## FAST National University of Computer and Emerging Sciences FALL 2022

## MT-1004 Linear Algebra

## **Course Content for Mid-Term 1 Exam**

Contents/Topics	Exercises
Introduction, System of Linear equations,	1.1 (1-20)
Elementary row operation	
Solving system of Linear equations:	<b>1.2</b> (1-26)
Gaussian Elimination and Gauss Jordan methods	<b>1.2</b> (1-20) <b>1.5</b> (1-6, 11-18)
Matrix Operations	<b>1.6</b> (1-20)
Elementary Matrices, Methods for	1.0 (1-20)
finding Inverse, Invertible Matrices,	
Diagonal, triangular, and symmetric matrices,	<b>1.7</b> (1-10, 19-28)
Matrix Transformations	<b>1.8</b> (1-24, 27-41)
Application no 1:	<b>1.10</b> (1-4)
Network Analysis	<b>2.1</b> (1-32)
Determinants and their properties, Minors,	<b>2.2</b> (1-23)
Cofactors, Inverse using cofactors, Cramer's Rule	<b>2.3</b> (1-29,31,32)