

A YggYfUb [ f]ZZ' ]b '5`hYbghUXh. 'HfU[ ]gWk Yg  
9bXY`Y]bYg`'i b [ Yb`@YVYbg

⇒a`K YhhYfUi \_fY]g`ghUfV`Y]bY`%- !>A\ f][ Y`Ub  
A YggYfj Yf`Yhni b [ Yb" `8Yf`a i ha U» `]WkY`HÄhYf`VY [ ]b [ `Gi`n]X"  
8YhU]`g`i bX`< ]bhYf[ fØbXY"

⇒a`K YhhYfUi \_fY]gž [ YbUi Yf` [ YgU [ hi]b `5`hYbghUXhž` \Uh`Y]b  
hfU [ ]gWkYf`J cfZU` `XUg` `c\_U`Y`I a ZY`X`YfgWkØhYfh"9]bY`%- !>A\ f][ Y  
: fUi`j Yf`cf` ]\f`@YVYb`bUWk`Y]bYa`A YggYfUb [ f]ZZ" `8 ]YgY  
gWk cW\_]YfYbXY`HUh`k ]fZi`b]Wk`h`bi f` : fU [ Yb`ni`f`G]WkYf\Y]h`i]b`XYf  
; Ya`Y]bXY`Ui Z`gcbXYfb`Ui Wk`ØVYf`X]Y`6Yn]Y\ i b [ Yb`i]bbYf\U`V  
XYg`I a ZY`Xg`XYf`6YhY` ]][ hYb"

8 Yf`hØX` ]WkY`J cfZU` `

8]Y`HØhi b [ `XYf`'f b [ Yb`i : fUi` [ YgWkU\` ]b` ]\fYf`K c\bi b [ ž`k`c`g]Y  
`Ui`h`GhUUhgUbk U`hgWkUZh` ; ]Y» Yb`Ub`XYb` : c` [ Yb`XYf`J Yf`Yhni b [ Yb  
j YfghUfV" `8Yf`a i ha U» `]WkY`HÄhYfž`Y]b`" ` !>A\ f][ Yf`A Ubbž`k i fXY  
bUWk`XYa`5b [ f]ZZ' ]b`gY]bYf`K c\bi b [ `]b`A ØbnYbVYf [ `hch  
Ui Z [ YZ] bXYb" `8]Y`C`VXi \_h]cb`Yf [ UVž`XUgg`Yf`Gi`n]X`VY [ Ub [ Yb  
\UhY" `8]Yg`j YfghÄf`\_h`X]Y`HfU [ ]\_`XYg`J cfZU` `gž`XU`Yf`b]Wk`h`bi f`XUg  
@YVYb`XYf`%- !>A\ f][ Yb`ZcfXYfhYž`gcbXYfb`Ui Wk`ni`XYa`HcX`XYg  
HÄhYfg`ZØ\fhY"

I a ZY`X`i bX`a Ø [ ` ]WkY`6Yn]Y\ i b [ Yb

8Yf`6Yf]Wk`h`XYf`~6]`X" !NY]hi b [ `Äggh`j Yfa i hYbž`XUgg`Yg`nk ]gWkYb  
XYa`HÄhYf`i bX`XYa`C`dZYf`Y]b`Y]bj YfbY\ a ` ]WkYg`J Yf`Ä`hb]g` [ UV"  
8]Y`f`b [ Y` : fUi`k Uf`ni a`NY]hdi b`\_h`]\fYg`HcXYg`5V]hi f]Ybh]b`i bX  
VYgi Wk`hY`X]Y`GWk`i`Yž`Ub`XYf`XYf`HÄhYf`i bhYff]Wk`hYhY" `Gc`WkY  
6Yn]Y\ i b [ Yb`nk ]gWkYb`GWk`Ø`Yfb`i bX`@Y\ fYfb`g]bX`i]b`XYf

; YgY`gW UZh`Äi Z[ `Y]b`H\Ya UžXU`g]Y`Yh\]gWY : fU[ Yb`Ui Zk YfZYb  
i bX`dchYbn]Y``[ YZÄ`f`]W`gY]b`\_ÖbbYb``8]Y`GhUUhgUbK U`hgW UZh  
ghY`hY`]b`X]YgYa`Ni gUa`a Yb\Ub[ `ZYghž`XUgg`g]Y`ni a`U`hi Y`Yb  
GhUbX`\_Y]bY`k Y]hYfYb`ϕZcfa Uh]cbYb`ØVYf`X]Y`[ YbUi Yb`l a ghÄbXY  
]\fYf`6Yn]Y\i b[ `a`]hY]`Yb`\_Ubb"

## 8]Y`5i gk ]f\_ i b[ Yb`Ui Z`X]Y` ; Ya Y]bgW UZh

Gc`WY`hfU[ ]gWYb`J cfZÄ`Y`UVYb`b]W`h`bi f`5i gk ]f\_ i b[ Yb`Ui Z`X]Y  
X]fY`\_h`VYhY`]] [ hYb`DYfgcbYbž`gcbXYfb`\]bhYf`UggYb`Ui W`h]YZY  
Gdi fYb`]b`XYf` ; Ya Y]bgW UZh`8]Y`VYgc f[ hYb`6Øf[ Yf`j cb  
5`hYbghUXh`ZfU[ Yb`g]W`ž`k Y`WY`A U» bU\`a Yb`Yf[ f]ZZYb`k YfXYb  
\_ÖbbYbž`i a`X]Y`G]W`Yf\Y]h`ni`Yf\Ö\Yb`i bX`Ä`b`]W`Y`HfU[ ÖX]Yb`]b  
Ni`\_i bZh`ni`j Yf\]bXYfb``9g`]gh`i bYf`Ägg`]W`ž`XUgg`]b` ; Ya Y]bXYb  
\_`UfY`Ghfi`\_hi fYb`ni`f`l bhYfghØhni b[ `j`cb`[ YZÄ`fXYhYb`DYfgcbYb  
VYghY\Yb`i bX`XUgg`VY]a`5i ZhfYhYb`j`cb`?`cbZ`\_hYb`ZfØ`nY]h][`<`]Z  
]b`5bgdfi W`[ Ybca`a Yb`k`]fX"

## < ]`ZY`i bX`l bhYfghØhni b[

6YgcbXYfg`]b`gc`W`VY`UghYbXYb`G]hi Uh]cbYb`V]YhYh`X]Y  
HY`YZcbgYY`gcf[ Y`l bhYfghØhni b[ `Ub``8]Y`Ubc bma Yb  
6YfUhi b[ gbi`a`a Yfb`\$, \$\$`#`%`%`\$`%`%`i bX`\$, \$\$`#`%`%`\$`&&&`g]bX  
fi bX`i`a`X]Y`l`f`YffY]W`VUf``8]YgY`8]YbghY`g]bX`Y]bY`k ]W`h][ Y  
F Yggci fW`ZØf`A YbgW`Ybž`X]Y`gi ]n]XU`Y` ; YXUb`\_Yb`\UVYb`cXYf  
g]W`\`]Zcg`ZØ\`Yb`i bX`Y]bY`5b`Ui ZghY`Y`VYb`Øh][ Yb"

8Yf`hfU[ ]gWY`J cfZU`ž`XYf`XUg`@YVYb`Y]bYf`↑ b[ Yb` : fUi`]b  
5`hYbghUXh`ZcfXYfhYž`]gh`Y]b`U`Ufa`]YfYbXYg`NY]W`Yb`ZØf`X]Y  
B`chk`YbX][`\_Y]h]j`cb`l bhYfghØhni b[ ggmg]Ya`Yb`]b  
6]Xi b[ gY]bf]W`hi b[ Yb`i bX`XUfØVYf`\]bUi`g``8]Y`9fgW`ØhYfi b[`]b  
XYf` ; Ya Y]bXY`nY][`hž`XUgg`XUg`H\Ya U`dgmW`]gWY` ; Ygi bX\Y]h  
i bX`nk ]gW`Yba`YbgW`]W`Y`6Yn]Y\i b[ Yb`j`cb`[ fc» Yf`6YXYi hi b[  
]gh"

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