## FAST National University of Computer and Emerging Sciences FALL 2024

## MT-1004 Linear Algebra

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

Contents/Topics	Exercises
General Vector Space	<b>4.1</b> (1,2,9,11, 12)
Subspaces	Example no 1-5,7
	<b>4.2</b> (1-5, 19)
	Example no.1-6,13
Spanning Sets	<b>4.3</b> (1-13, 15-20)
Linear Independence	4.4 (1-15)
Coordinates and Bases	<b>4.5</b> (1-9, 11-22)
Dimensions	<b>4.6</b> (1-8,10,12-13,15-20)
Change of Basis	<b>4.7</b> (1-19)
Bases for row, column, and null spaces,	<b>4.8</b> (1-19,21-30)
Rank and Nullity	<b>4.9</b> (1-14,19-36)
Eigenvalues and Eigenvectors	<b>5.1</b> (1-16)