counter using deployment descriptor.
19	Create a form processing servlet which demonstrates use of cookies and sessions.
20	Write a simple JSP program for user Registration & then control will be transfer it into second page.
21	Write a JSP program to display the grade of a student by accepting the marks of five subjects.

3360703(Network Management and Administration)

SR. NO.	TITLE
1	Execution of Basic TCP/IP utilities and commands.(eg: ping, ipconfig, tracert, arp, tcpdump, whois, host, netsat, nslookup, ftp, telnet etc...).
2	Configure a router (Ethernet & Serial Interface) using router commands including access lists on any network simulator (eg. packet Tracer).
3	Configure VPN components and Set-up VPN.
4	Design and implement small network using actual physical components with IP address scheme.

5	Configuration of the following a) Remote Login Service – TELNET/SSH b) Configuration of FTP server and accessing it via FTP Client.
6	Setting up and Configuring Local Print Device and Network Print Device.
7	Creating Windows Server Boot Disk.
8	Installing Windows Server.
9	Installing Linux Server.(Managing User accounts and device configuration, Configure and use Telnet and VNC, Windows connectivity through Samba Server, Configure web server and FTP server, Configure proxy server)
10	Installing Active Directory & Creating AD Objects.
11	Create Domain Controller.
12	Create new Users & assign privileges/ Permission.
13	Modify/ Delete/Deactivate Users and groups.
14	Configure Print Server & Backup Server.
15	Identify, Segment Network Faults and troubleshoot.
16	Manage Microsoft Windows Internet Security Services (WINS).
17	Manage Microsoft Certificate Services.
18	Manage Desktop Configuration using Group Policy & Remote Installation Services.

3360704(Mobile Computing and Application Development)

SR. NO.	TITLE
1	Installation and setup of java development kit(JDK),setup android SDK, setup eclipse IDE, setup android development tools (ADT) plugins, create android virtual device
2	Create “Hello World” application. That will display “Hello World” in the middle of the screen using TextView Widget in the Red Color.
3	Create application for demonstration of android activity life cycle
4	Create Registration page to demonstration of Basic widgets available in android.
5	Create sample application with login module. (Check username and password) On successful login, Change TextView “Login Successful”. And on failing login, alert user using Toast “Login fail”
6	Create login application where you will have to validate username and passwords Till the username and password is not validated , login button should remain disabled.
7	Create and Login application as above. Validate login data and display Error to user using setError() method.
8	Create an application for demonstration of Relative and Table Layout in android.
9	Create an application for demonstration of Scroll view in android
10	Create an application for demonstration of Explicitly Starting New Activity using Intent.
11	Create an application that will pass two number using TextView to the next screen, and on the next screen display sum of that number.
12	Create spinner with strings taken from resource folder(res >> value folder). On changing spinner value, change background of screen.

13	Create an application that will get the Text Entered in Edit Text and display that Text using toast (Message).
14	Create an application that will Demonstrate Button onClick() Event and change the TextView Color based on button Clicked
15	Create an UI such that, one screen have list of all the types of cars. On selecting of any car name, next screen should show Car details like: name, launched date, company name.
16	Create an application that will Demonstrate Dialog Box Control In Android.