

**INTERACTIVE COMPUTER GRAPHICS
MT-11**

Max. Marks – 10

ASSIGNMENT-1

- Q.1 Explain the graphics tools?
- Q.2 Explain Bresenham's algorithm?
- Q.3 What is transformation?
- Q.4 Explain need for clipping and windowing?
- Q.5 What is Sutherland-Hodgeman algorithm?
- Q.6 Describe rubber band techniques?
- Q.7 What is Kinetic dopm effect?
- Q.8 What are Singularities? Describe algorithm Singularity
- Q.9 Explain the 3-d transformation.
- Q.10 Explain wornock's algo.

Max. Marks – 10

ASSIGNMENT-2

- Q.1 Write any two program in C/C++ for different line drawing algos? Also explain me O/P misobtained?
- Q.2 Write a program in C/C++ for circle generating algorithm?

ADVANCED COMPUTER ARCHITECTURE
MT-12

Max. Marks – 10

ASSIGNMENT-1

- Q.1 What are the difference types of addressing modes?
- Q.2 Write the difference b/w RISC & CISC?
- Q.3 What is the principle of Virtual memory?
- Q.4 Why Cache is needed? Explain?
- Q.5 What is DMA? How it is used?
- Q.6 What are the function of Typical pipelining?
- Q.7 Explain the different types of dependencies?
- Q.8 Describe Bernstein's condition of parallelism?
- Q.9 What are the SIMD programming principles?
- Q.10 What are the various types of vector instruction?

Max. Marks – 10

ASSIGNMENT-2

- Q.1 What is memory hierarchy? Explain the different levels o memory hierarchy?
- Q.2 Explain the different Flynn's Taxonomy of computer architecture.

ALGO ANALYSIS AND DESIGN
MT-13

Max. Marks – 10

ASSIGNMENT-1

- Q.1 What is the difference between DFS & BFS?
- Q.2 What are the worst, good and average cases regarding with algorithm?
- Q.3 Write a short note on –
(i) Spanning tree
(ii) Dijkstra's algo
- Q.4 What are the properties of Binary Tree?
- Q.5 What is the need of an algorithm?
- Q.6 What is Buddy system?
- Q.7 Describe the various issues with memory?
- Q.8 What is Circuit satisfiability?
- Q.9 Describe the vertex cover problem?
- Q.10 Describe traveling salesmen problem?

Max. Marks – 10

ASSIGNMENT-2

- Q.1 Write the C/C++ codes for DFS & BFS?
- Q.2 Write the C/C++ codes for merge sort?

**ADVANCED DBMS
MT-14**

Max. Marks – 10

ASSIGNMENT-1

- Q.1 What are the basics of DBMS?
- Q.2 What is information integration?
- Q.3 What is the meaning of extended ER models?
- Q.4 What are client server systems?
- Q.5 What is normalization?
- Q.6 What are views? Explain its various types?
- Q.7 What is Dynamic SQL?
- Q.8 What is parsing?
- Q.9 Write a short note on –
 - 1. Concurrency control by time stamps
 - 2. Concurrency control by validation
- Q.10 What is centralized and client server architectures?

Max. Marks – 10

ASSIGNMENT-2

- Q.1 Make a table using oracle, SQL and made five entries and run five different commands.
- Q.2 Apply the join operation on the two different tables?