

COT-311

Advance Technologies (Pr) (5th Sem)

L T P
- - 3

Sessional Work: 50 Marks
Exam: 50 Marks
Total: 100 Marks
Duration of Exam: 3 Hrs.

List of Experiment

1. Learn Basic of Java Language and its Development Libraries /tools.
2. Generate an Editor screen containing menus, dialog boxes etc using Java.
3. Create an applet with a text field and three buttons. When you press each button, make some different text appear in the text field. Add a check box to applet created, capture the event and insert different text in the Text field.
4. Create a applet with a button and text field. Write an handle event () so that if the button has the focus, characters typed in to it will appear in the text field.
5. Create your own Java bean called VALUE that contains two properties: a Boolean called “on” and an integer called “Level”. Create a manifest file, use jar to package your own bean then load it in to the bean box or in to your own beans enabled program builder tool.
6. Develop a servlet that gets invoked when a form on a web page in HTML submitted. Create a cookie object and enter/display value for that cookie.
7. Java Networking Java sockets and RMI.
8. Programming under development tool ASP.net
9. Using Java develop a front end for a contact management program using a flat database. DB needs to be distributed or centralized.

Beyond Curriculum:

1. Write a program to calculate area of a rectangle.
2. Write a Program for Interfacing.
3. Write a program to find the area of rectangle using a constructor.
4. Write a program to compute area of circle and rectangle using interface.

(ECE-207E)

ANALOG COMMUNICATION LAB

L **T** **P**
- - 2

Sessional : 25 Marks

Viva : 25 Marks

Total : 50 Marks

Time : 3hrs.

LIST OF EXPERIMENTS

1. i) To study Double Sideband Amplitude Modulation and determine its Modulation factor and power in sidebands.
ii) To study amplitude demodulation by linear diode detector.
2. i) To study Frequency Modulation and determine its modulation factor.
ii) To study PLL 565 as frequency demodulator
3. To study Sampling and reconstruction of pulse amplitude modulation system.
4. To study the Sensitivity characteristics of superhetrodyne receiver.
5. To study the Selectivity characteristics of superhetrodyne receiver.
6. To study the Fidelity characteristics of superhetrodyne receiver.
7. i) To study Pulse Amplitude Modulation
 - a) Using switching method
 - b) By sample and hold circuit.ii) To demodulate the obtained PAM signal by IInd order Low pass filter.
8. To study Pulse Width Modulation / Demodulation.
9. To study Pulse Position Modulation / Demodulation.
10. To study active filters (Low-pass, High-pass, Band-pass, Notch filter).

C ++ Programming Lab.(4th Sem)

	L	T	P		Sessional Work:	50
Marks					Exam:	25
Marks	-	-	3		Total:	75
				Marks		
					Duration of Exam:	3 Hrs

List of Experiments

- Q1. Raising a number n to a power p is the same as multiplying n by itself p times. Write a function called `power ()` that takes a double value for n and an int value for p , and returns the result as double value. Use a default argument of 2 for p , so that if this argument is omitted, the number will be squared. Write a `main ()` function that gets values from the user to test this function.
- Q2. A point on the two dimensional plane can be represented by two numbers: an X coordinate and a Y coordinate. For example, (4,5) represents a point 4 units to the right of the origin along the X axis and 5 units up the Y axis. The sum of two points can be defined as a new point whose X coordinate is the sum of the X coordinates of the points and whose Y coordinate is the sum of their Y coordinates. Write a program that uses a structure called `point` to model a point. Define three points, and have the user input values to two of them. Then set the third point equal to the sum of the other two, and display the value of the new point. Interaction with the program might look like this:
 Enter coordinates for P1: 3 4
 Enter coordinates for P2: 5 7
 Coordinates of P1 + P2 are : 8, 11
- Q 3. Create the equivalent of a four function calculator. The program should request the user to enter a number, an operator, and another number. It should then carry out the specified arithmetical operation: adding, subtracting, multiplying, or dividing the two numbers. (It should use a switch statement to select the operation). Finally it should display the result. When it finishes the calculation, the program should ask if the user wants to do another calculation. The response can be 'Y' or 'N'. Some sample interaction with the program might look like this. Enter first number, operator, second number: 10/ 3 Answer = 3.333333
 Do another (Y/ N)? Y
 Enter first number, operator, second number 12 + 100
 Answer = 112
 Do another (Y/ N) ? N

IT-256 E

C ++ Programming Lab.(4th Sem)

- Q4. A phone number, such as (212) 767-8900, can be thought of as having three parts: the area code (212), the exchange (767) and the number (8900). Write a program that 334 uses a structure to store these three parts of a phone number separately. Call the structure phone. Create two structure variables of type phone. Initialize one, and have the user input a number for the other one. Then display both numbers. The interchange might look like this:

Enter your area code, exchange, and number: 415 555 1212

My number is (212) 767-8900

Your number is (415) 555-1212

- Q 5. Create two classes DM and DB which store the value of distances. DM stores distances in metres and centimeters and DB in feet and inches. Write a program that can read values for the class objects and add one object of DM with another object of DB. Use a friend function to carry out the addition operation. The object that stores the results maybe a DM object or DB object, depending on the units in which the results are required. The display should be in the format of feet and inches or metres and cenitmetres depending on the object on display.

- Q 6. Create a class rational which represents a numerical value by two double values- NUMERATOR & DENOMINATOR. Include the following public member Functions: constructor with no arguments (default).

. constructor with two arguments.

. void reduce() that reduces the rational number by eliminating the highest common factor between the numerator and denominator.

Overload + operator to add two rational number.

. Overload >> operator to enable input through cin.

. Overload << operator to enable output through cout.

Write a main () to test all the functions in the class.

- Q 7. Consider the following class definition

```
class father {
protected : int age;
public;
father (int x) {age = x;}
virtual void iam ( )
{ cout << "I AM THE FATHER, my age is : "<< age<< endl;}
};
```

Derive the two classes son and daughter from the above class and for each, define iam () to write

our similar but appropriate messages. You should also define suitable constructors for these classes Now, write a main () that creates objects of the three classes and then calls iam () for them. 335 Declare pointer to father. Successively, assign addresses of

Contd...

IT-256 E

C ++ Programming Lab.(4th Sem)

objects of the two derived classes to this pointer and in each case, call iam () through the pointer to demonstrate polymorphism in action.

- Q 8. Write a program that creates a binary file by reading the data for the students from the terminal. The data of each student consist of roll no., name (a string of 30 or lesser no. of characters) and marks.
- Q9. A hospital wants to create a database regarding its indoor patients. The information to store include
- a) Name of the patient
 - b) Date of admission
 - c) Disease
 - d) Date of discharge
- Create a structure to store the date (year, month and date as its members). Create a base class to store the above information. The member function should include functions to enter information and display a list of all the patients in the database. Create a derived class to store the age of the patients. List the information about all the to store the age of the patients. List the information about all the pediatric patients (less than twelve years in age).
- Q10. Make a class Employee with a name and salary. Make a class Manager inherit from Employee. Add an instance variable, named department, of type string. Supply a method to toString that prints the manager's name, department and salary. Make a class Executive inherit from Manager. Supply a method to String that prints the string "Executive" followed by the information stored in the Manager superclass object. Supply a test program that tests these classes and methods.
- Q11. Imagine a tollbooth with a class called toll Booth. The two data items are a type unsigned int to hold the total number of cars, and a type double to hold the total amount of money collected. A constructor initializes both these to 0. A member function called payingCar () increments the car total and adds 0.50 to the cash total. Another function, called nopayCar (), increments the car total but adds nothing to the cash total. Finally, a member function called displays the two totals. Include a program to test this class. This program should allow the user to push one key to count a paying car, and another to count a nonpaying car. Pushing the ESC key should cause the program to print out the total cars and total cash and then exit.

- Q12. Write a function called `reversit ()` that reverses a string (an array of `char`). Use a for loop that swaps the first and last characters, then the second and next to last characters and so on. The string should be passed to `reversit ()` as an argument. Write a program to exercise `reversit ()`. The program should get a string from the user, call `reversit ()`, and print out the result. Use an input method that allows embedded blanks. Test the program with Napoleon's famous phrase, "Able was I ere I saw Elba)".

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IT-256 E

C ++ Programming Lab.(4th Sem)

- Q13. Create some objects of the string class, and put them in a Deque-some at the head of the Deque and some at the tail. Display the contents of the Deque using the `forEach ()` function and a user written display function. Then search the Deque for a particular string, using the first `That ()` function and display any strings that match. Finally remove all the items from the Deque using the `getLeft ()` function and display each item. Notice the order in which the items are displayed: Using `getLeft ()`, those inserted on the left (head) of the Deque are removed in "last in first out" order while those put on the right side are removed in "first in first out" order. The opposite would be true if `getRight ()` were used.
- Q 14. Assume that a bank maintains two kinds of accounts for customers, one called as savings account and the other as current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintain a minimum balance and if the balance falls below this level, a service charge is imposed. Create a class `account` that stores customer name, account number and type of account. From this derive the classes `cur_acct` and `sav_acct` to make them more specific to their requirements. Include necessary member functions in order to achieve the following tasks:
- a) Accept deposit from a customer and update the balance.
 - b) Display the balance.
 - c) Compute and deposit interest.
 - d) Permit withdrawal and update the balance.
 - e) Check for the minimum balance, impose penalty, necessary and update the balance.
 - f) Do not use any constructors. Use member functions to initialize the class members.
- Q 15. Create a base class called `shape`. Use this class to store two double type values that could be used to compute the area of figures. Derive two specific classes called `triangle` and `rectangle` from the base `shape`. Add to the base class, a member function `set_data ()` to initialize baseclass data members and another member function `display_area ()` to compute and display the area of figures. Make

display_area () as a virtual function and redefine this function in the derived classes to suit their requirements. Using these three classes, design a program that will accept dimensions of a triangle or a rectangle interactively and display the area. Remember the two values given as input will be treated as lengths of two sides in the case of rectangles 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

Contd...

IT-256 E

C ++ Programming Lab.(4th Sem)

Beyond Curriculum:-

1. Write a program that creates the member function as the same name as of its class.
2. Write a program that shows the use of an array.
3. Write a program that calculates the mean of some samples using friend function.
4. Write a program showing the uses of copycon function.

Computer Graphics Lab.(6th Sem)

L	T	P
Marks	-	3
Marks	-	3
Marks	-	3

Sessional Work:	40
Exam:	40
Total:	80
Duration of Exam:	3 Hrs.

List of Experiments

1. Write a program to implement DDA line drawing algorithm.
2. Write a program to implement Bresenham's line drawing algorithm.
3. Implement the Bresenham's circle drawing algorithm.
4. Write a program to draw a decagon whose all vertices are connected with every other vertex using lines.
5. Write a program to show a ship moving using the concepts of 2-D transformations.
6. Write a program to show a ball moving on the screen according to the given requirements.
7. Write a program to implement the midpoint circle drawing algorithm.
8. Write a program to implement the Bezier curve.
9. Implement the line clipping algorithm using C.
10. Implement boundary fill algorithm using C.
11. Implement the depth buffer algorithm using C.

Beyond Curriculum

1. Write a Program to reset every pixel in an image that is in the 24-bit 256 entry lookup table representation to its complementary.
2. Write a program to draw a triangular area with three vertices at(x, y), (x, y+t), and (x+t, y), where integer $t \geq 0$ using color rgb.

3. Write a Program the end point of a given line are $(0,0)$ & $(6,18)$. Compute each value of Y as X steps from 0 to 6. Plot the results.
4. Write a Program to plot a line whose slop is between 00 & 450 using the slop intercept equation.

Algorithm Design (5th Sem)

L	T	P
-	-	3

Sectional Work:	50 Marks
Examination:	25 Marks
Total:	75 Marks
Duration of Exam:	3 Hrs.

1. Implement the minimum cost spanning tree.
2. Implement the shortest cost of optimal binary search tree.
3. Implement the shortest path algorithm.
4. Write a complete LC branch algorithm for job sequencing with deadlines problem. Use fixed tuple size formulation.
5. Write a LC branch and bound algorithm for the Knapsack problem using the fixed tuple size formulation.
6. Write a program to implement linear search algorithm.
7. Write a program to implement linear stack operation.
8. Write a program to implement Queue operation.
9. Write a program to implement Quick sort.
10. Write a program to implement heap sort

Beyond Curriculum

1. Write a program to implement Counting sort.
2. Write a program to implement Activity Selection problem.
3. Write a program to implement Bucket sort

CSE-209E

Database Management System Lab. (3rd Sem)

	L	T	P	Sectional Work:	25
Marks	-	-	3	Examination:	25
Marks				Total:	50
Marks				Duration of Exam:	3 Hrs.

List of Experiments

11. Create a database and write the programs to carry out the following operation:
 1. Add a record in the database
 2. Delete a record in the database
 3. Modify the record in the database
 4. Generate queries
 5. Data operations
 6. List all the records of database in ascending order.
12. Create a view to display details of employees working on more than one project.
13. Create a view to display details of employees not working on more than one project
14. Create a view to display employees name and projects name for employees working on projects <P1 and P3> or <P2 and P4>.
15. Using two tables create a view which shall perform EQUIJOIN.
16. Write trigger for before and after insertion. Detection and updation process.
17. Write a procedure to give incentive to employees working on all projects. If no such employee found give app. Message.
18. Write a procedure for computing amount telephone bill on the basic of following conditions.

Beyond Curriculum

1. Retrieve the name of the employees and the name of their respective manager from the employee table using self join
2. To illustrate the concept of sub queries retrieve all orders placed by a client Named 'Rahul Desai' from the sales_order_table

Digital Electronics Lab.

L T P
- - 3

Sessional: 25 Marks
Exam: 25 Marks
Total: 50 Marks
Duration of Exam: 3 Hrs.

LIST OF EXPERIMENTS

1. Study of TTL gates – AND, OR, NOT, NAND, NOR, EX-OR, EX-NOR.
2. Design & realize a given function using K-maps and verify its performance.
3. To verify the operation of multiplexer & Demultiplexer.
4. To verify the operation of comparator.
5. To verify the truth tables of S-R, J-K, T & D type flip flops.
6. To verify the operation of bi-directional shift register.
7. To design & verify the operation of 3-bit synchronous counter.
8. To design and verify the operation of synchronous UP/DOWN decade counter using J K flipflops& drive a seven-segment display using the same.
9. To design and verify the operation of asynchronous UP/DOWN decade counter using J K flipflops& drive a seven-segment display using the same.
10. To design & realize a sequence generator for a given sequence using J-K flipflops.
11. Study of CMOS NAND & NOR gates and interfacing between TTL and CMOS gates.
12. Design a 4-bit shift-register and verify its operation . Verify the operation of a ring counterand a Johnson counter.

CSE-211E

Data Structures Lab. (3rd SEM)

L T P
- - 3

Sectional Work: 50 Marks
Examination: 25 Marks
Total: 75 Marks
Duration of Exam: 3 Hrs.

List of Experiments

19. Write a program to search an element in a two-dimensional array using linear search.
20. Using iteration and recursion concepts write programs for finding the element in the array using Binary search method.
21. Write a program to perform following operations on tables using functions only a) Addition b) Subtraction c) multiplication d) Transpose
22. Write a program to implement Linear Queue.
23. Write a program to implement Stack using Array.
24. Write a program to implement the various operations on string such as length of string concatenation, reverse of a string & copy of a string to another.
25. Write a program to swapping of two numbers using 'call by value' and call by reference strategies.
26. Write a program to implement binary search tree. (Insertion and traversal in Binary Search Tree).
27. Write a program to implement binary search tree. (Deletion in Binary Search Tree).
28. Write a program to create a linked list & perform operations such as insert, delete and display the contents of the linked list.
29. Write a Program to reverse a linked list.
30. Write a program to implement linear search and binary search
31. Write a program to implement selection sort by using different algorithms
32. Write a program to implement bubble sort

CSE-211E

Data Structures Lab. (3rd SEM)

33. Write a program to implement insertion sort.
34. Write a program to simulate the graph traversal using bfs.

Beyond Curriculum

1. Write a program to perform operations on array-Traversing,Insertion,Deletion
2. Write a program to implement circular queue.

Computer Hardware & Troubleshooting (6th Sem)

L T P
- - 3

Sessional Work: 50 Marks
Exam: 50 Marks
Total: 50 Marks
Duration of Exam: 3 Hrs.

List of Experiment

1. To solder and de-solder various components.
2. To check and measure various supply voltages of Pc.
3. To make comparative study of motherboards: 386,486 PI. PII. PIII.
4. To observe and study various cables, connections and parts used in computer Communication.
5. To study various cards used in a system viz. display card, LA1'rbrd etc.
6. To remove, study and replace Floppy disk drive.
7. To remove, study and replace hard disk.
8. To remove, study and replace CD ROM drive.
9. To study monitor, its circuitry and various presets and some elementary fault Detection.
10. To study printer assembly and elementary fault detection of DMP and laser Printers.
11. To observe various cables and connectors used in networking.
12. To study parts of keyboard and mouse.
13. To assemble a Pc.
14. Troubleshooting exercises related to various components of computer like monitor. drives, memory, and printers etc.

Beyond Curriculum

1. To study routers connection in the network.
2. To install different operating system like win 98, xp.

Internet Lab (3rd Sem)

L T P
- - 3

Sessional Work: 50 Marks
Exam: 25 Marks
Total: 75Marks
Duration of Exam: 3 Hrs.

List of Experiments

1. To prepare the Your Bio Data using MS Word.
2. To prepare the list of marks obtained by students in different subjects and show with the help o chart/graph the average, min. and max. Marks in each subject.
3. Prepare a presentation explaining the facilities/infrastructure available in your collage/institute.
4. Design Web pages containing information of the Dep't.
5. Create a new document that takes the format of a business letter. Combine <P> and
 tags to properly separate the different parts of the document. Such as the address, greeting, content and signature. What works best for each?
6. Create a document that use multiple
 and <P> tags, and put returns between <PRE> tags to add blank lines to your document see if your browser sends them differently.
7. Create a document use the <PRE> tags to works as an invoice or bill of sale, complete with aligned dollar values and a total. Remember not to use the Tab key, and avoid using emphasis tags like or within your list.
8. Create a seven-item ordered list using Roman numerals. After the fifth item, increase the next list value by 5.
9. Beginning with an ordered list, create a list that nests both an unordered list and a definition list.
10. Use the ALIGN attribute or an tags to align another image to the top of the first image... play with this feature, aligning images to TOP, MIDDLE and BOTTOM.

Contd...

Internet Lab (3rd Sem)

11. Create a 'table of contents' style page (using regular and section links) that loads a different document for each chapter or section of the document.
12. Study of E-mail system.
13. Create your own mail-id in yahoo and indiatimes.com.
14. Add names (mail-id's) in your address book, compose and search an element.

Beyond Curriculum

1. Search an element using Meta Search Engine

Mobile Computing (Pr.) (6th Sem)

L T P
- - 3

Sessional: 50 Marks
Exam: 50 Marks
Total: 100Marks
Duration of Exam: 3 Hrs.

List of Experiments

1. Design a prototype that implements the Cache management for a mobile computing environment?
2. Design a System: The challenges or developing high performance. high reliability and high quality software systems are too much for ad hoc and informal engineering techniques that might have worked in the past on less demanding systems. New techniques for managing these growing complexities are required to meet today's time-to-market. productivity and quality demands.
3. Peer-to-peer communication system: As computers become more pervasive and homes become better connected. a new generation of applications will be deployed over the Internet. In this model. peer-to-peer applications become very attractive because they improve scalability and enhance performance by enabling direct and real-time communication among the peers. We need to propose a decentralized management system that manages the peer-to-peer applications and the system resources in an integrated way: monitors the behavior of the peer-to-peer applications transparently and obtains accurate resource projections. Manages the connections between the peers and distributes the objects in response to the user requests and changing processing and networking conditions.
4. Write programs that implement the few sorting algorithms (bubble, selection, etc.) for n data. It stops the operation when the counter for sorting index is at 100, 1000,10000 and so on, stores the contents of the registers, program counter and partially sorted list of data, etc. It resumes the operation after 30 sec from the point of the termination.

Mobile Computing (Pr.) (6th Sem)

5. Write a program that implements the bubble sort for n data. It stops the operation when the counter for sorting index is at 100, 1000, 10000. and so on. Stores the contents of the registers, program counter and partially sorted list of data. etc. It transfers the code and data - across the network on the new destination and resumes the operation from the point of termination on the previous node. Finally the result from the last node in the itinerary is sent back to the process-initiating node.
6. Develop a prototype that performs parallel computation of the same task on different nodes. Finally process initiator (master node)- receive Yes the result It and computation time required to complete the task on an each node and displays to the user. Compare the computing power of different nodes.

Beyond Curriculum

1. To study and observe the difference in uplink & downlink frequency.
2. To calculate antenna gain and antenna beam width.

ECE-218 E

Microprocessors and Interfacing Lab.

L T P
- - 3

Sessional: 25 Marks
Exam: 25 Marks
Total: 50 Marks
Duration of Exam: 3 Hrs.

LIST OF EXPERIMENTS

1. Study of 8085 Microprocessor kit.
2. Write a program using 8085 and verify for :
 - a. addition of two 8-bit numbers.
 - b. addition of two 8-bit numbers (with carry).
3. Write a program using 8085 and verify for :
 - a. 8-bit subtraction (display borrow)
 - b. 16-bit subtraction (display borrow)
4. Write a program using 8085 for multiplication of two 8- bit numbers by repeated addition method. Check for minimum number of additions and test for typical data.
5. Write a program using 8085 for multiplication of two 8- bit numbers by bit rotation method and verify.
6. Write a program using 8085 for division of two 8- bit numbers by repeated subtraction method and test for typical data.
7. Write a program using 8085 for dividing two 8- bit numbers by bit rotation method and test for typical data.
8. Study of 8086 microprocessor kit
9. Write a program using 8086 for division of a defined double word (stored in a data segment) by another double word division and verify.
10. Write a program using 8086 for finding the square root of a given number and verify.
11. Write a program using 8086 for copying 12 bytes of data from source to destination and verify.
12. Write a program using 8086 and verify for:
 - a. Finding the largest number from an array.
 - b. Finding the smallest number from an array.
13. Write a program using 8086 for arranging an array of numbers in descending order and verify.
14. Write a program using 8086 for arranging an array of numbers in ascending order and verify.
15. Write a program for finding square of a number using look-up table and verify.
16. Write a program to interface a two digit number using seven-segment LEDs. Use 8085/8086 microprocessor and 8255 PPI.
17. Write a program to control the operation of stepper motor using 8085/8086

microprocessor and 8255 PPI.

CSE-406-E

Neural Networks. (8th Sem)

L	T	P
-	-	3

Sessional Work:	50 Marks
Exam:	50 Marks
Total:	100 Marks
Duration of Exam:	3 Hrs.

List of Experiment

1. NN for AND, OR gate.
2. Perceptions to classify odd and even numbers.
3. NN for alphabet recognition using back propagation.
4. Hopfield network for recognizing patterns such as '+' and '-'.
5. NN for EXOR classification using Back propagation.
6. CPN for image classification.
7. Name and telephone no. recognition system.

Beyond Curriculum

1. Design & train the Neural network for AND, OR gate using Hopfield Net.
2. Design & train the Neural network for NAND gate using Perceptron.
3. Design & train the Neural network for NAND gate using Hopfield Net.
4. Design & train the Neural network for NAND gate using Back Propagation.

Operating System (5th SEM)

L **T** **P**
- - 3

Sessional Work: **50 Marks**
Exam: **50 Marks**
Total: **100 Marks**
Duration of Exam: **3 Hrs.**

List of Experiments

1. Study of H/W & S/W requirement of different operating system.
2. Implementation of contiguous, linked and indirect allocation strategies assuming randomly generated free space list.
3. Implementation of worst, best & first fit contiguous allocation assuming randomly generated free space list.
4. Implementation of compaction for the continually changing memory layout & calculate total movement of data.
5. Calculation of external & Internal fragmentation for different program & for different page size.
6. Implementation of resource allocation graph.
7. Implementation of Banker's algorithm.
8. Conversion of response allocation graph to wait for graph.
9. Implementation of Bernstein's condition for concurrency.
10. Implementation of Fork & Join Construct.
11. Implementation of " Semaphore " for concurrency.

CSE-103E

COMPUTER PROGRAMMING LAB. (1st Sem.)

L	T	P
-	-	2

Sessional Work:	25 Marks
Exam:	25 Marks
Total:	50 Marks
Duration of Exam:	3 Hrs

List of Experiments

1. Write a program for the addition of two numbers.
2. Write a program to check whether a number is even or odd.
3. Write a program to find the largest number out of three numbers (if-then-else)
4. Write a program to find the largest number out of ten numbers (for- statement)
5. Write a program to find the average male height & average female height in the class (input is in form of sex code, height)
6. Write a program using arrays to find the largest and second largest number out of given 50 numbers.
7. Write a program to find the roots of a quadratic equation using functions
8. Write a program to multiply two matrices
9. Write a program to read a string and write it in reverse order.
10. Write a program to concatenate two strings.
11. Write a program to check that the input string is palindrome or not.

Beyond Curriculum

1. Write a program for the addition of two matrices.
2. Write a program to find the factorial of a number using recursion.
3. Write a program to print pyramid

```
  1
 1 2 3
1 2 3 4 5
1 2 3 4 5 6 7
```

4. Write a program to sort the elements using bubble sort

CSE-316

Software Engineering (6th Sem)

L	T	P	Sectional Work:	50
Marks			Examination:	50
-	-	3	Total:	100
Marks			Duration of Exam:	3 Hrs.
Marks				

List of Experiments

- (i) Implement Receipt Acknowledgement and updation of Inventory (RAUP)
 - Find unadjusted Functional points (UFP)
 - Calculate FPC by Mark II Method
- To estimate effort and schedule
Calculate the compression factor and the manpower required based on given information of software .
- Implement a Testing strategy for the following software development cases:
 - Rule based deterministic closed large but simple payroll system for a Company.
 - Development of a customer relation management system for a retail distribution chain. The retail organization is not sure about the scope, and failure feature.
 - Modification to existing order processing system for a multi location, Multi Product Company.
- Build a work breakdown structure for the following
 - Delivery of the software, initiation to development covering lifecycle.
 - Development of prototype
 - Development of a process for a function
- In a hospital management system develop the following diagrams for a Ward Service Management System (SMW).
 - Work Flow
 - System Flow

(c) DFD

Develop on effective modular design of SMW using these diagrams.

6. Draw three level DFD's for CLPS. Modularize the CLPS and structure them top-down as functional model.
7. Conduct a task analysis for the following users:
 - (a) officer at railway ticket reservation window
 - (b) officer at insurance claim settlement desk.
 - (c) clerk at call center. answering queries of customers who have purchased cars from the company.
8. Based on the business model of DEL develop a modular structure for a business system model. Draw a complete system flowchart.

Beyond Curriculum

1. To draw the DFD of Waterfall Model.
2. To draw Entity Relationship Diagram of Minor Project.

Linux Lab (7th Sem.)

L T P
- - *1+2

Sectional Work: 50 Marks
Practical: 50 Marks
Total: 100 Marks
Duration of Exam: 3 Hrs.

List of Experiments

35. Familiarize with Unix/Linux logging/logout and simple commands.
36. Familiarize with VI editor.
37. Using Bash shell develop simple shell programs.
38. Develop advanced shell programs using grep. Fgrep & egrep.
39. Compile and debug various C programs using different options.
40. Learning of installation and up gradation of Linux operating system.
41. Install, Linux on a PC having some other previously installed operating system. All OS's should be usable.
42. As supervisor create and maintain user accounts, learn package installation, taking backups, creation of scripts for file and user management, creation of startup and shutdown scripts using at. Cron etc.

Beyond Curriculum

1. Configuring Samba server on Linux both GUI & Command line.
2. Configuring an e-mail server in Linux- send mail

Web Engineering Lab. (7th Sem)

L	T	P
-	-	3

Marks

Marks

Sectional Work: 25 Marks

Examination: 25

Total: 50

Duration of Exam: 3 Hrs.

List of Experiments

1. Check out the storyboard and design of Diary food Lmt. As the name reflects your site diary products and aims to opening an online store.
2. Create your own page with your favorite hobbies.
3. Create a menu or a table of content web page each menu items or section of table of content should load a different web page.
4. Create a website of your college.
5. Create a Frameset that is divided into three sections. The Frameset should have three zones.
 - The topmost section
 - The middle section
 - The lower section
6. Create a web page which displays map of your country Link, each city/state on the image map, such that the respective HTML page of the city/state is displayed when the user select an area.
7. Incorporate a quest book and use java script to built validation into form.
8. Use style-sheet to modify the following:
 - a. Change background to modify the color.
 - b. Change font type and color.
 - c. Align text.
9. To design a web page using inline Frame.
10. Write a program using XML to display the data.

Beyond Curriculum

1. write a Program using XSL to display the data.
2. Create your own page with your Resume.