1. What's the meaning of state transition function of FSM (one sentence)?

2. Write down the characteristic table of J-K Flip-Flop [1pt]; Derive the excitation table of J-K Flip-Flop [2pts]

3. Why is there a Memory Bottleneck (one sentence)?

4. What's the meaning of non-volatile memory? (one sentence)

5. What's the meaning of Miss Penalty in Cache system? (one sentence)

6. What's the function of Tag in direct mapping? (a few words)

7. In associative mapping, a block is mapped to a fixed cache line (True or False).

8. What's the function of Tag in associative mapping? (a few words)