

Gca a YfgU]gcb '&\$&) . '? ]Yb'; ]Ub[ ``cW\_h  
a ]h' bYi Yb 'Hci f]ga i g! < c hgd chg°

⇒ 'Gca a Yf'&\$&) 'Vcca h'XYf'Hci f]ga i g' ]b'?' ]Yb'; ]Ub[ 'a ]h  
bYi Yb 'HfYbXgž'J YfUbghU'hi b[ Yb' i bX'Y]bYf'j YfVYggYfhYb  
⇒ ZfUghfi \_hi f"



A i ]'B U]ž'?' ]Yb'; ]Ub[ ž'J ]YhbUa '!'Gca a Yf'&\$&) 'ghY\h'ja  
NY]WXYb'XYg'Hci f]ga i g' ]b'J ]YhbUa ž' ]bgVYgcbXYfY' ]b'XYf'Dfcj ]bn  
'? ]Yb'; ]Ub[ "' ⇒ X]YgYf'FY[ ]cb'g]bX'?'ca a i bYb' i bX' i bhYfbY\ a Yb  
[ YZcfXYfhž' bYi Y' D'ÀbY'ni 'Ybhk ]W\_Y'b' i bX'U\_hi Y''Y'HfYbXg'ja  
Hci f]ga i g'ni 'Yf\_YbbYb"'8 ]Y'VYY]bXfi W\_YbXY'DfcnYgg]cb'XYf  
GhUhi Y'XYf'@UXm7\ i U'Li 'j ca 'GUa 'A ci bhU]b'n]Y\h'VYfY]hg  
HUi gYbXY'j cb'6Ygi WXYfb'Ubž'k Ug'XUg'hci f]gh]gWXY' ⇒ hYfYggY' i bX  
X]Y' \_i 'hi fY''Y'6YXYi hi b[ 'XYf'; Y[ YbX' i bhYfghfY]W'h"

9]bY'VYgcbXYfY'5 hhfU\_h]cb' ]gh'A i ]'B U] ]b' < U'H]Ybž'k c': fUi '8 c  
H\Ub\ 'Li Ub' i bX' ]\fY': fYi bXY' \_Øfn' ]W'X]Y'BUhi fgW\Òb\Y]hi bX  
X]Y'Ub[ YVchYbYb': fY]nY]hU\_h]j ]h'AhYb'k ]Y'K UggYfgdcfhi bX'F cXY'b  
[ Yb]Y» Yb'\_cbbhYb"'?' ]Yb'; ]Ub[ '\Uh'Y]b' i a ZUb[ fY]WXYg

Hci f]ga i gYbhk ]W\_`i b[ gdfc[ fUa a `Z0f`&\$&) `[ YghUfhYhž`XUg`XYb  
: c\_i g`Ui ZGY!`i bX`ϕgY`hci f]ga i gž`^2 \_chci f]ga i g`i bX  
\_i`hi fY`Yb`Hci f]ga i g`Y[ h`6YfY]hg`]b`XYb`YfghYb`Z0bZ`A cbUhYb  
XYg`ϕ\`fYg`k i fXY`Y]b`5bgh]Y[ `j cb`&\* ž`DfcnYbh]a `J Yf[ `Y]W`ni a  
J cf`U\`f`j YfnY]W`bYhž`a ]h`0VYf`) ž`A ]`]cbYb`Hci f]ghYbž`X]Y`X]Y  
FY[ ]cb`VYgi W`hYb`i bX`; YgUa hY]bbU`a Yb`j cb`0VYf`&` "\$\$\$  
A ]`]UfXYb`J B 8 `[ YbYf]YfhYb"

## 9bhk ]W\_`i b[ `XYf`ϕZfUghfi \_hi f

8]Y`Dfcj ]bn`\Uh`g]W`U\_hj `Ui Z`X]Y`Gca a YfgU]gcb`&\$&)  
j cfVYfY]hYhž`]bXYa `X]Y`hci f]gh]gW`Y`ϕZfUghfi \_hi f`i bX  
8]Ybgh`Y]ghi b[ Yb`j YfVYggYfhk i fXYb" `J YfVYggYfi b[ Yb`]b`XYf  
J Yf`\_Y`fg]bZfUghfi \_hi f`ž`k ]Y`Yhk U`bYi Y`6f0W`Yb`i bX  
GW`bY`ghfU» Yb`]a `A Y`\_cb[ !8Y`hUž`Yf`Y]W`hYfb`XYb`Ni [ Ub[ `ni`XYb  
5hhfU\_h]cbYb`XYf`FY[ ]cb`"7U`A Ui `Uh`YVYbZU`g`]b`XUg  
J Yf`\_Y`fggmghYa `]bj Ygh]Yfhž`i a `Hci f]ghYb`ni `VYggYfYb  
9ffY]W`VUf`\_Y]h]j cb`5hhfU\_h]cbYb`ni `j Yf`Y`ZYb"

C V k c \ `D \ i `E i c W k Y ] h Y f \ ] b `X U g `Z 0 \ f Y b X Y `H c i f ] g h Y b n ] Y ` `V `Y ] V h ž  
k Y f X Y b `U i W `U b X Y f Y `C f h Y `k ] Y `F U W `; ] U ž < U `H ] Y b `i b X `? ] Y b < U ]  
[ Y n ] Y `h [ Y Z 0 f X Y f h ` `ϕ g V Y g c b X Y f Y ` < U `H ] Y b `d f c Z ] h ] Y f h j c b `b Y i Y b  
H c i f Y b `i b X `J Y f V ] b X i b [ Y b `n i `U b X Y f Y b `N ] Y `Y b ž `k A \ f Y b X `X ] Y `G h U X h  
] a `Y f g h Y b `E i U f h U `& \$ & ) `Z U g h , % ) "\$ \$ \$ `6 Y g i W `Y f `j Y f n Y ] W `b Y h Y ] b [ ž  
k c V Y ] `A i ] `B U ] `X U g `V Y `] Y V h Y g h Y `N ] Y `] g h "

## 2 \_c`c [ ]gW`Y`i bX`k ]fhgW`UZh`]W`Y`ϕ]h]Uh]j Y

9]b`VYXYi hYbXYg`5i [ Yba Yf`\_]Y[ h`Ui Z`XYa `?]Yb`; ]Ub[ `K cf`X  
6]cgd`YfY`FYgYfj Yž`XUg`Y]bY`k ]W`h][ Y`F c`Y`Z0f`0\_c`c [ ]gW`Y  
9f`U`hi b[ `i bX`bUW`\U`h][ Y`k ]fhgW`UZh`]W`Y`9bhk ]W\_`i b[ `gd]Y`h`8]Y  
k ]fhgW`UZh`]W`Yb`5\_hj ]h`hYb`]b`X]YgYf`FY[ ]cb`Z0fXYfb`c`\_U`Y  
; Ya Y]bgW`UZhYbž`Yf`U`hYb`bU`0f`]W`Y`K`YfhY`i bX`g]W`Yfb`X]Y  
I a k Y`hei U`]h`h`8 Ug`5b[ YVch]a `Hci f]ga i g`k ]fX`X]j Yfg]Z]n]Yfhž  
Y]bgW`Y»`]W`^2 \_chci f]ga i gž`; Ya Y]bgW`UZhghci f]ga i g`i bX  
I a k Y`hV]`Xi b[ "

8 U f 0 V Y f \ ] b U i g `d `U b h `X ] Y `D f c j ] b n `Y ] b Y `b U W \ U `h [ Y `9 b h k ] W \_ `i b [

j cb'5ei U\_i`hi fl'i bX': ]gWYfY]a cXY`Yb'a ]h'XYa`N]Y`ž  
 l a k Y`hVY`Ughi b[ Yb'ni`fYXi n]YfYb'i bX'X]Y'6]cX]j Yfg]h`h'ni  
 gWØhnYb""9g'k YfXYb'Ui W`5bghfYb[ i b[ Yb'i bhYfbca a Ybž  
 k ]ggYbgWUZh]WY'i bX'hYWb]gWY'9ffi b[ YbgWUZhYb']b'XUg  
 h`[ `]WY`@YVYb'i bX'X]Y'DfcXi`\_]cb'ni`]bhY[ f]YfYbž'i a`X]Y  
 @YVYbgei U]h`h'ni`j YfVYggYfb'i bX'bYi Y'9]b\_ca a Ybgei Y`Yb'ZØf  
 X]Y'; Ya Y]bgWUZh'ni`gWUZZYb"

≠g[ YgUa h'nY][ h'XYf'Hci f]ga i ggY\_hcf']b'?]Yb'; ]Ub[ '[ fc»Yg  
 DchYbn]U`ž]b'XYf'J YfV]bXi b[ 'j cb'k ]fhgWUZh]WYf'5\_h]j ]h`h'i bX  
 BUhi fgW'i hn""9g']gh'Y]bY`\_UfY'GhfUHY[ ]Y`Yf\_YbbVUfž'X]Y'gck c`\`  
 X]Y`l a k Y`h'U'g'Ui W`X]Y`c\_U'Y`K ]fhgWUZh]b'XYb'A ]hh'Y`di b\_h  
 fØW\_hž'k cVY]'X]Y'5bk YfVi b[ 'j cb']b`ÅbX]gWYb'i bX'Ui g`ÅbX]gWYb  
 ≠j Ygh]h]cbYb'[ YZØfXYfh'k ]fXž'i a`X]Y'gcn]cØ\_cbca ]gWY  
 9bhk ]W`i b[ `]b'X]YgYf'FY[ ]cb'k Y]hYf'j cfUbni hfY]VYb"  
 fU ]YhbUa "j bžJ ]YhbUa`5a Un]b[ Ł

8YhU]`g	
C fh	A i ]'BU]ž'?]Yb'; ]Ub[ ž'J ]YhbUa
E i Y`Yb	<ul style="list-style-type: none"> <li>• k k k "j ]YhbUa "j b</li> <li>• j ]YhbUa !Ua Un]b[ "WŁa</li> </ul>

6Ygi WYb'G]Y'i bg'Ui Z.'Y]bY!fY]gY"XY