

## Dr B R Ambedkar National Institute of Technology, Jalandhar Scheme of M. Tech Programme in Computer Science and Engineering M. Tech Computer Science and Engineering With Specialization in Information Security to be applicable from 2019 Batch onwards

## LIST OF DEPARTMENTAL CORES FOR M.TECH PROGRAMME IN COMPUTER SCIENCE AND ENGINEERING

Course Code	Course Title	Hrs/week			Credits
		L	T	P	1
CS-501	Cryptography	3	0	0	3
CS-502	Advanced Computer Networks	3	0	0	3
CS-503	Advanced Databases and Data Mining	3	0	0	3
CS-504	Advanced Data Structures and Algorithms	3	0	0	3
CS-505	Digital Image Processing	3	0	0	3
CS-506	Machine Learning	3	0	0	3
CS-507	Software Project Management	3	0	0	3
CS-554	Network Security	3	0	0	3
CS-511	Cryptography Laboratory	0	0	3	2
CS-512	Advanced Computer Networks Laboratory	0	0	3	2
CS-513	Advanced Databases and Data Mining Laboratory	0	0	3	2
CS-514	Advanced Data Structures and Algorithms Laboratory	0	0	3	2
	Total	24	0	12	32







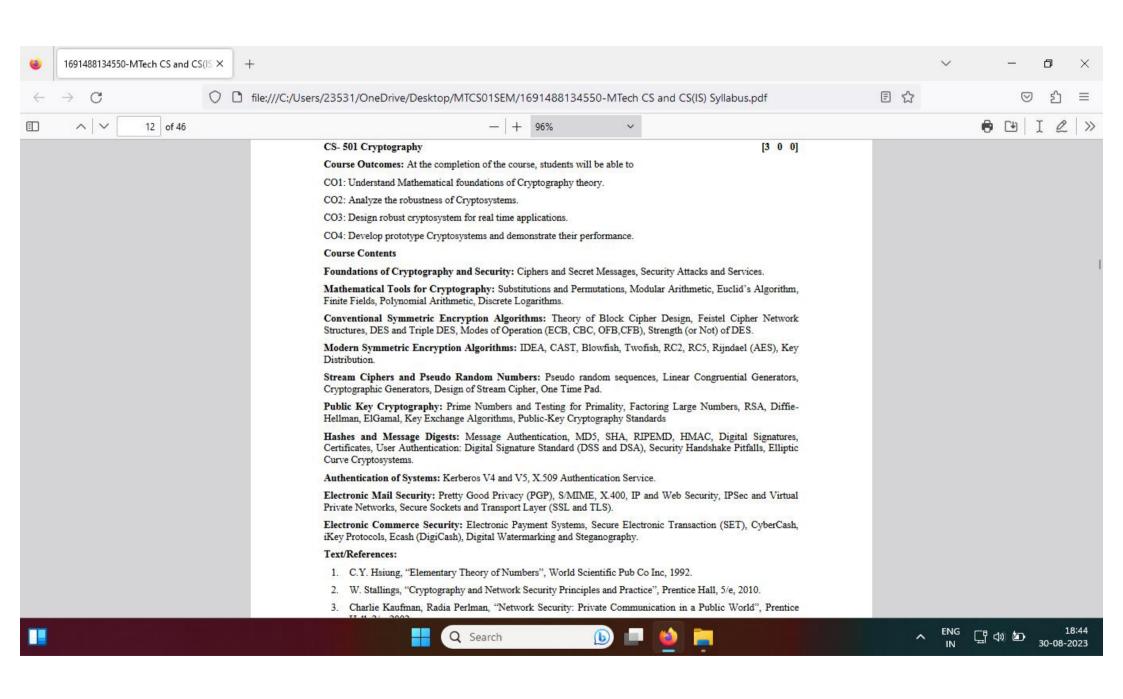


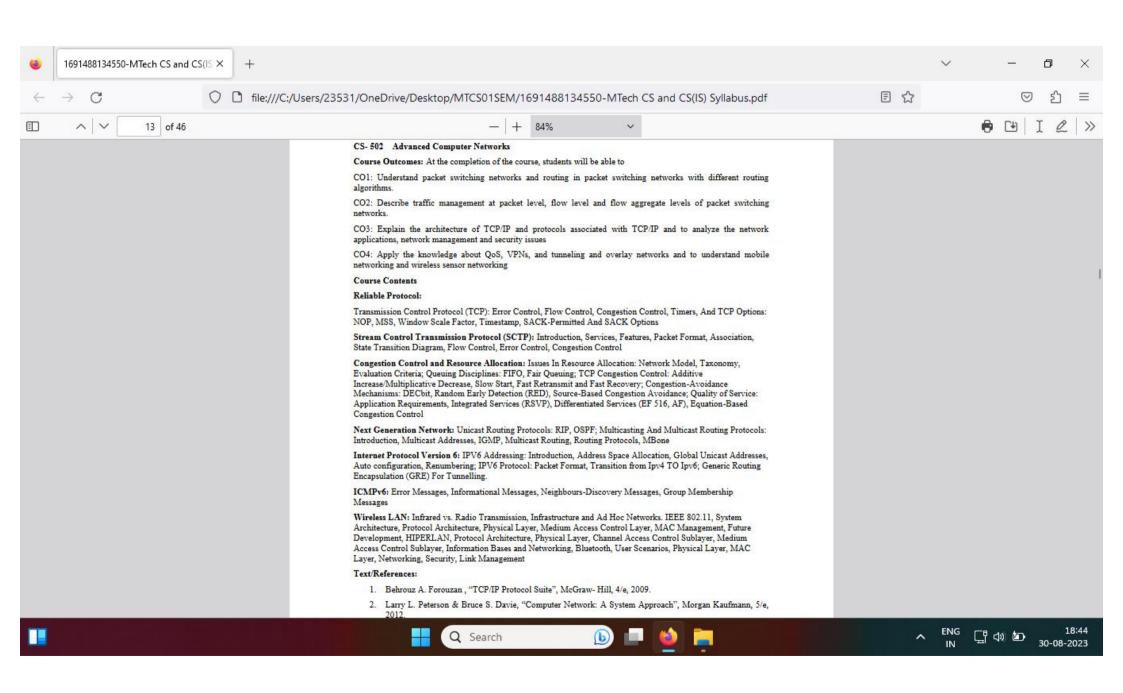


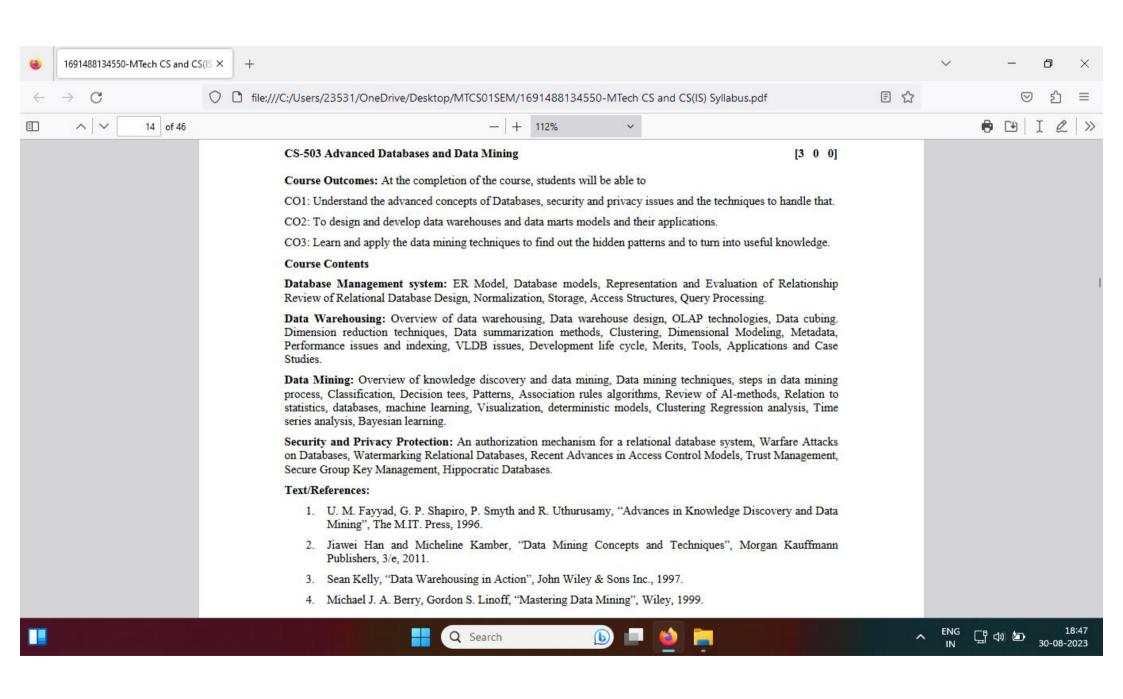


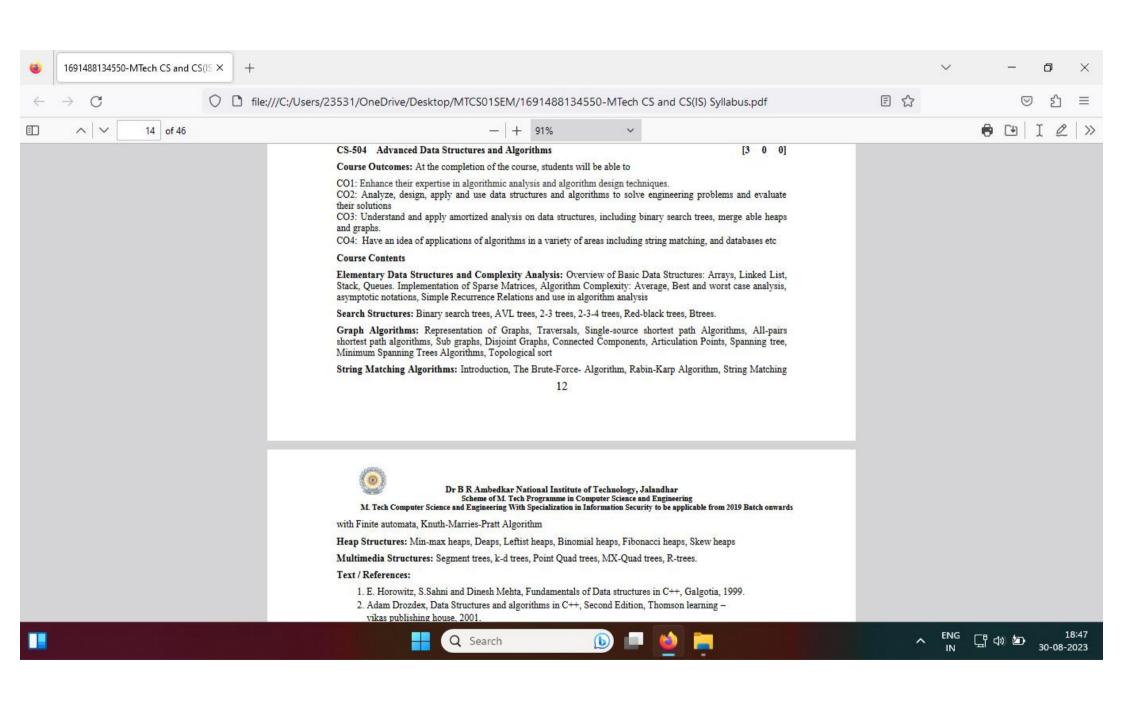


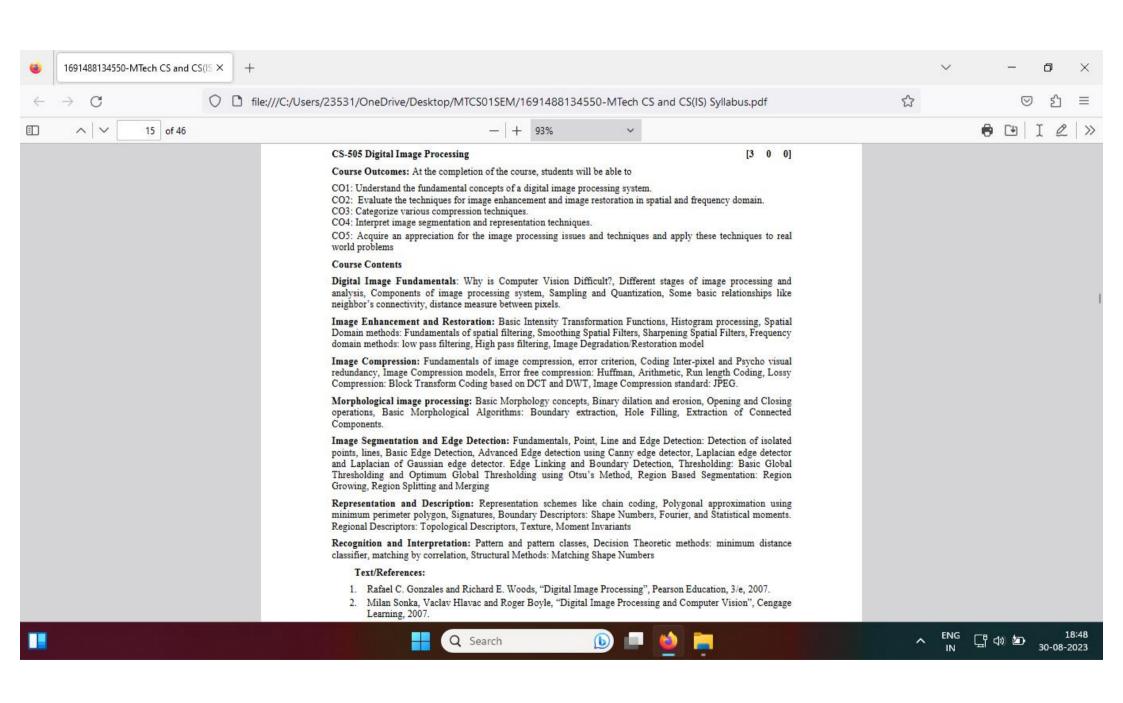


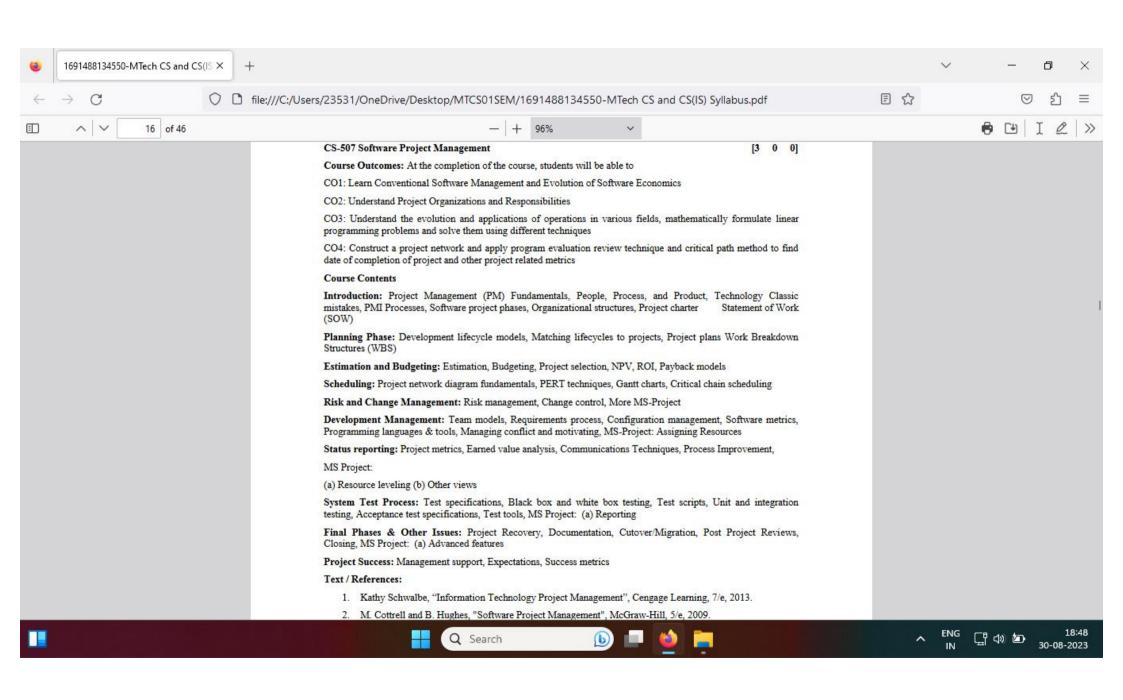


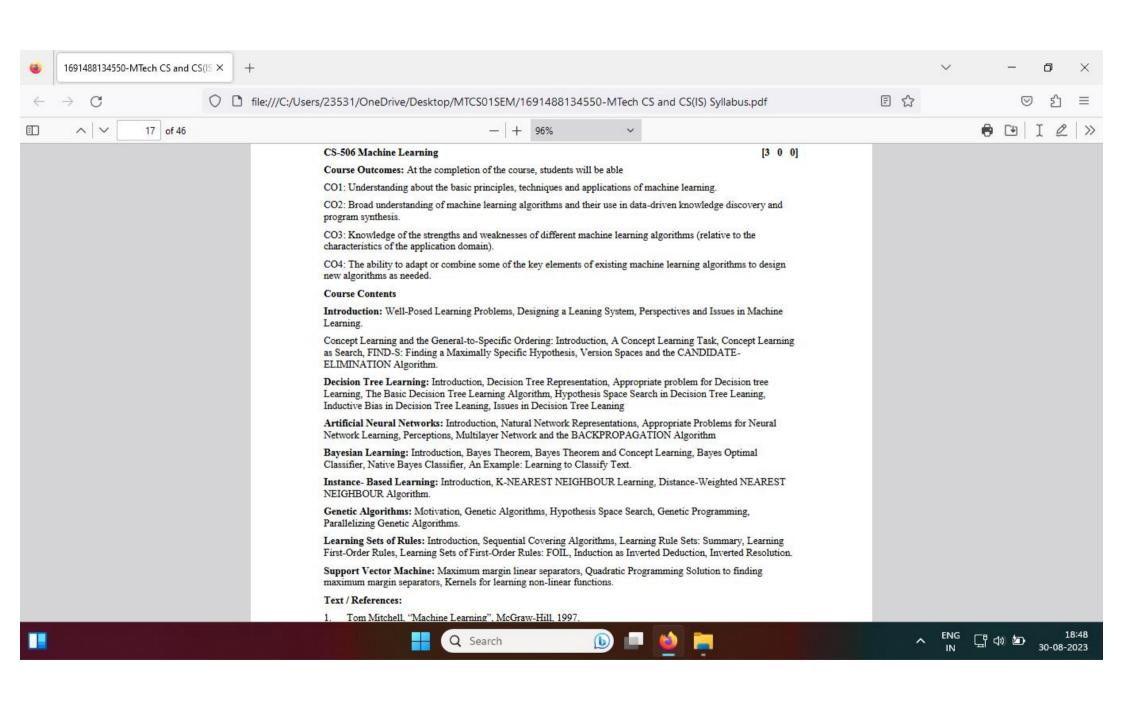


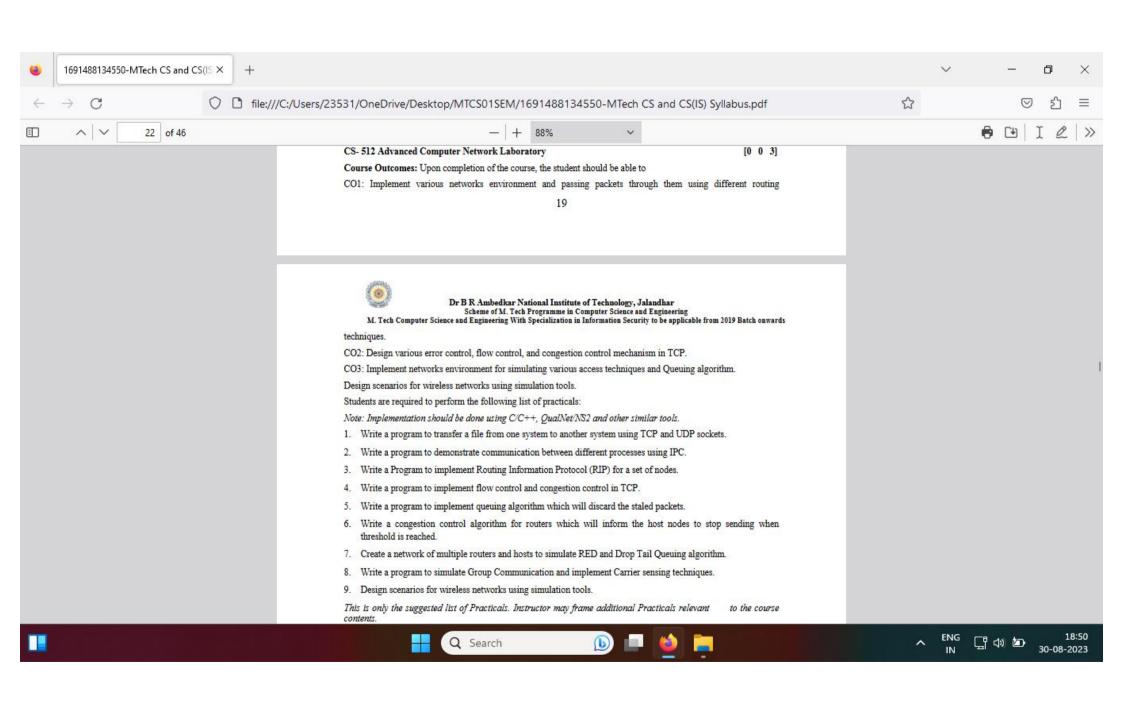


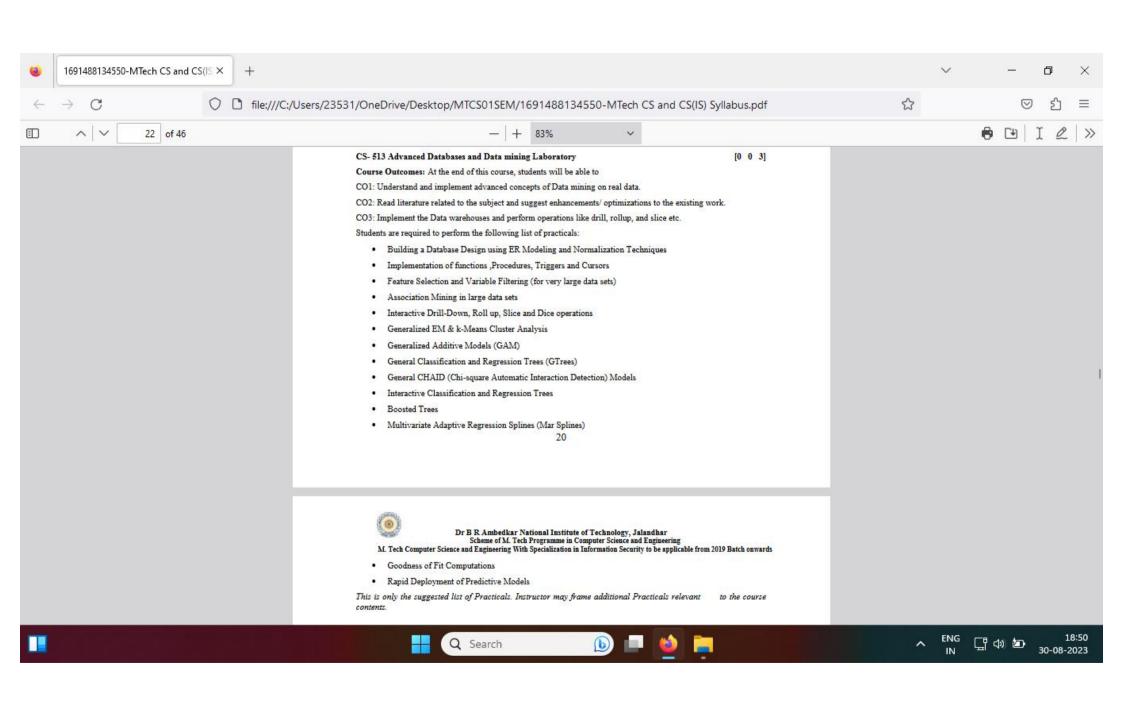


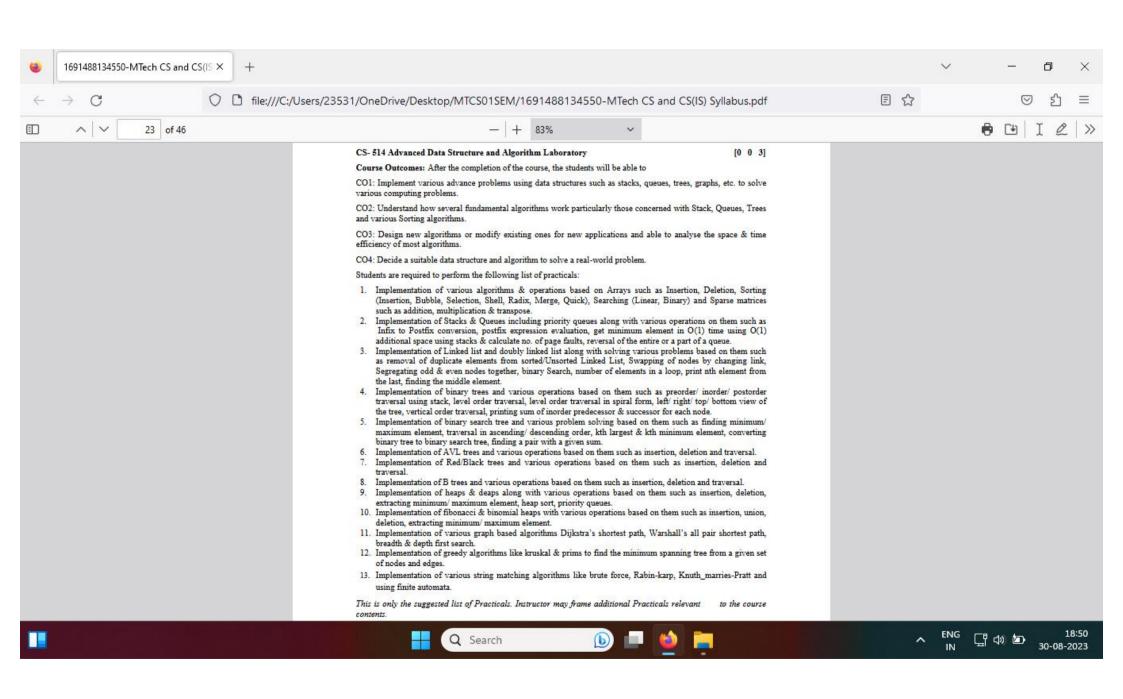


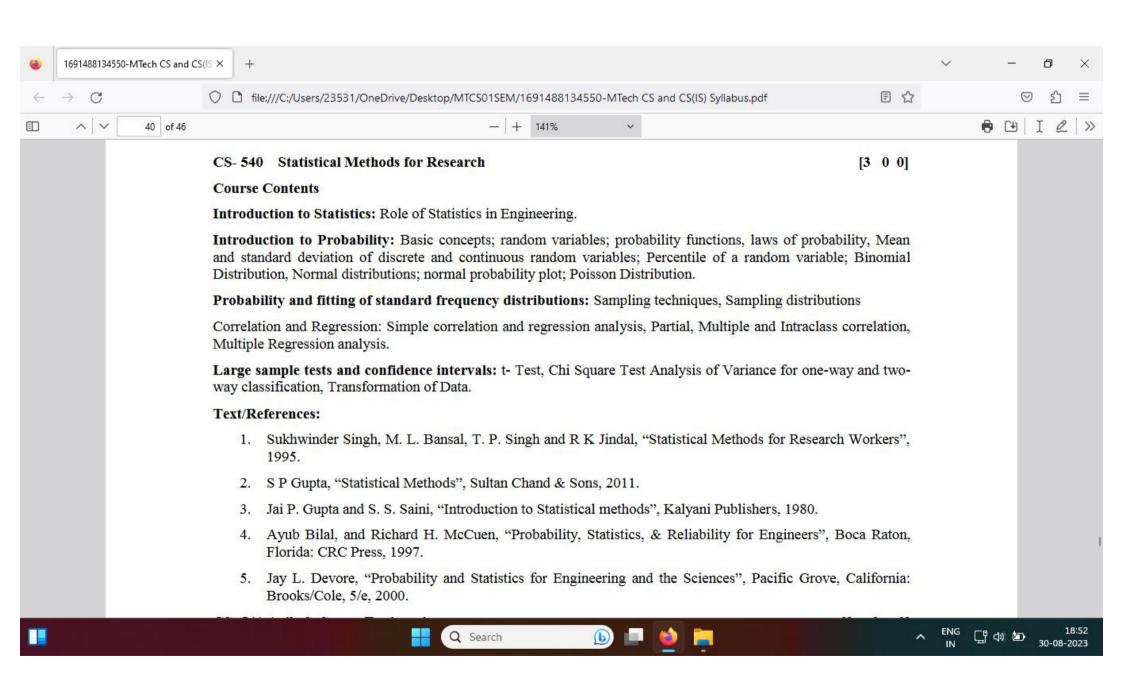












## AMBEDKAR NATIONAL INSTITUTE OF TECHNOLOGY JALANDHAR CS- 511 Cryptography Laboratory M.Tech (CSE) 2<sup>nd</sup> Semester

Course Name:	1 - Lande to make		Course Code:						
Departme	nt: Computer Science :	and	Type:						
L-T-P Structure	0-0-3	Credits	2	Pre-requisite:	NA				
Sr. No.	List of Programmes								
1.	Write a program to implement Ceaser Cipher and Rail fence encryption and decryption.								
2.	Write a program to implement Play Fair and Affine Cipher encryption and decryption.								
3.	Write a program to implement Hill cipher encryption and decryption.								
4.	Write a program to implement DES encryption and decryption.								
5.	Write a program to implement AES encryption and decryption.								
6.	Write a program to implement Chinese Remainder Theorem (CRT).								
7.	Write a program to implement Rabin Miller test for primality.								
8.	Write a program to implement RSA encryption and decryption								
9.	Write a program to implement Elgamal encryption and decryption								
10.	Write a program to perform the Diffie-Hellman key exchange between two parties, sending the public key values over the network and verify that you ge the same secret key after that use the secret key to encrypt any data and check that the other party can decrypt it.								
11.	Write a program to implement Cipher Block Chaining Mode encryption and decryption.								
12.	Write a program to implement MD5 hash function to validate data integrity.								
13.	Write a program to implement SHA 512 hash function to validate data integrity.								
14.	Write a program to implement Digital Signature Standard (DSS).								
15.	Write a program to implement Elgamal Digital Signature.								
16.	Write a program to implement Email security using SSL and TSL.								