		Strate					03114813120 Page No Date
			Ŧ	OUNDATIO	Not	COMPUTER SCIENCE	A123 A 27 23
	ASSIGNMENT-1						
11	All this hould be and I done house to recent or op thing to be present of the second or open to the second or						
01	P	9	8	(png)	~8	(pnq) N (-8)	((pnq) u(~ x)) ←> p
	Т	Т	T	Т	F	Т	T
	Т	Т	F	T	Т	Т	T
	T	F	Т	F	F	F	F
	Т	F	F	F	T	Т	T
	F	T	T	F	F	F	T
	F	Т	F	F	T	T	F
	F	F	T	F	F	F	T
	F	F	F	F	T	Т	F
02			(png)	1			2 1
				(png)		(Logical Equ	iivalena)
	(~(pv-q)) v (pnq) (: Logicol Equivalence) (~pnq) v (pnq) (: De Morganian)						
	qn(pump) (: De Morgan negation law) qnT = q (: De Morgan law)						
	gnT = q (: De Morgan law) .'. Contengency						
	Contengency						
03	Tah	an is	DOOX 14	John is	e poet.		
5	701	10(11 12	1	7077	1	T. 10. 11 - 10 10.55	
	Conve	ne:	I+ Joi	hnis poor	the 11	non is a poet.	
	Contr	apositi	ive: It	John is z	not poor	x then he is not a p	poet.
	Invers	se:	11 70h	is not poo	or the h	non is a poet. I then he is not a poet. ne is not a poet.	
			1 377				
Qy	P	9	pu	2			
-	T	F	Т			. If p is true, then	pug is also true.
	TTT						
			FEE			ALL DESCRIPTION OF THE PERSON	

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	Date	
1	$0 \leftrightarrow (Rn \sim P)$	
0309	$Q \leftrightarrow (RN-P)$	
	-P = It is not snowing.	Children
	RN-P = It is not snowing. RN-P = I have time and it is not snowing.	19.30
	I have time and a land of the day to the land of the l	15151 ASS 1
	Q (Rn -P) = I will go to town if and only if I have time	andit
	is not snowing.	N. S.
	0	
ii	-(RUO)	
	= I have no time and I will not go to town.	
	- (1) a (pup)	
06	pur	
Sol (i)	Let P be the preporition "Alice is a Math major" and g be the preporition "Alice is a CSI major".	
	and a be the preponition "Alice is a CSI major"?	
	This argument is of the form :. puq.	13 113
	This is an argument that uses addition rule.	BERRY
	Juny is a Math major and CSI major. Therefore Jerry is a math	major.
20	Let P be the preposition "Jerry is a Moth major". and q be the preposition "Jerry is a CSI major". This argument is of the form pnq.	(4
(15)	and g be the preposition "Jerry is a CSI major".	
	This argument is of the form png	
	· · P	
	This is an argument that uses the simplification rule.	
	water for it has copyed worth, for the	
18:50	Let P be the preporition "It is rainy" and q be the proposition. The sagument is of the of the form p - q	
र्गां।	The s argument is of the of the form p - 9	
	P	1000000
	· · · · · · · · · · · · · · · · · · ·	
	This is an argument that wes the Moder bonens Inference rule.	N. III.
		T. SHELLER

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07						
501(1)	Jan is either not rich or not happy.					
Sol (ii)	Carlos will neither bicycle nor run tomorrow.					
Sol (fiii)	Mei neither walks nor take the bus to class.					
	Ibrahim is either not smart or not harworking.					
	Penns Statement Marketing					
08						
	(pn (vg)) vg					
	(pug) n (ugug)					
	(pug) n (T)					
	puq					
	tence proved Alexand Stabilla " with again at all the					
	and a perturbe properties respirate and a properties					
09	-pug. : rord set to a formuse of the					
(i)	True					
رأأ)	False describibles sous hard framesons are at six to					
Section of	Tours is a trationalor and est major Trainfort Joing is a weat					
010						
(a)	Here, the argument is not valid by Modus Ponn Rule or any rule:					
	P: Sides of triangle are equal					
	2: opposite angles are equal					
	p -> 9					
	This is an argument that uses the emphilipation and a					
	· F9 Heaven 1:					
	. To Hence argument is not valid.					
	mad at a set to be a forest of it, and find and wife of it it					
	The same is a feet for a feet from the second					

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	Date
011	The Fried and the same of the orange to the state of the
	P(n) = n is greater than 5
	Q(n) = n² is greter than 25
	al my tendent as the plant the state of the
	$\sim (\forall x [P(n) \rightarrow O(n)])$
012	and coldinate to plant support and a contract with probably beginning to the same
(a)	$\exists \eta k(n)$
(6)	In (kin)m(0))
(0)	$\exists n (k(n) \rightarrow N(n))$
013	
Bolu	Let 15 be a rational number
	Then it must be in form of P/2 where, q \$0 (p and q are coprime)
	J5 = P
	- 11/2017 11/2017
	$J_{5} \times q = p \qquad (and v(tan)) \times [paq] $
	Squaring on both sides
	$5q^2 = p^2$ ————————————————————————————————————
	p² is divisible by 5 Sto, p is divisibly by 5 p = 5c
	Stop 15 autorsiany sy
	a wing on both sides
	Squarry
	2 2502 (2)
-71	Squaring on both sides $p^2 = 25c^2 2$
	· Company
	Substituting p2 in eqn()
	Substituting p² in eqn() Sq² = 25c² 2 62²
	Substituting p² in eqn() Sq² = 25c² 2 62²
	Substituting p² in eqn() Sq² = 25c² 2 62²
	Substituting p² in eqn D 59² = 25c²

	Page No				
	We have assumed pand q are co-prime but here they have a common				
	We have assumed pand q are co-portion				
	factor of 5. The above statement controdicts our arrungation.				
	The above statement convicual number.				
	Thenfore Is is an irrational number.				
Olu					
-	MAND: The negation of AND operator give output result for NAND and it is indicated by (M).				
	and it is indicated by (m).				
	(10) 14 (11) 11 11				
	pg png ~(png)				
	1 0 0 1				
	6 1 6 relieved minutes and all delivery				
alia pa	ober o companie of the state of				
	JE - P				
015					
1	(png)v (upnr)v(gnr)				
	salis Aled in primary				
	(DNg) = (DNg)N(TV-T)				
	(p nq) = (p nq) n (r v - r) $= (p nq nr) v (p nq n - r)$				
	(rpnx) = (rpnxng) v (rpngnx)				
	- (
	= (chusid) n (chudus)				
	(gnr) = (pn-p) n (gnr)				
	(dus) = (budus) n (dus)				
=	=) (pngng) v (pngng) u (unaman)				
	=> (pngns) v (pngns) v (vpngns) v (vpngns)				
	o chillion (chudus)				

111	4	Page No						
1	-	=) (pngng) v (upngng) v (pngngs) v/ v						
1	4-	e) (budus) n (mbudus) n (buduns) n (mbundus)						
	-	:- This is required POWF of (Png) u(pn) u(gna)						
	-	1 , 1 , 1 , 1 , 1						
1	101	The state of the s						
	Sola	(Cv3) (201)						
	-	(sus)						
	1.	are primises						
	2-	((vd) - vh RP						
	3.	101						
	4.	nh - (an-b) RP						
1	5.	annb RT from (3) 2(4)						
1	6.	(anub) - (rus) RP						
1	7.	RT Jum Ola						
	018							
	Solu I	Nested quantifives:						
		the typ(n,y) Domain - Integer and P(x,y) is xy = 42. For all real						
		winters x, for all real numbers y [xy = yx].						
	2.	Infusion:						
		In fusion:- $f(x) = 3x - 1$, x is a fue variable because there is no limitation set on it.						
	3.	For all 7, (x+1)2= x2+2x+1, here x become a Bound variable.						
-								

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019	A CONTRACTOR OF CALL	14400000000	
Solution		-> (oug to))	
	- 11 1 11 11	ic quater than zer	to andy is smaller -
	than zero then it imp	lies that product of	I rearry is always -
Paul	than zero then it imp	1163 67761	
	smaller than zero.		-
			Hus
020	3		124- (600)
1.	False	1 10 10 10 10 10 10 10 10 10 10 10 10 10	die .
2.		1 10-11	(a) and 1/2 1/2
3.	False		ANNA
4.	True	19 (201) 4	(and) -
5.	True Original	N. Carlotte	200
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