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	FINANCIAL ENGINEERING	7
	SURPRISE TEST	
	SUBMITTED BY: AIMAN SIDDIQUA	
	2K18 MC 008	
1.	S(0) = 110	
	u = 0.4	
	d = 0.1	
	91 = 0.2	
1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 * 1 *	X = 120	
	Su = S(0) * (1+u) = 110 x 1.4 = 154	
	Sd = S(0) * (1+d) = 110 x 1.1 = 121	
	Suy = S(0) * (1+4) * (1+4) = 215.6	
	Sud = S(0) * (1+u) * (1+d) = 169-4	
	Sad = Sco)* (1+d) * (1+d) = 133-1	
	215.6	
	154	
	110 169.4	
	121	_
		_
	$b^* = 91-d = 0.2-0.1 = 0.1 = 1$ $4-d = 0.4-0.1 = 0.3 = 3$	
	$1-p^{*}=2$	
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	$C^{uu} = [S^{uu} - K]^{+} = 215.6 - 120 = 95.6$
	$Cud = [3ud - K]^{+} = 169.4 - 120 = 49.4$
	$Cdd = \left[Sdd - k\right]^{+} = 133.1 - 120 = 13.1$
	cd = 1 [p* . dd + (1-p*) ud]
	$\frac{1}{1\cdot 2} \left(\frac{1 * 13.1 + 2 * 49.4}{3} \right)$
	- 31.083
	$C^{4} = \frac{1}{12} \left[\frac{1 * 95.6 + 2 \times 49.4}{3} \right]$
	= 54
	((0)= 1 [px xC4+ (1-px)xcd]
	$= 1 \left[\frac{1 \times 54 + 2 \times 31.083}{3} \right]$
	= 32.268
	Number of Stocks in portfolio = Cu-Cu = 54-31.083
	Sco) (a-d) 110 * 0.4-0.1 = 0.6944
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	The state of the s	
2.	A(0) = \$90	
<u> </u>	When the second	
and the same of th	SCO 275	
Same and the same of the same		
Commence of the Control of the Contr	S(1) = 5\$90 0.8 prob \$70 0.2 prob	
particular and a second second	[\$ 70 0.2 poub	The same
A CONTRACTOR OF THE PARTY OF TH		
	x= 60, y= 40	-
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	When he had
	V(0)= X * S(0) + Y * A(0) = 60 × 75 + 40 × 90	and the same
	= 60 x 75 + 40 x 90	-
	= 8100	
	1112 x x S(1) + y + A(1)	
	V(1) = x * S(1) + y * A(1)	
	$=$ $560 \times 90 + 40 \times 99$ 0.8	
	$\frac{1}{60 \times 70 + 40 \times 99}$ 0.2	
		700
	= 59360 0.8	
	28160 0.2	-
		-
	k = v(1) - v(0)	
	V(0)	-
No. of the last of	2 4 3 0.700	and the control of th
	0.007	
The second secon	E(K) = 0.8 x 0.156 + 0.2 x 0.007	
	A second field in the second s	tine and the sales seems and
	= 0.1262	

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	Risk = \((0.156 - 0.126)^2 x 0.8 +
	$Risk = \left[(0.156 - 0.126)^{2} \times 0.8 + (0.007 - 0.126)^{2} \times 0.2 \right]$
	$= \sqrt{0.0009x + 0.01416 \times 0.2}$
	= 0 -122 0.045
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