OPERATING SYSTEMS
COMPUTER ENGINEERING
SEM-3RD

LIST OF PRACTICALS

1. Demonstration of all the controls provided on Control Panel
2. Exercises involving various internal and external DOS commands (20 No.)
3. Exercises involving Basics of Windows (20 No.)
4. Exercises on windows operating system
5. Exercise on basic commands of Linux Operating System
6. Exercise on shell programming on Linux (10 No.s)

COMPUTER PERIPHERALS AND INTERFACING
COMPUTER ENGINEERING

SEM-3RD

LIST OF PRACTICALS

1. To identify various components and peripheral devices.
2. Exercise on assembling of a PC.
3. Exercise on installation of a PC.
4. Installation of peripherals like printer, scanner.
5. Studying parts of motherboard, FDD, HDD.
6. Fault finding and repair of peripherals (HDD, FDD, DMP, Laser printer, Inkjet
7. Using antivirus software.

DIGITAL ELECTRONICS – I
COMPUTER ENGINEERING

SEM-3RD

LIST OF PRACTICALS

1. Study of logic breadboard with verification of truth table for AND, OR, NOT, NAND, EX-OR, NOR gate
2. Verification of NAND and NOR gate as universal gates
3. Construction of half-adder and full adder circuits using EX-OR and NAND gate and verification of their operation
4. Verify the operation of
a) multiplexer using an IC
b) de-multiplexer using an IC
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5. a) Verify the operation of BCD to decimal decoder using an IC
b) Verify the operation of BCD to 7 segment decoder using an IC
6. Verify operation of SR, JK, D-flip-flop master slave JK filp-flop using IC
7. Verify operation of SISO, PISO, SIPO, PIPO shift register. (universal shift register)
8. Study of ring counter, Up/down counter
9. Construct and verify the operation of an asynchronous binary decade counter using JK flip-flop
10. Testing of digital ICs using IC tester

INTERNET AND WEB DESIGNING
COMPUTER ENGINEERING

SEM-3RD

LIST OF PRATICALS

1. Setting up internet on a standalone machine.
2. Familiarization with web browser and search engine.
3. Creating email account, sending and receiving emails.
4. Using search engine for finding information of internet.
5. Using IRC.
6. Demonstration of Video conferencing.
7. Demonstration of e-commerce.
8. Demonstration of TELNET.
9. Creating web pages using basic tags, lists, images, hyperlinks, tables and frames.
10. Practice on using FLASH.

DATA STRUCTURES USING 'C'

COMPUTER ENGINEERING

SEM-4TH

LIST OF PRACTICLES

Write Programmes in C to implement

1. The addition of two matrices using functions
2. Inserting and deleting elements in array
3. Push and pop operation in stack
4. Conversion from in-fix notation
5. The factorial of a given number using recursion
6. Insertion and Deletion of elements in queue using pointers
7. Insertion and Deletion of elements in circular queue using pointers
8. Insertion and Deletion of elements in linked list
9. Insertion and Deletion of elements in doubly linked list
10. The linear search procedures to search an element in given list
11. The binary search procedures to search an element in a given list
12. The bubble sort techniques
13. The selection sort techniques

DATABASE MANAGEMENT SYSTEM

COMPUTER ENGINEERING

SEM-4TH

LIST OF PRACTICALS

1. Overview, Features and functionality, Application development in MS-Access
2. Exercises on different forms of select statement, altering and droping of tables
3. Exercises on creation of tables
4. Exercises on insertion of data into tables
5. Exercises on deletion of data using different conditions
6. Exercises on UPDATE statement

OBJECT ORIENTED PROGRAMMING USING C++

COMPUTER ENGINEERING

SEM-4TH

LIST OF PRACTICALS

1. Write a function using variables as arguments to swap the values of a pair of integers
2. Consider a shopping list of items for which we place an order with a dealer every month.The list includes such as the code number and price of each item .we would like to perform operations such as adding an item to the list,deleting an item from the list and printing the total value of the order.

3. Write a program to read name, roll no ,internal external marks using classes and display the same on the screen.
4. Write a program of swapping of numbers by accessing private numbers using friend function.
5. Define a class to represent a bank account using constructor including the following members:- Data members

i) For Single Customer ii) For n Customers

a) Name of the depositors
b) Account number
c) Type of account
d) Balance amount in the account

Member function

- To assign initial values
- To deposit an amount
- To withdraw an amount after checking the balance
- To display the name and balance.

6. Create 2 classes OM and DB which store the value of distance. DM store distances in Meters and cm and DB in feet and inches. Write a program that can read values for the class objects and add 1 object OM with another object of DB. Use a friend function to carry out the addition operation the object that stores the results may be a DM object or a DB object, depending upon the units in which the results are required. The display should be in the format of feet and inches or meters and cms depending on the object on display.
7. A book shop maintains the inventory of books that are being sold at the shop the list includes details such as author, title and publisher and stock position. Whenever a customer wants the book, the sales person inputs the title and author and the system search the list and display whether it is available ornot. If it is not, a appropriate message is displayed, if it is, then the system displays the book details and requests for the number of copies require. If the requested are available, the total cost of the required copies is displayed: otherwise the message" Required copies not in stock"is displayed. Design a system using a class called books with suitable member functions and constructors. Use new operator in constructor to allocate memory space require.
8. Define a class string that could work as a userdefined string type include constructors that will enable us to create an .un-initialized string

String s1; :/ string with length 0 And also to initialize an object with string constant at the time of creation like String s2("well done"); . Include a function that adds two strings to make a third string.
9. Create a class float that contains 2 float data member. Over load all the 4 arithmetic operators so that do operate on the objects of float.
10. Programming Exercise on Hybrid Inheritance
11. Define 2 classes POLAR and RECTANGLE to represent points in the POLAR and RECTANGLE systems. Use conversion routines to convert from one system to the other.

12. Create a base class called shape. use this class to store two double type values that could be used to compute the area of fig. Derive the specific class called TRIANGLE and RECTANGLE from the data shape. Add to base class, a member function get - data ( ) to initialize base class data members and another member and another member function display – area( ) to compute and display the area of the fig.. Make display – area ( ) as a virtual function and redefine function in the derived classes to suit their requirements, Using these 3 classes design a program that will accept dimension of RECTANGLE or TRIANGLE interactivity and display the area.
Remember the 2 values given as input will be treated as length of 2 sides in the case of rectangle and as base and height in the case of triangles and used as follows:
Area of rectangle = x*y
Area of triangle = 1/2 *x*y
13. Exercise on file handling

MICROPROCESSORS AND PERIPHERAL DEVICES

COMPUTER ENGINEERING

SEM-4TH

LIST OF PRACTICALS

1. Familiarization of different keys of 8085 microprocessor kit and its memory map
2. Steps to enter, modify data/program and to execute a programme on 8085 kit
3. Writing and execution of ALP for addition and sub station of two 8 bit numbers
4. Writing and execution of ALP for multiplication and division of two 8 bit numbers
5. Writing and execution of ALP for arranging 10 numbers in ascending/descending order
6. Writing and execution of ALP for 0 to 9 BCD counters (up/down counter according to choice stored in memory)
7. Interfacing exercise on 8255 like LED display control
8. Interfacing exercise on 8253 programmable interval timer
9. Interfacing exercise on 8279 programmable KB/display interface like to display the hex code of key pressed on display
10. Use of 8085 emulator for hardware testing