

Dc`nY]`gi W\ h`NYi [ Yb`bUW\ `8 ]YVghU\ ``]b  
8 fc [ Yf]Ya Uf\_h`]b` < U`Y

8 ]Y`Dc`nY]`< U`Y`gi W\ h`NYi [ Yb`bUW\ `@UXYbX]YVghU\ ``]b  
8 fc [ Yf]Ya Uf\_h`"H\hYf`ghU\`5fh]\_Y``]a`K`Yfh`j`cb`&\*'`'9i`fc`"  
< ]bk`Y]gY`YfVYhYb`°

⇒ < U`Y`fGUU`Y\`Uhg]W\`Y]b`8 ]YVghU\`YfY][`bYhž`XYf`X]Y  
5i`Za`Yf\_gUa`\_Y]h`XYf`Dc`nY]`Ui`Z`g]W\`[`Ync[`Yb`\`Uh`5a`'-`":`YVfi`Uf  
&\$&( ž`[`Y[`Yb`%,`.)`-`I`\`fž`bU\`a`Y]b`i`bVY`\_UbbhYf`H\hYf`]b`Y]bYa  
8 fc [ Yf]Ya Uf\_h`Ub`XYf`@Y]dn][`Yf`GhfU»`Y`&\$`5fh]\_Y``]a`]h`Y]bYa  
;`YgUa`hk`Yfh`j`cb`&\*'`'9i`fc`a`]h`8 ]YgY`HUhgUW\`Y`\`Uh`b]W\`h`bi`f`XYb  
9]bnY`\`Åb`X`Yf`VYhfc`ZYb`ž`gcb`XYfb`nY][`h`Ui`W\`X]Y  
<`YfUi`gZcf`XYfi`b[`Yb`ž`j`cf`XYb`Yb`;`YgW\`Å`ZhY`\`Yi`hni`hU[`Y`ghY`\`Yb`ž  
i`a`]`\`fY`K`UfYb`ni`gW\`Ø`h`n`Yb`"

8 ]Y`HUhYb`ž`X]Y`g]W\`]b`gh`Å`Xh]gW\`Yb`9]b`\_Ui`ZgnYb`hfYb`UVgd]Y`Yb`ž  
g]b`X`c`Zha`U`g`XUg`F`Ygi`h`Uh`Y]b`Yg`[`fO»`YfYb`HfYb`Xgž`XYf`Ub`j`]Y`Yb  
GhUb`Xcf`hYb`ni`VYc`VUW\`hYb`]gh";`YgW\`Å`ZhY`gY`\`Yb`g]W\`ni`bY`\`a`Yb`X  
a`]h`XYf`Dfc`V`Ya`Uh]\_j`cb`@UXYbX]YVgh`Å`\`Yb`\_cb`Zfc`bh]Yf`hž`X]Y`b]W\`h  
bi`f`Z]b`Ub`n]Y``Y`G\`Å`X`Yb`j`Yfi`fgUW\`Yb`ž`gcb`XYfb`Ui`W\`XUg  
G]W\`Yf`\`Y]hgYa`dZ]b`XYb`XYf`?`i`b`XgW\`U`Zhi`b`X`A`]hUfVY]hYf  
VYY]b`hf`Å`W\`h][`Yb`\_`Ø`bb`Yb`"

8 ]Y`9fa`]hh`i`b[`Yb`i`b`X`X]Y`6YXYi`hi`b[`j`cb  
J`]XYc`Ø`VYfk`UW\`i`b[

⇒ `Ni`[`Y`XYf`9fa`]hh`i`b[`Yb`\_`cbb`h`Y`X]Y`Dc`nY]`Y]b`6]`X`XYg  
a`i`ha`U»`]W\`Yb`H\hYfg`Ui`g`XYf`J`]XYc`Ø`VYfk`UW\`i`b[`XYg  
8 fc [ Yf]Ya Uf\_hYg`g]W\`Yfb`"Gc`W\`Y`,`VYfk`UW\`i`b[`ggmghYa`Y`\`UVYb  
g]W\`U`g`Yb`hgW\`Y]XYb`X`Yfk`]YgYb`ž`i`a`X]Y`⇒`Yb`h]h`Å`h`j`cb  
J`Yf`X`Å`W\`h][`Yb`ni`Y`fa`]hh`Y`b`i`b`X`\`Y`ZYb`c`Zhi`XUVY]ž`8 ]YVgh`Å`\`Y

Ui Zni \_`ÄfYb"8 Ug'5a hg[ Yf]W h' < U`Y`fGUU`YŁ[ UV`XUfUi Z ]b`XYb  
6YgW`i gg'ni f`J YfÖZZYbh]W i b[ `XYg', VYfk UW i b[ gZchcgž'i a `X]Y  
7\UbW`b`ni `Yf\Ö\Ybž`XUgg`NYi [ Yb`g]W `a Y`XYb`i bX`< ]bk Y]gY  
[ YVYb"

8 ]Y`Dc`nY]\ Uh'5i Zfi ZY` ]b`XYb`gcn]U`Yb`A YX]Yb`j YfÖZZYbh]W h'i bX  
X]Y`² ZZYbh]W \_Y]h'i a `A ]h\`ZY` [ YVYhYb"8 ]Y`6YUa hYb`Yf`cZZYb  
g]W ž`Xi fW` < ]bk Y]gY`ni f`X`Ybh]hÄ`h`cXYf`ni a `5i ZYbh`U`hgcfh`XYg  
HÄ`hYfg`bYi Y`9f`\_Yb`hb]ggY`ni ` [ Yk ]b`bYb" DYfgcbYbž`X]Y`Yhk Ug  
[ YgY\Yb`cXYf` [ Y\Öfh\UVYbž`k YfXYb` [ YVYhYbž`g]W `i bhYf`XYf  
HY`YZcbbi a a Yf`f\$' ( ) Ł`&&( `&\$ \$\$`VY]`XYf`Dc`nY]`ni `a Y`XYb"  
8 ]YgY`5fh`XYf`Ni gUa` a YbUfVY]h`nk ]gW`Yb`XYf`Dc`nY]`i bX`XYf  
; Ya Y]bgW`UZh`]gh`j cb` [ fc» Yf`6YXYi hi b[ `i bX`\_Ub`b`Yb`hgW`Y]XYbX  
XUni `VY]hfU[ Ybž`GhfUZhUhYb`Ui Zni \_`ÄfYb"

8 Ug`DfcV`Ya `XYg`@UXYbX]YVghU\`g`]gh`b]W h`bi f`Y]b`c`\_U`Yg  
D\Äbca`Yb`]b` < U`Y`fGUU`YŁž`gcbXYfb`Ui W`Y]b`H\Ya`Už`XUg`]b  
j ]Y`Yb`GhÄ`hYb`X]g`\_i h]Yfh`k ]fX"8 ]Y` ; fØbXY`ZØf`gc`W`Y`HUhYb`g]bX  
j ]Y`ZÄ`h][ `i bX`fY]W`Yb`j cb`k ]fhgW`UZh]W`Yb`G`W`k ]Yf][ \_Y]hYb`V]g  
\b`ni `ja`di`g]j Ya`J`Yf\U`hYb"9g`]gh`k ]W`h][ `ni`j`YfghY\Ybž`XUgg  
`YXY`GhfUZhUh`b]W`h`bi f`↑`f]gh]gW`Y`?`cbgYei`YbnYb`bUW`g]W`n]Y\hž  
gcbXYfb`Ui W`a`YbgW`]W`Yg`@Y]X`i bX`5i`gk ]f`\_i b[ Yb`Ui`ZX]Y  
; Ya`Y]bgW`UZh`\Uh"

I a`gc`W`Y`J`cfZÄ`Y`ni`a`]b]a`]YfYbž`gYhmYb`j ]Y`Y`9]bnY`\ÄbX`Yf`Ui`Z  
j`YfgW`]YXYbY`A`U»`bU\`a`Ybž`XUfi`bhYf`j`YfVYggYfhY  
G]W`Yf\Y]hghY`W`bc`c` [ ]Yb`i`bX`G`W`i`i`b[ ]Yb`ZØf`A`]hUfVY]hYf`a  
I a` [ Ub[ `a`]h`J`YfXUW`hgZÄ`Yb"8 ]Y`GYbg]V`]g]Yfi`b[ `XYf  
²`ZZYbh]W`\_Y]h]gh`YVYbZU`g`Y]b`Yb`hgW`Y]XYbXYf` : U`\_hcfž`i`a`Y]bY  
\Ö\YfY`K`UW`gUa`\_Y]h`ni`YffY]W`Yb`i`bX`ni`f`DfÄ`j`Ybh]cb  
VY]ni`hfU[ Yb"

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