



**In semester Assessment  
ST- (Semester-IV)  
Design and Analysis of Algorithms**

**Branch: AIML**

**Div.: A**

**Duration: 1 hour**

**Instructions –**

1. All questions are compulsory
2. Assume suitable data wherever necessary and state the assumptions made.
3. Diagrams / sketches should be given wherever necessary.
4. Use of logarithmic table, drawing instruments and non-programmable calculators is permitted.
5. Figures to the right indicate full marks.
6. Scan the answer sheet in sequence and upload the Pdf. Pdf should be named as ST\_AIML\_ Roll No\_Subject abbreviation\_Student Name

**Date: 18/04/2022**

**Timing: 2.30 pm to 3:30 pm**

**Maximum Marks: 20**

**Q.1) Objective Questions (10M)**

Solve any 10 questions out of 12. (Each question carries 1Mark)

<https://forms.gle/cNEbQZgQyvc2SR6M9>

**Q2 a)** Write the pseudocode for Naïve String-Matching algorithm. Also state its worst- and best-case complexity

[5 marks]

OR

**Q2 b)** What is branch and bound strategy? Explain different branch and bound methods.

[5 marks]

**Q3 a)** Explain Rabin Karp Algorithm

[5 marks]

OR

**Q3 b)** Describe the backtracking solution to solve 4-Queen problem.

[5 marks]