1. Explain the role performed by lexical analysis of the compiler.
2. Write grammar for the following languages the set of non-integers with no leading zeros.
3. Explain the need of code optimization in compiler
4. Write note on front and back end of compiler
5. Write a context free grammar that generates all numbers; numbers can be integer or real.
6. Explain in detail about phases of compiler.
7. Explain Symbol table management and error handling
8. Explain cousins of compiler
9. Explain the need of intermediate code generator and write the grammar for the following languages set of non-negative odd integers.
10. Explain in the detail Input buffering scheme.
11. Draw a diagram for the compilation of machine language processing system.
12. Explain in the detail about compiler construction tool.
13. Explain in the detail about specification token.
14. Construct minimum DFA for RE **(0+1)\*(0+1)01**.
15. Explain in the detail about how compiler recognition of token.
16. Illustrate how does LEX work?
17. Explain in the detail about finite automata.
18. Convert the RE **(a|b)\*abb** into NFA E and find the equivalent minimum state DFA.
19. Construct NFA E for the RE **(01|10)\*101** and convert into DFA.
20. Find the transition diagram for the Regular expression and the Regular definition i.**a(a|b)\*a**

**ii.((E|a)b\*)\***

iii.All the string of digit with at most one repeated digit

1. Convert the RE **abb (a|b)\*** to DFA using the direct method and minimize it.
2. Construct NFA with the epsilon for the RE **(a|b)\*ab** convert into the minimize DFA.
3. Convert the following NFA-to NFA without epsilon.
4. Construct for the RE to NFA for the sentence **(a|b)\*a.**

**SET -1( 701,707,713,716,719725,731,737,744,750, LE 04, LE 10)**

1.Explain in detail about phases of compiler.

2.Construct for the RE to NFA for the sentence **(a|b)\*a.**

3.Convert the RE **(a|b)\*abb** into NFA E and find the equivalent minimum state DFA.

4. Explain in the detail about specification token.

**SET -2(702,708,714,720,726,732,738,745,751, LE 05)**

1. Explain in detail about various phases of compiler. Give an one example.

2. Convert the following NFA-to NFA without epsilon.

3. Construct NFA E for the RE **(01|10)\*101** and convert into DFA.

4. Construct minimum DFA for RE **(0+1)\*(0+1)01**.

**SET -3(703,709,715,721,727,733,739,746,752, LE 06)**

1. Construct NFA with the epsilon for the RE **(a|b)\*ab** convert into the minimize DFA.

2. Illustrate how does LEX work?

3. Construct NFA E for the RE **(01|10)\*101** and convert into DFA.

4. Explain in detail about phases of compiler.

**SET -4(704,710,716,722,728,734,740,747,LE 01, LE 07)**

1. Convert the RE **abb (a|b)\*** to DFA using the direct method and minimize it.

2. Explain in the detail about finite automata.

3. Explain in the detail Input buffering scheme.

4. Construct minimum DFA for RE **(0+1)\*(0+1)01**.

**SET -5(705,711,717,723,729,735,741,748, LE 02, LE 08)**

1. Find the transition diagram for the Regular expression and the Regular definition

i.**a(a|b)\*a ii.((E|a)b\*)\*** iii.All the string of digit with at most one repeated digit.

2. Explain in detail about various structure of compiler.

3. Construct for the RE to NFA for the sentence **(a|b)\*a.**

4**.** Explain the role performed by lexical analysis of the compiler.

**SET -6(706,712,718,724,730,736,742,749, LE 03, LE 09)**

1.Explain in the detail about compiler construction tool.

2.Write note on front and back end of compiler.

3. Construct NFA E for the RE **(01|10)\*101** and convert into DFA.

4. Explain in the detail about how compiler recognition of token.