**QUESTION BANK**

**Unit-3,4&5**

**4 mark**

1. Conversion of CFG to PDA
2. Proving given language is not context free.
3. Modifications of Turing Machines.
4. Techniques for TM construction
5. Construction of Turing Machine for a given language.
6. Undecidable problem with an example.
7. Instantaneous description of PDA.
8. time and space complexities of TM.
9. travelling salesman problem a NP or P Problem.
10. PCP problem.
11. Halting problem.
12. Rice theorem stmt.

**12 mark**

1. Construction of PDA for the given language.
2. Conversion of PDA to CFG.
3. Construction of Turing Machine for a given language.
4. properties of recursive and recursively enumerable.
5. NP type problem, NP complete type problem, NP hard type problem with example.