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| **CLASS TEST-I** | **ROLLNO:** | |
| **SUBJECT:FLAT** | **FULL NAME:** | |
| **DATE:** | **MARKS AWARDED** | **SIGN OF FACULTY** |
| **SECTION:** |
| **EACH QUESTION CARRIES 2 MARKS , ANSWER ALL QUESTIONS** | | |
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| 1.What is the formal definition of Deterministic Finite Automata? Explain with one example. |
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| 2.State difference between DFA and NFA. |
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| 3. Define state transition diagram. |
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| 4.Construct a DFA for the language {0n|n mod 3=2, n>=0} |
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| 5. Define NFA with epsilon transition. Is the NFA’s with epsilon transitions are more powerful than NFA’s without epsilon transitions? |
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| **EACH QUESTION CARRIES 5 MARKS , ANSWER ANY 2QUESTIONS** |
| 1. Construct an NFA to accept set of strings over alphabet set {0,1} and ending with two consecutive 0’s. |
| 2.Construct a DFA which accept set of all strings over ∑ = {0,1} which when interpreted as binary number, it’ll be divisible by 4. |
| 3. Convert the following NFA to DFA. |
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