Logic Design– Assignment 08

#	Student ID	Student Name	Grade (10)
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Delivery Date	

١. يتم تسليم التمرين محلولا في خلال أسبوع من تاريخ التمرين، و يتم حذف درجتين من التمرين عن كل أسبوع تأخير
٢. يتم التسليم لمعيد المقرر مباشرة
٣. تتم أجابه التمرين في نفس ورق الأسئلة

Q1	For each of the following functions, find all of the prime implicants, using the Quine-McCluskey method. (b) $f(a, b, c, d) = \Sigma\, m(0, 1, 3, 5, 6, 7, 8, 10, 14, 15)$
Sol 1	.....

Q2	Find all prime implicants of the following function and then find all minimum solutions using Petrick's method: $F(A, B, C, D) = \Sigma\, m(9, 12, 13, 15) + \Sigma\, d(1, 4, 5, 7, 8, 11, 14)$
Sol 2	.....

Q3	For each of the following functions, find all of the prime implicants using the Quine-McCluskey method. Using a prime implicant chart. find *all* minimum sum-of-products solutions for each of the functions given in (b) $f(a, b, c, d) = \Sigma\, m(2, 4, 5, 6, 9, 10, 11, 12, 13, 15)$
Sol 3	…… ……

Q4	(a) Use the Quine-McCluskey method to find all prime implicants of $f(a, b, c, d, e) = \Sigma\, m(1, 2, 4, 5, 6, 7, 9, 12, 13, 15, 17, 20, 22, 25, 28, 30)$. Find all essential prime implicants, and find all minimum sum-of-products expressions. (b) Repeat Part (a) for f'.
Sol 4	.....

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