



DEPARTMENT: AIML &IT  
Section: D

Siliguri Institute of Technology  
Department of Engineering  
Science & Humanities  
BS-M101, Mathematics 1A  
Odd Semester of  
Academic Year 2022-2023

**Course Instructor: Dr. Jayanta Dutta &**

## Assignment 1(Problem Solving)

**Total marks: 5**

1. Find the rank of the matrix

[BS-M101.3]

$$\begin{bmatrix} 1 & 3 & 2 & 4 & 1 \\ 0 & 0 & 2 & 2 & 0 \\ 2 & 6 & 2 & 6 & 2 \\ 3 & 9 & 1 & 10 & 6 \end{bmatrix}$$

2. Find A if  $\text{adj. } A = \begin{bmatrix} 2 & 1 & 1 \\ -1 & 1 & 1 \\ -1 & -2 & 1 \end{bmatrix}$  and  $|A| = 3$

[BS-M101.3]