

## 6UmYfb!: fUi Yb ZY]Yfb A Y]ghYf\Uhhf]W\_. CVYfXcfZg 9A!7\UbWb k UW\_Y`b°

 $6 \, \text{UmYfb'A} \, \emptyset b \, \text{W} \, \text{Yb'ZY]Yfh'A Y]gh Yf! < \text{Uhhf}] \, \text{W\_ž'k } \, \text{A} \, \text{Yb X'@Yb U} \\ \quad \text{CVYf Xcf Zg'7 ca YV UW\_'j cf' XYf'9A'ib[Yk]gg'V`Y]Vh''}$ 



BØfbVYf[ ž'8 Yi hgW `Ub X'!'8]Y': i » VU``Yf]bbYb'XYg': 7'6UmYfb A ØbWXYb'\UVYb'Ua '&, "'5df]` &\$&) ']\fYb'A Y]ghYf! < Uhhf]W\_'dYfZY\_h [ Ya UWXh"'8]YgYg'9fY][ b]g'gma Vc`]g]Yfh'Y]bYb'A UWXhk YWXgY` ]a XYi hgWXYb': fUi YbZ » VU``ž'XU'XYf'J Z@K c`ZgVi f[ 'ni j cf'j cb'&\$%+V]g'&\$&\$'j ]Yf'A Y]ghYfgWXUZhYb'[ Yk cbbYb'\UhhY"'BUWX'XYa Hf]i a d\'Ài » YfhY'g]WX'HfU]bYf'5`YI UbXYf'GhfUi g'ni fØW\_\U`hYbX\]bg]WXh`]WX'XYg'7ca YVUW\_g'j cb'@YbU'C VYfXcfZ'j cf'XYf VYj cfghY\YbXYb'9i fcdUa Y]ghYfgWXUZh'f9A Ł"'C VYfXcfZ'\Uh'Y]bYb?fYi nVUbXf]gg'Yf`]hhYb'i bX'a i gg'ni bÀWXgh'j c``ghÀbX][ ']bg HfU]b]b[ 'ni fØW\_\_Y\fYbž'VYj cf'g]Y'k ]YXYf']bg K Yhh\_Ua dZ[ YgWXY\Yb'Y]bghY][ Yb'\_Ubbž'k ]Y'hn"XY'VYf]WXhYh"

: fUi Yb!: i » VU``!8]fY\_hcf]b'6]UbWU'FYW\'VYhcbhY'YVYbZU``gž'XUgg

CVYfXcfZini fnY]hib]WkhiUi ZiXYa "GhUbXigY]žii a "UbiXYfi9A hY]ini bY\a Yb"'6i bXYghfU]bYfi7\f]gh]UbiK ØW\_iài »YfhYiYXcWkiX]Y <cZZbi b[žiXUggiCVYfXcfZibcWkink Y]iV]giXfY]iGd]YiYiZØfi6UmYfbi]b X]YgYfiGU]gcbigd]YiYbi\_ObbhY"i8]YiA UbbgWkUZhiZY]YfhYi]\fYbiH]hYi hfchniXYfiUbghY\YbXYbi<YfUi gZcfXYfi b[YbžiXUig]YiUa 8cbbYfghU[i]ai8:6!Dc\_UiZ]bUiYi[Y[YbiK YfXYfi6fYa YbiUbhfYhYb aigg"iGd]YiYf]bi?iUfUi6Ø\iiXfØW\_hYi]\fYbiK i bgWkiUi gžiXUg 8ci ViYini [Yk]bbYbžik UgiZØfiX]Yi6UmYfb!:fUi YbiY]bYiDfYa]YfY XUfghYiYbik ØfXY"

## CVYfXcfZi bX XUg 7ca YVUW\_

@YbU'C VYfXcfZ`\Uh']b'XYf'Nk ]gWXYbnY]h'I dXUhYg'ni ']\fYa 7ca YVUW\_'i bX']\fYb'7\UbW'b'a ]h'XYb'8: 6!: fUi Yb'[Y[YVYb" BUWX'XYf'JYf`Yhni b[ž'X]Y'g]Y'XUg'8YVØh'VY]'XYb'C`ma d]gWXYb Gd]Y`Yb'\_cghYhYž'hfU]b]Yfh'g]Y'XYfnY]h']bX]j ]Xi Y``i bX'nY][ h : cfhgWXf]hhY"'K À\fYbX'XYg'YfghYb'@ÀbXYfgd]Y`dUi gYb'XYg'\\fYg k UfhYh'g]Y'k Y]hYf\]b'Ui Z']\fY'FØW\_\_Y\f']bg'8: 6!HYUa ž'k c'g]Y j cfØVYf[Y\YbX'b]WXh'ni f'JYfZØ[i b['ghY\hž'k]Y'k Uhgcb"XY VYf]WXhYh"

#D'Y]bYa '\_Øfn`]W\'Ui Z'#\ghU[fUa '[YhY]`hYb'J]XYc'\_cbbhYb'X]Y
B Uh]cbU`\gd]Y`Yf]bbYb'VY]']\fYf'5b\_i bZh'Z\Øf'X]Y'VYj cfghY\YbXYb
Gd]Y`Y']b'XYf'B Uh]cbg'\@YU[i Y'VYcVUW\hYh'k YfXYb'''K \Ø\\\_'\Uh
VYfY]hg'\&' 'Gd]Y`Yf]bbYb'bca ]b]Yfh\z'k \A\fYbX'FYVY\\WU'?bUU\_'bU\W\
\ØVYf'bYi b'\J\fYb']bg'\8: 6!5i Z[YVch'ni f\Ø\\\_\_Y\fh''Hfchn']\fYf
5Vk YgYb\Y]h'\ZY\`h'CVYfXcf\Z'\X]Y'YXc\W'j cb'\XYb'F\Ab[Yb'Ui g']\fY
HYUa \_c``Y[]bbYb'i bhYfgh\Øhnh'i bX'cdh]a ]gh]g\W\'VYn\Ø[`]\W\'XYf
FYU\_h]cb']\fYg'?b]Yg']gh''G]Y'\YVh'\X]Y'\6YXYi hi b['\XYf
FY[YbYfUh]cb'\Yfj cf'i bX'\Ai \(\gamma\)Yfh'\XYb'K i bg\W\\\z'\VU'\X'\k]Y\XYf'Y]bY
Cdh]cb'\Z\Øf'\X]Y'\5i qk U\``ni 'k Yf\XYb''

## JYf`Yhni b[Yb]a: fUi Ybgdcfh

9]b'h]YZYf[Y\YbXYf'?cbhYl h'\]bg]W\h`]W\'XYf  $J Yf`Yhni b[gUbZA``][\_Y]h'k Y]V`]W\Yf'5h\`YhYb'k ]fX'Xi fW\ : cfgW\i b[gUfVY]hYb'i bX'U\_hi Y``Y'8]g_i gg]cbYb']a '6YfY]W\'XYf qdcfha YX]n]b]gW\Yb'6YhfYi i b['XYi h`]W\"8Yf': c_i g'`]Y[h'Ui Z'XYf$ 

I fgUWX Yb ZcfgWX i b['i bX'XYf'DfÀj Ybh]cb'j cb'J Yf`Yhni b[Yb'VY]
: fUi Ybž'X]Y 'VYgcbXYfg'\Ài Z]['i bhYf'J Yf`Yhni b[Yb'XYf'i bhYfYb
9I hfYa ]hÀhž']bgVYgcbXYfY'Ua 'Gdfi b[!'i bX'?b]Y[Y`Yb\_ž'`Y]XYb"
@Ui h'gdcfhUYfnhYnY]hi b["Wca '\UVYb': fUi Yb'Y]b'XfY]a U`
\O\YfYg'F]g]\_c'ZØf'?fYi nVUbXj Yf`Yhni b[Ybž']bgVYgcbXYfY'VY]
bcb!WcbhUWh 'J Yf`Yhni b[Yb"

8]Y; fØbXY`\]YfZØf`g]bX`V]c`c[]gW\Yf`BUhi fii bX`i a ZUggYb
I bhYfgW\]YXY`]b; fÒ» Yž; Yk]W\hž`A i g\_Y`a UggY`i bX
<cfa cb\Ui g\U`h"8]YgY`: U\_hcfYb`Yf\Ò\Yb`[Ya Y]bgUa `XUg`F]g]\_c
ZØf`J Yf`Yhni b[Yb"Y9]b`kY]hYfYg`]bhYfYggUbhYg`8YhU]``]ghž`XUgg
J Yf`Yhni b[Yb`XYg`j cfXYfYb`?fYi nVUbXYg`\Ài Z][`]b`XYf`YfghYb
D\UgY`XYg`A Ybghfi Uh]cbgnm\_`i g`Ui ZhfYhYbž`k Ug`X]Y
<YfUi gZcfXYfi b[Yb`ZØf`a YX]n]b]gW\Y`6YhfYi Yf]bbYb`i bX
5h\`Yh]bbYb`Yf\Ò\h"`<Ui hÀfnhY`i bX`HfU]bYf`gY\Yb`XU\Yf`Y]bYb
Xf]b[YbXYb`6YXUfZ`Ub`]bX]j ]Xi Y```ni [YgW\b]hhYbYb
DfÀj Ybh]cbgqhfUhY[]Yb"

Ni gUa a YbZUggYbX'nY][ h'g]W\ž'XUgg'gck c\``XYf'9fZc`[ 'XYg': 7 6UmYfb'A ØbW\Yb'U`g'Ui W\'X]Y'9bhk ]W`i b[ Yb'fi bX'i a '@YbU CVYfXcfZ'i bX'XYf'k Y]V`]W\Y'DfcZ]Zi » VU```]b'8Yi hgW\`UbX'Yb[ a ]hY]bUbXYf'j Yf\_bØdZh'g]bX'''8Ug'K UW\ghi a 'i bX'X]Y < YfUi gZcfXYfi b[ Yb']b'XYf': fUi YbZi » VU``gnYbY'g]bX'gck c\``Y]bY gdcfh`]W\Y'U`g'Ui W\'Y]bY'[ YgY``gW\UZh`]W\Y'5b[ Y`Y[ Yb\Y]hž'X]Y k Y]hYf\]b'j ]Y``5i Za Yf\_gUa \_Y]h'j YfX]Ybh''

8 Y hU]`g	
J c f ZU``	Gcbgh][ Yg
I fgUWXY	?fYi nVUbXf]gg
Cfh	BØfbVYf[ž'8Yi hgWX`UbX
J Y f`Y hn hY	%
EiY``Yb	• k k k "hn"XY
	• kkk"kUhgcb"XY
	<ul><li>gdcfhUYfnhYnY]hi b[ "Wca</li></ul>

## 6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. 'b!U[ "XY