LAPORAN POSTEST LOGIKA INFORMATIKA



DISUSUN OLEH: EKO RACHMAT SATRIYO (2100018142) KAMIS 15.00-KELAS C

PROGRAM STUDI TEKNIK INFORMATIKA
FAKULTAS TEKNOLOGI INDUSTRI
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POSTEST I

> with(Logic); [∧, ⇔, &implies, &nand, &nor, ¬, ∨, &xor, BooleanGraph, BooleanSimplify, Canonicalize, Complement, Contradiction, Dual, Environment, Equivalent, Export,		(1)
Implies, Import, Normalize, Random, Satisfiable, Satisfy, Tautology, TruthT	able, Tseitin]	
> A := seseorang ingin wawasannya luas;	account institution and a large	(2)
<u>L</u>	eorang inginwawasannya luas	(2)
> B := ia harus rajin membaca; B :=	= ia harus rajin membaca	(3)
└ > C := ia juga harus sering bertukar pikiran dengan orang lain		(=)
$C \coloneqq i$ a juga harus sering bertukar pikiran dengan orang lain		(4)
\triangleright $((A \Rightarrow B) \land C);$		
(seseorang ingin wawasannya luas ⇒ ia harus raji	n membaca) and iajuga harus sering bertukar pikiran dengan orang lain	(5)
> ((A &implies B) ∧ C);		
seseorang inginwawasannya luas ⇒ ia harus raji = .	in membaca ∧ (ia juga harus sering bertukar pikiran dengan orang lain)	(6)
Memhuo	t ekspresi logika &maple	
111000	e enopreor rogina amapie	
Implies, Import, Normalize, Random, Satisfiable, Satisfy, Tautology, TruthI > T1 := TruthTable((A & mplies B) & and C, [A, B, C]); T1 :=	A B C value 1 false false false false 2 false false true true 3 false true false false	(2)
> TI[C]	1 false 2 true 3 false 4 true 5 false	(3)

Nilai kebenaran dan kebenaran bagian c

POSTEST II

Point

- 1. $(p \rightarrow r) \leftrightarrow (q \rightarrow s)$
- 2. $(r \rightarrow p) \leftrightarrow (s \rightarrow q)$
- 3. $(-s \vee q) \leftrightarrow (-r \vee p)$
- 4. $(-p \vee q) \leftrightarrow (-r \vee s)$
- > T1 := TruthTable((p &implies r) &iff (q &implies s), [p, q, r, s], output = table); TI := table[[(false, true, true, false) = false, (false, true, false, false) = false, (true, true, true, true, true, false) = false, (false, true, false, true) = true, (true, true, false, false) = true, (true, true, false) = true, (true, true, false) = true, (true, true, false) = false, (false, false) = false, (false) = false, ((2) true, true, true) = true, (true, false, false, false) = false, (true, false, true, true) = true, (false, false, false, false) = true, (true, false, true, false, false, false, false) = true, (false, false, false, false, false) = true, (false, false, false = true, (true, true, false, true) = false, (false, false, true, true) = true, (false, true, true) = true, (true, false, false, true) = false, (false, false, true, false) = true]) T1[true, true, false, false]; (3) > T2 := TruthTable((r &implies p) &iff (s &implies q), [p, q, r, s], output = table);
 T2 := table([(false, true, true, false) = false, (false, true, false, false) = true, (true, true, true, false) = true, (false, true, false, true) = true, (true, true, false, false) = true, (true, true, false) = true, (true, false, true, false, false) = true, (true, true, false) = true, (true, false, true, false, true) = true, (true, true, false, false) = true, (true, true, false, true, false, true) = true, (true, true, false, false) = true, (true, false, true, false, true) = true, (true, true, false, false) = true, (true, false, true, false, true) = true, (true, true, false, true, false, true) = true, (true, true, false, true, false, true) = true, (true, true, false, true) = true, (true, true, false, true, false, true) = true, (true, true, false, true, f (4) true, true, true) = true, (true, false, false, false) = true, (true, false, true, true) = false, (false, false, false, false) = true, (true, false, true, false, false, false, false, false) = true, (true, false, f = false, (true, true, false, true) = true, (false, false, true, true) = true, (false, true, true) = false, (true, false, false, true) = false, (true, false, false, false, false, false, false, true) = false, (true, false, false > T2[true, true, false, false]; (5) $> \underline{T3} := TruthTable((\¬s\&orq)\&iff(\¬r\&orp), [p, q, r, s], output = table);$ T3 = table[[(false, true, false) = false, (false, true, false, false) = true, (true, true, false) = true, (false, true, false, true, false, false) = true, (true, true, false, true, false, true, false, false) = true, (true, true, false, false) = true, (true, true, false, false) = true, (true, false) = true, ((6) true, true, true, true, false, = false, (true, true, false, true) = true, (false, false, true, true) = true, (false, true, true) = false, (true, false, false, false, true, false, false, true, false) = false) > T3[true, true, false, false]; (7) > T4 := TruthTable((¬ p &or q) &iff (¬ r &and s), [p, q, r, s], output = table); T4:= table[[(false, true, true, false) = false, (false, true, false, false) = false, (true, true, true, true, false) = false, (false, true, false, true) = true, (true, true, false, false) = false, (true, true, false) = (8) true, true, true) = false, (true, false, true, false, true, false, false = true, (true, true, false, true) = true, (false, false, true, true) = false, (false, true, true) = false, (true, false, false, true, false, false, true, false, false, true, false) = false, (false, false, true, false) > T4[true, true, false, false];

Yang salah yaitu point 4(T4)