

: f]YX`UbX. ' &, !>À\ f][ Yf`c\ bY': Ø\ fYfgW\ Y]b  
a ]h' ž+%Dfca ]`Y`[ Yghcddh

9]b`&, !>À\ f][ YfžVYhfi b\_Yb`a ]h' ž+%Dfca ]`YžVY`Y]X][ hY  
Dc`n]ghYb`bUW\ `?cbhfc`Y`]b': f]YX`UbX" >hnhXfc\Yb`a Y\ fYfY  
5bnY][ Yb"

9]b`J c fZU`XYf`VYgcbXYfYb`5fh`YfY][ bYhY`g]W\ `Ua  
: fY]hU[ bUW\ a ]hhU[ `]b': f]YX`UbXž`U`g`X]Y`Dc`nY]`Y]bYb`5i hcZU\ fYf  
a ]h`Ui ZÄ`][ Yf': U\fk Y]gY`Ui g`XYa `J Yf\_Y\`f`n]Y\Yb`a i gghY" I a  
%( " \$`I \`f`Yf\]Y`hYb`X]Y`6YUa hYb`XYb`<]bk Y]g`Ui ZXUg': U\fnYi [ ž  
XUg`Xi fW\ `i b\_cbnYbhf]YfhYg': U\ fYb`Ui Z]Y`"GcZcfh`a UW\ hYb`g]W\  
X]Y`Dc`n]ghYb`Ui ZXYb`K Y[ ži a `X]Y`G]hi Uh]cb`ni ` \_`ÄfYb"

5`g`X]Y`Dc`nY]`XUg`5i hc`gW\`Y]»`]W\`ghcddYb`\_cbbhYž`nY][ hY`g]W\  
gW\ bY`ž`XUgg`XYf': U\ fYfž`Y]b`&, !>À\ f][ Yf`A Ubbž`]b`Y]bYa  
VYgcf[ b]gYffY[ YbXYb`Ni ghUbX`k Uf"8]Y`?cbhfc`Y`cZYbVUfhYž  
XUgg`XYf': U\ fYf`Y]bY`Yi hfYa ` \c\Y`6`i hU`\_c\c`\_cbnYbhfUh]cb`j cb  
' ž+%Dfca ]`Y`UhhY"Ni a `VYggYfYb`J Yfgh`AbXb]g`XYf`NU\`Yb. 9]b  
K Yfh]j cb`\$ž) `Dfca ]`Y`[ ]`h`VYfY]hg`U`g`[ fYbnk Yfh][ ži bX`UV`%ž%  
Dfca ]`Y`]gh`XYf': Ø\ fYfgW\ Y]b`gcZcfh]b'; YZU\ f"8Yf'; fi bX`ZØf`X]Y  
ghfYb[ Yb`J c f gW\ f]ZhYb`ni `5`\_c\c`Ua `GhYi Yf`]gh`X]Y`Yf\`Ø\`hY  
; YZU\ f`j cb`I bZÄ`Yb`i bX`X]Y`XUa ]h] YfVi bXYbYb`F]g]\_Yb`ZØf  
UbXYfY`J Yf\_Y\`fghY]`bY\`a Yf"

## F YW\ hg`U[ Y`i bX`? cbgYei YbnYb

B YVYb`XYa ` \c\Yb`5`\_c\c`dY[ Y`ghY`hY`g]W\ `Ui W\ `YfUi gž`XUgg  
XYf`A Ubb`\_Y]bYb': Ø\ fYfgW\ Y]b`VYgU» "8]YgY`?ca V]bUh]cb`]gh  
b]W\ h`bi f[ YZÄ\`f]W\ ž`gcbXYfb`ZØ\`fh`Ui W\ `ni `gW\ k Yfk ]Y[ YbXYb  
fYW\ h]W\ Yb`?cbgYei YbnYb"8]Y`Dc`nY]`YfghY`hY`Y]b  
GhfUž] YfZU\ fYb`k Y[ Yb`Hfi b\_Yb\`Y]h]a `J Yf\_Y\`f`gck ]Y`k Y[ Yb

: U\fybg'c\vbY: U\fyf'Ui Vb]g"8 Ug; YgYhn'g]Y\h'ZØf'gc`WXY  
J Yf[ Y\Yb'Ya dZ]bX`]WXY'GhfUZYb'j cfžX]Y'j cb'; Y`XghfUZYb`V]g`\]b  
ni': fY]\Y]hgghfUZYb'fY]WXYb`\_ÖbbYb"

8cW`XUg`]gh'bcW`b]W`h'U`Yg.`K`Ä`fYbX`XYf'?cbhfc`Y`\_Ua`Yg'ni  
Y]bYa`k`Y]hYfYb`J`cfZU`""8Yf'6Yhfi`b`\_YbY`VY[`UbbžX]Y`6YUa`hYb  
j`YfVU`ni`VY`Y]X][`Yb`i`bX`nY][`hY`g]W`Äi`»Yfgh`U[`[`fYgg]j`]b`gY]bYa  
J`Yf\`U`hYb""8]Yg`ZØ\`fhY`ni`Y]bYf`k`Y]hYfYb`5bnY][`Y`k`Y[`Yb  
6Y`Y]X][`i`b[`X`Yf`Dc`]nY]VYUa`hYb""Gc`WXY`J`Yf\`U`hYb`gk`Y]gYb  
i`bhYfghfY]WXYb`X]Y`G`W`k`Y]f][`\_Y]hYbžX]Y`X]Y`Dc`]nY]`c`Zi`\`Uhž`k`Yb`b  
g]Y`]b`gc`WXYb':`Ä`Yb`]bhYfj`Yb]Yfh"

8Yf`J`cfZU`""]b':`f]YX`UbX`]gh`Y]b`k`Y]hYfYg`6Y]gd]Y`ZØf`XUg`DfcV`Ya  
XYg':`U\fybg'i`bhYf`5`\_c\c`""9g]YfXYi`h]W`h`b]W`h`bi`f`X]Y  
;`YZU\`fYbžX]Y`j`cb`U`\_c\c`]g]YfhYb':`U\fyfb`Ui`g[`Y\Ybž`gcbXYfb  
Ui`W`X`Yb`Xf]b[`YbXYb`6YXUfZ`Ub`a`Y`f`5i`Za`Yf`\_gUa`\_Y]h`ZØf`X]Y  
H\Ya`Uh]\_"8]Y`Dc`]nY]`ZØ\`fh`fY[`Y`a`Ä`][`[`?`cbhfc`Y`b`Xi`f`W`ž`i`a  
gc`WXY`J`Yf`\_Y`f`gg`ØbXYf`Ui`Zni`XYW`\_Yb`i`bX`ni`VYghfUZYbž`i`a  
`Y`nh]W`X]Y`G]WXYf\Y]h`Ui`ZXYb`GhfU`»Yb`ni`[`Yk`Ä`f`Y]ghYb"

Ni`g`Ä`hn`]W`\_`ÖbbhY`X]YgYf`J`cfZU`""Ui`W`ni`Y]bYf`VfY]hYfYb  
8]g`\_i`gg]cb`ØVYf`X]Y`6YXYi`hi`b[`X`Yf`J`Yf`\_Y`f`gg]WXYf\Y]hi`bX`XYf  
:`c`[`Yb`j`cb`5`\_c\c`\_cbgi`a`i]a`GhfU`»Ybj`Yf`\_Y`f`Ub`fY[`Yb`""9g`k`]fX  
]a`a`Yf`k`]YXYf`XUfUi`Z`]b[`Yk`]YgYbž`XUgg`YXYf`Y]bnY`bY`gY]bYb  
6Y]hfU[`Y]ghYb`\_Ubbž`i`a`gc`WXY`[`Y`Z`Ä`f`]WXYb`G]hi`Uh]cbYb`ni  
j`Yfa`Y]XYb":`Øf`X]Y;`YgY`g`W`U`Zi]gh`Y`g`k`]W`h][`ž`X]YgY  
G`W`UXYbgnU`Yb`ni`VYhfU`W`hYb`i`bX`ni`j`YfghY\Ybž`XUgg`YXY  
Gh]a`a`Y`n`Ä`\`hž`i`a`XUg`6Yk`i`gg`hY]b`ZØf`X]YgYg`Yfb`gh`U`ZiY`DfcV`Ya  
ni`g`W`Ä`f`ZYb"

## 9]bY`k`]W`h][`Y`@Y`\_h]cb

8Yf`J`cfZU`""]b':`f]YX`UbX`nY][`h`b]W`h`bi`f`X]Y`F`]g]\_Yb`XYg':`U\fybg  
i`bhYf`5`\_c\c`Y]bZi`gg]Ui`Zž`gcbXYfb`X]Yb`hi`Ui`W`U`g`K`Ufbi`b[`ZØf  
U`Y`J`Yf`\_Y`f`ghY]`bY`a`Yf`""9g]gh]a`a`Yf`Y]bY`J`Yf`Ub`hk`cf`hi`b[`ž`X]Y  
YXYf`ZØf`g]W`gY`VYf`i`bX`Ui`W`[`Y[`Yb`ØVYf`UbXYfYb`\`Uh`""9]b`XYfUfh  
\c\Yg`A`U`»`Ub`5`\_c\c`i]a`6`i`h`nYi`[`h]j`cb`Y]bYa  
g`W`k`Yfk`Y][`YbXYb`A`]gg]Yfgh`Ä`b`X`b]g]b`6Yni`[`Ui`Z`G]WXYf\Y]hi`b`X

J YfUbhk cfhi b[ 'ja 'GhfU» Ybj Yf\_Y\ f" 8 ]Y': c` [ Yb' \_ÖbbYb' b]W h'bi f  
XUg' @YVYb' XYg': U\ fYfgž' gcbXYfb' Ui W' XUg' j cb' l bVYhY'] [ hYb  
[ YZ\ fXYb"

## 8 ]Y' fYW h' ]W Yb': c` [ Yb' j cb' 5` \_c\ c` Ua GhYi Yf

: U\ fYb' i bhYf' 5` \_c\ c` Y] bZi gg' ]gh' Y] bY' gW k Yfk ]Y [ YbXY  
CfXbi b[ gk ]Xf] [ \_Y] h' i bX' \_Ubb' 'Y' bUW' 'GW k YfY' XYg' J Yf [ Y\ Ybg  
i bX' Dfca ]` Y [ fYbnY' Yf\ YV' ]W Y' fYW h' ]W Y' ? cbgYei YbnYb' bUW  
g]W 'n] Y\ Yb" " ð' 8 Yi hgW' 'UbX' ]gh' X] Y'; fYbnY' j cb' \$ž) 'Dfca ]` Y' X] Y  
[ YgYhn' ]W Y'; fYbnY' ZØf' 5i hcZU\ fYf" '5V' X] YgYa' 'K Yfh' \_Ubb' Yg' ni  
6i » [ Y' XYfbž' Di b\_ hYb' ]b': 'YbgVi f [ i bX' gc [ Uf' Y] bYa' : U\ fj YfVch  
\_ca a Yb" '6Y] 'K YfhYb' ØVYf' %ž% Dfca ]` Y [ ] h' XYf': U\ fYf' U' g' UVgc' i h  
ZU\ fi bhØW h] [ ž' k Ug' ghfUZfYW h' ]W Y' ? cbgYei YbnYb' bUW' g]W  
n] Y\ Yb' \_Ubb' i bX' cZh' ]b' GhfUž] YfZU\ fYb' YbXYh"

⇒ a' XUf [ YghY' hYb': U' j cb': f] YX' UbX' ghY' hY' XYf': U\ fYf' a ]h' ž+ %  
Dfca ]` Y' Y] bYb' YI hfYa Yb' K Yfh' ZYgh' '8 ]Yg' ZØ\ fh' b] W h' bi f' ni 'Y] bYa  
gcZcfh] [ Yb' J Yf' i gh' XYg': Ø\ ffYW hgž' gcbXYfb' Ui W' ni 'Y] bYa  
GhfUž] YfZU\ fYbž' XUg'; Y' XghfUZYb' i bX' a Ø [ ' ]W Yfk Y] gY' < UZhghfUZYb  
bUW' g]W 'n] Y\ Yb' \_Ubb"

## 6Y' Y]X] [ i b [ ' j cb' Dc` ]nY] VYUa hYb

8 ]Y' 5bnY] [ Y' k Y [ Yb' 6Y' Y]X] [ i b [ ' ]gh' Y] bY' k Y] hYfY' gW k Yfk ]Y [ YbXY  
5b\_ U [ Yž' X] Y' XYf': U\ fYf' Yf\ Å' h' '6Y' Y]X] [ i b [ Yb' [ Y [ YbØVYf  
Dc' ]nY] VYUa hYb' g] bX' ghfUZfYW h' ]W Y' b] W h' ni' i bhYfgW ÅhnYb' i bX  
\_ÖbbYb' YVYbZU' g' a ]h'; Y' XghfUZYb' cXYf' gc [ Uf' < UZhghfUZYb  
[ YU\ bXYh' k YfXYb" " ð' XYf' F YW hgd fYW i b [ ' k ]fX' cZh' nk ]gW Yb  
' Y] W h' bi bX' gW k YfYb' 6Y' Y]X] [ i b [ Yb' i bhYfgW ]YXYbž' k cVY]  
gW k YfYfY': Å' Y' k ]Y' HÅh' ]W \_Y] hYb' i bhYf' l a ghÅbXYb' \ ÅfhYf  
VYghfUZh' k YfXYb"

8 ]Y' ?ca V] bUh] cb' Ui g' Hfi b\_ Yb\ Y] h' Ua' GhYi Yf' i bX' XYf' 6Y' Y]X] [ i b [ ' j  
cb' 6YUa hYb' nY] [ hini XYa' X] Y' dchYbn] Y' Y'; YZU\ fž' X] Y' j cb  
j YfUbhk cfhi b [ g' cgYa' J Yf\ U' hYb' ]a' GhfU» Ybj Yf\_Y\ f' Ui g [ Y\ h'  
Gc' W Y' J cfZÅ' Y' \_ÖbbYb' b] W h' bi f' ni' dYfgØb' ]W Yb' ? cbgYei YbnYb

Z0f`XYb`HÀhYf`Z0\ fYbž`gcbXYfb`Ui W`X]Y`G]WYf\Y]h`UbXYfYf  
JYf\_Y\ fghY]`bY\ a Yf`[ YZÀ\ fXYb"

DfÀj Ybh]c bga U» bU\ a Yb`i bX`5i ZZÀ``][ \_Y]hYb  
]a `GhfU» Ybj Yf\_Y\ f

8Yf`J cfZU``]b`: f]YX`UbX`k ]fZh`: fU[ Yb`ni f`J Yf\_Y\ fgg]WYf\Y]h`i bX  
ni `DfÀj Ybh]c bga U» bU\ a Yb`Ui Z`8 ]Y`Dc`]nY]`fÀh`XUni ž  
U`\_c\c`]g]YfhYb`: U\ fg]hi Uh]cbYb`U\_h]j `Ybh[ Y[ Ybni k ]f\_Yb"  
?Ua dU[ bYb`k ]Y` F i bhYf`j ca `; Ug `cXYf`gdYn]Y``Y  
?cbhfc``U\_h]cbYb`gc``Yb`j YfghÀf`\_h`gYbg]V`]g]YfYb`i bX  
: Y\`j Yf\ U`hYb`Ubd fUb[ Yfb`` ð`XYb``YmhYb`đ\ fYb`\ Uh`X]Y`Dc`]nY]  
Ui W`j YfghÀf`\_h`Ui Z`X]Y`?cbhfc``Y`j cb`: U\ fYb`i bhYf  
5`\_c\c`Y]bZi gg`fYU[ ]Yfhž`i a `X]Y`J Yf\_Y\ fgg]WYf\Y]h`ni `Yf\ 0\Yb"

GhUh]gh]\_Yb`nY][ Ybž`XUgg`nU\`fY]WY`J Yf\_Y\ fgi bZÀ``Yž  
JYf`Yhni b[ Yb`i bX`HcXYgZÀ``Y`Ui Z`XUg`: U\ fYb`i bhYf  
5`\_c\c`Y]bZi gg`ni f0W`ni Z0\ fYb`g]bX" `a `đ\ f`&\$&%[ UV`Yg`]b  
8Yi hgW`UbX``Ui h`XYf`GhUh]gh]gWYb`6i bXYgUa h`0VYf`&, "\$\$\$  
fY[ ]ghf]YfhY`i bZÀ``Y`i bhYf`5`\_c\c`Y]bZi ggž`k cVY]`fi bX`' ++  
A YbgWYb`XUVY]`i a g`@YVYb`\_Ua Yb``8 ]YgY`NU\`Yb`j YfXYi h]WYb  
X]Y`8f]b[ `]W\_Y]hž`a ]h`XYf`Y]bY`F`YXi n]Yfi b[ `U`\_c\c`VYX]b[ hYf  
JYf\_Y\ fgi bZÀ``Y`Ub[ Y[ Ub[ Yb`k YfXYb`a i gg"

8YhU]`g

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