PAPER 2

Note: Attempt any <u>five</u> questions.

1. Define a minimum spanning tree. Write Prim's algorithm to generate an MST for a given weighted graph.
2. What is a flip-flop? Explain the differences between SRAM and DRAM.
3. Differentiate between Euler graph and Hamiltonian graph by taking suitable examples.
4. Derive the time complexity of merge sort with the help of recurrence relation.
5. Write a program(C/C++/Java) to multiply two matrices of size NxN.
6. Explain the working of two phase locking protocol in DBMS.
7. What do you mean by hypertext and markup language? How does HTTP work?
8. What is an IPv4 address? Explain the different classes of IPv4.
9. Differentiate between deadlock avoidance and deadlock prevention.

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