



NATIONAL UNIVERSITY
OF COMPUTER & EMERGING SCIENCES
PESHAWAR CAMPUS



Problem Set:	Assignment 03	Semester:	Spring 2022
Points:	15	Due Date:	See Slate
Course:	EE227 Digital Logic Design	Instructor:	Shakir Ullah Shah

Note:

1. No Assignment will be accepted after the deadline.
2. You need to submit the assignment in Hard-form in the start of the class of the next week (your own hand-written on paper) and also on slate.
3. CALCULATOR IS NOT ALLOWED

Best of Luck 😊

Question# 1

Convert the expression $AC + (A + \overline{B}C)(AC + B)$ to standard SOP form and standard POS form.

Question# 2

Construct SOP and POS from a Truth Table and then simplify using Karnaugh map method. Use different color for each group in K-Map.

A	B	C	X
0	0	0	0
0	0	1	1
0	1	0	0
0	1	1	1
1	0	0	0
1	0	1	1
1	1	0	0
1	1	1	0

Question# 3

Minimize the expression using Quine-McCluskey Method.

$F(A,B,C,D,E) =$

$\Sigma m(0,1,2,3,6,8,9,10,11,17,20,21,23,25,28,30,31)$