

## GhUXhfUh'=`gUb\_Yf.'J]XYcØVYfk UW\i b[']a ?`cghYf[UfhYb']gh'fYW\hgk]Xf]['

 $segYZ=gUb_YfžGhUXhfUhjcbDUggUiždUbhfYWXh)WXYGWXf]hhY[Y[YbX]Yiaghf]hhYbYJ]XYcØVYfkUWXib[i]a?cghYf[UfhYb"$ 



 $DUggUi \ \check{z}'8\ Yi \ hgWX `Ub\ X'! \ ^5_hi \ Y``Y' \ ^9bhk \ ]W_`i \ b[\ Yb''fi \ b\ X'i \ a \ 'X]Y$   $J]XYc \varnothing VYfk \ UWXi \ b[\ ']a \ DUggUi \ Yf'? `cghYf[ \ UfhYb'gcf[ \ Yb' \ Z\ \varnothing f'fY[ \ Y \ 8 \ ]g_i \ gg]cb Yb'' \ ^cgYZ = gUb_Yf\check{z}'GhUXhfUh'j \ cb' DUggUi \ \check{z}' \ Uh$   $Ub[\ Y_\varnothing b\ X][\ h\check{z}'bYi \ Y''^{1} \ f]gh]gWX \ Y'GWX \ f]hhY'[\ Y[\ Yb'\ X]Y'i \ a \ ghf]hhYbY$   $VYfk \ UWXi \ b[\ 'Y]bni \ `Y]hYb'' \ ^eUi \ h'XYa \ 'GhUXhfUh' \ Uh'X]Y' \ GhUXh$   $DUggUi \ 'hfchn'_``UfYf'[\ Yf]WX \ h`]WXYf'I \ fhY]`Y'X]Y'? \ Ua \ YfUg']a$   $?`cghYf[\ UfhYb' k\ ]YXYf'U_h]j \ ]Yfh''' \ 8\ ]YgY' \ 9bhgWXY]Xi \ b[\ Yb' ghY \ Yb']a$   $K \ ]XYfgdfi \ WX'ni \ XYb' I \ fhY]`Yb'XYg'6i \ bXYgj \ Yfk \ U`hi \ b[\ g[\ Yf]WX \ hg$   $gck \ ]Y'XYg'6UmYf]gWXYb' \ J \ Yfk \ U`hi \ b[\ g[\ Yf]WX \ hg \ cZg\check{z}'X]Y'X]Y$   $VYfk \ UWXi \ b[\ 'U`g'fYWX \ hgk \ ]Xf][\ 'YfUWX \ hYh' \ UVYb\check{z}'k \ ]Y' \ A \ YX]YbXYb_$   $VYf]WX \ hYh''$ 

 $GY]h^{\circ}9bXY^{\circ}\&\$\%$ ,  $k]fX^{\circ}X]Y^{\circ}$ ,  $f\emptyset bUb^{\circ}U[Y^{\circ}?^{\circ}cghYf[UfhYb^{\circ}a]h$ 

J]XYc\_Ua YfUg'ØVYfk UW\hž'k cVY]'X]Y'GhUXh'VY\Ui dhYhž'XUgg'X]Yg XYf'J UbXU`]ga i gdfÀj Ybh]cb'i bX'XYf'GhÀf\_i b['XYg G]W\Yf\Y]hg[YZØ\`g'X]Ybh"'9]b'DUggUi Yf'6Øf[Yf'\UhhY'[Y[Yb'X]YgY , VYfk UW\i b['[Y\_`U[hž'i bhYfghØhnh'j cb'XYf'; YgY``gW\UZh'ZØf : fY]\Y]hgfYW\hY'fl :: \L'''8]Y'?`U[Y'k i fXY'ni bÀW\gh'U`g'i bni `Àgg][UV[Yk]YgYbž'YXcW\'ghY``hY'XYf'6UmYf]gW\Y JYfk U`hi b[g[Yf]W\hg\cZ'gdÀhYf'ZYghž'XUgg'X]Y'GhUXh'\_Y]bY Ui gfY]W\YbXYb'8UhYb'j cf`Y[Yb'\_cbbhYž'X]Y'XYb'?`cghYf[UfhYb'U`g?f]a]bU`]hÀhggW\k Yfdi b\_h'Ui gk Y]gYb"

## if]gh]gWXY'5igY]bUbXYfgYhnib['[Y\h'kY]hYf

 $8 ]Y'; :: \check{z}'X]Y']a :: U```XYg'DUggUi Yf'?`cghYf[UfhYbg'U_h]j '[Yk cfXYb]gh\check{z}'VYhcbh\check{z}'XUgg'OZZYbh`]WXY'D`ÀhnY'CfhY'XYg'[YgY``gWXUZh`]WXYb A]hY]bUbXYfg'g]bX'i bX'Y]bY'J]XYcØVYfk UWXi b['\YfY]bfYXYh\check{z}'X]Y bi f']b'Yb[Yb'; fYbnYb'ni `Àgg]['k ÀfY''@Ui h'XYa 'I fhY]`'XYg 6UmYf]gWXYb'JYfk U`hi b[g[Yf]WXhg\cZg'ØVYfk c[Yb'X]Y gWXi hnk ØfX][Yb'\dangerbYb'X]Y'ghÀXh]gWXYb'G]WXYf\Y]hg]bhYfYggYb''$ 

## 8UhYbgWlihn]a :c\_ig

8 UgʻH\Ya Uʻ8 UhYbgWki hnʻ]ghʻVY]ʻXYfʻJ]XYcØVYfk UWki b[ʻ]b 8 Yi hgWk`UbXʻY]bʻdYfa UbYbhYgʻ\Y]» Ygʻ9]gYb"ʻ@Ui hʻXYf 6i bXYgVYUi ZhfU[ hYbʻZØfʻXYbʻ8 UhYbgWki hnʻi bXʻX]Y ±bZcfa Uh]cbgZfY]\Y]hik ]fX`XYfʻHfYbX'ni fʻ5i qk Y]hi b[ʻXYf  $J ] XYC \emptyset VYfk UW i b [ 'k Y]hYf \rangle ] b j cfUb [ Yhf]YVYb " = a Yf a Y \wedge f ghUUh ] W Y = bgh]hi h]cbYb gYhnYb 'Ui Z ] b hY ``] [ Yb hY 'GmghYa Y 'ni f , VYfk UW i b [ <math>\check{z}'X$ ]Y 'Ui W ']b '\_f]h]gW Yb '6 YfY]W Yb 'k ]Y '? Zn! ? Yb b nY]W Yb! 'c XYf'; Yg]W hgUV [ `Y]W '5 b k Yb Xi b [ 'Z]b XYb " '8 Yf 8 UhYb gW i hn 'k ]fX '\]Yf 'c Zh 'U 'g 'dfc V 'Ya Uh]gW 'VYhfUW hYhž 'XU 'Yf ']b XUg 'DYfg Ob `]W \_Y]hgfY W h XYf '6 Øf[ Yf 'Y]b [ fY]Zhž k Ug 'X]Y '\c\Y fYW h`]W Yb '5 b Zc fXYfi b [ Yb 'Ub 'J ]XYc ØVYfk UW i b [ 'i bi a [ Àb [ `]W a UW hž k ]Y 'Ui Z'6: 8 = Ub [ YXYi hYh k ]fX"

8]YgY'ni bY\a YbXY'HYW\bc`c[]g]Yfi b['k]fZh'b]W\h'bi f
fYW\hgghUUh`]W\Y': fU[Yb'Ui Zž'gcbXYfb'\_Ubb'Ui W\ni 'Y]bYf
ZÀW\YbXYW\_YbXYb', VYfk UW\i b['XYg'ÒZZYbh`]W\Yb'F Ui a g'ZØ\fYbž
k Ug'Ui hcf]h\hf[Yg]bbhYb'FY[]Yfi b[Yb']b'X]Y'<\hhXY'gd]Y`Yb
\_\ObbhY''=\hgUb\_Yf']gh'g]W\'X]YgYf'; YZU\fYb'VYk i ggh'i bX'UddY``]Yfh
Ub'X]Y'^2 ZZYbh`]W\\_Y]h'gck]Y'X]Y'Dc`]h]\_ž'; Yf]W\hgi fhY]`Y'ni
fYgdY\_h]YfYb'i bX'k UfbhY'j cf'XYb': c`[Yb'XYf'A]ggUW\hi b['j cb
; fi bXfYW\hYb"

 $GWX `i ggYbX`]WX `ghY \ h`X]Y :: fU[Y`]a `FUi a ž`cV`X]Y `GhUXh`DUggUi `a ]h ] \ fYf`9b hgWXY]Xi b[ž`X]Y`J]XYcØVYfk UWX i b[`k ]YXYf`ni `U_h]j ]YfYbž b]WX h`]b`Y]bYb`[YZÀ\f`]WXYb`DZUX`XYf`, VYfk UWX i b[`\]bY]bghYi Yfhž XYf`a <math>O[`]WXYfk Y]gY`b]WX h`a Y\ f`i a _Y\ fVUf`]gh"`8]Y`8]g_i gg]cb`]gh YfOZZbYh`i bX`k ]fX`g]WXYf`]WX`Ui WX`]b`Ni _i bZh`ZØf`GWX`U[nY]`Yb qcf[Yb"$ 

8 Y hU]`g	
Cfh	DUggUi ž'8 Yi hgWX`Ub X
Ei Y``Yb	• k k k "a YX]YbXYb_"XY
	<ul><li>VfY]hgY]hY"U_'!ZfY]Vi f[ "XY</li></ul>
	• k k k "VZX]"Vi bX"XY

6 Ygi W Yb G]Y i bg Ui Z b!U[ "XY