

Dc`h]gW\Y`9fgW\ØhhYfi b[ Yb. `GUW\gYb  
i bX`H\Øf]b[ Yb`ghY\Yb`j cf`BYi UbZUb[

B UW\`XYb`@UbXhU[ gk U\`Yb`]b`GUW\gYb`i bX`H\Øf]b[ Yb  
nY]W\`bYh`g]W\`Y]bY`i bg]W\`YfY`dc`h]gW\Y`@U[ Y`UV`"K`Y`W\Y  
@Y\`fYb`Yf[ YVYb`g]W\3

9fZ fh#8 fYgXYb#6Yf`]b`fXdUk` `8]Y`Øb[ ghYb`@UbXhU[ gk U\`Yb`]b  
GUW\gYb`i bX`H\Øf]b[ Yb`\UVYb`ZØf`5i ZgY\Yb`[ Ygcf[ hi bX`k YfZYb  
: fU[ Yb`ØVYf`X]Y`\_ØbZh[ Y`dc`h]gW\Y`5i gf]W\`hi b[ `]b`X]YgYb  
6i bXYg`ÀbXYfb`Ui Z`K`À\`fYbX`X]Y`5a dY`!`?cU`h]cb`]b`6Yf`]b`g]W\  
g]W\`h]W\`i a`GhUV`]h`Àh`VYa Ø\hž`ghY\Yb`X]Y`DUfhY]Yb`j cf`Y]bYf  
BYi cfXbi b[ ž`X]Y`a`Ò[ `]W\`Yfk`Y]gY`[ fi bX`Y[ YbXY`J`Yf`ÀbXYfi b[ Yb  
a`h]g]W\`Vf]b[ h`

8]Y`78I`g]Y\`h]g]W\`]b`Y]bYf`gW\`k`]Yf][ Yb`@U[ Y`"G]Y`gW\`cgg`Y]bY  
?ccdYfUh]cb`a`h]XYf`@]b`gdUfhY`]cXYf`XYf`5Z8`\_UhY[ cf]gW\`Ui`gž  
k Ug`g]Y`[ Ynk`i b[ Yb`\Uhž`ØVYf`bYi`Y`A`Ò[ `]W\`\_Y]hYb`bUW\`ni`XYb`\_Yb`"  
@UggYb`g]W\`i bhYf`XYb`[ Y[ Ybk`Àfh][ Yb`6YX]b[ i b[ Yb`ghUV`]Y  
A`Y\`f\`Y]hYb`V`]XYb`ž`cXYf`Xfc`h`XYf`Gh`]ghUbX3`C`j`Yf`@Ya`VW`\_Yž  
Dc`h]\_k`]ggYbgW\`UZh`Yfž`k`Ufbh`XUj`cfž`XUgg`X]Y`78I``bi`b  
a`Ò[ `]W\`Yfk`Y]gY`Ui`Z`X]Y`@]b`gdUfhY`]ni`[ Y\`Yb`a`ØgghYž`k`Ug`X]Y  
8]g`\_i`gg]cb`i`a`X]Y`gc[ YbUbbhY`6fUbXa`Ui`Yf`ni`f`5Z8`bYi  
YbhZUW\`Yb`\_ØbbhY`"8]Y`5a`dY`!`?cU`h]cb`VY`\_Ua`VY`]XYb`K`U\`Yb  
\`YZh[ Yb`;`Y[ Ybk`]bX`i`bX`VYf]W\`hYh`j`cb`Y]bYa`9]bVfi`W\`XYf  
K`À\`Yf[ i`bgh`

8]Y`dc`h]gW\Y`5b`\_`U[ Y`XYf`K`À\`Yf`

9]b`Yb`hgW\Y]XYbXYf` : U`\_hc`f`]gh`XUg`9fghUf`\_Yb`XYf`5Z8`"A`h`ØVYf`" \$  
DfcnYbh]b`GUW\gYb`i bX`D`Uhn`Y]bg`]b`H\Øf]b[ Yb`nY][ h`X]Y`DUfhY]ž  
XUgg`g]Y`U`g`Yfbg`hni`bY\`a`YbXYf`dc`h]gW\Yf`5`\_hY`i`f`

k U\ f[ Ybca a Yb`k ]fX" `8 UVY]`VYUbgdfi W\ h`g]Y`Z0f`g]W\ ž`X]Y  
Gh]a a Y`XYf`K`À\`YfgW\ UZh`ni`fYdf`ĀgYbh]YfYbž`X]Y`[ Y[ Yb`Y]bY`U`g  
UV[ Y\cVYb`Ya`dZi`bXYbY`Dc`]h]\_`XYf`YhUV`YfhYb`DUfhY]Yb  
dfchYgh]Yfh" `5Z8!7\YZ`6`0fb`<`0W\_Y`Uf[ i a Ybh]Yfhž`XUgg`\_Y]bY  
ghUV]Y`FY[ ]Yfi b[ `]a`@UbX`c`\bY`X]Y`9]bV]bXi b[ `gY]bYf`DUfhY]  
a`0[ `]W\`gY]"`8]Yg`\_0bbhY`VYXYi`hYbž`XUgg`X]Y`5Z8`ž`ni`a`]bXYgh]b  
H\0f]b[ Ybž`Y]b`gc`[ YbUbbhYg`GdYffa`]bcf]h`ĀhfYW\ h`bi`hnh" `5i`Z`X]YgY  
K`Y]gY`\_0bbhY`X]Y`DUfhY]`k`]W\`h[ Y`9bhgW\ Y]Xi b[ Yb`j`Yf\`]bXYfbž  
ZU`g`Y]bY`Nk`Y]!8f]hY`!A`Y\`f\`Y]h`VYb`0h][`h`k`]fX`ž`k`]Y`Yhk`U`X]Y`K`U\  
j`cb`J`YfZUggi`b[`gf]W\`hYfb"

ϕXYg`]gh`XYf`Dc`di`]ga`i`gž`Y]bY`dc`]h]gW\ Y`GhfUhY[ ]Yž`X]Y`c`Zh  
Y]bZUW\`j`Yfgh`ĀbX`]W\ Y`i`bX`Ya`ch]cbU`Y`6`chgW\ UZhYb`j`Yfa`]hhY`hž`]b  
VY]XYb`@ĀbXYfb`Ui`Z[ YV`0\`h" `8]YgY`GhfUhY[ ]Yb`\_0bbhYb`U`g  
J`Yfgi`W\`[ YXYi`hYh`k`YfXYbž`b`Ā\`Yf`Ua`\_J`c`\_Y`ni`gY]bž`Ui`W\`k`Ybb  
g]Y`]b`XYf`dc`]h]gW\ Yb`8]g`\_i`gg]cb`c`Zh`\_f]h]g]Yfh`k`YfXYb"  
A`]b]ghYfd`f`Āg]XYbh`A`]W\ UY`?`fYhgW\ a`Yf`\`Uh]g]W\`j`cb`XYf`n`YbhfU`Yb  
78I`!Dc`]h]\_`X]ghUbn]Yfh`i`bX`VYgh]a`a`hY`H\`Ya`Ybž`k`]Y`X]Y  
5gm`dc`]h]\_ž`Ub[ YgdfcW\ Ybž`X]Y`]a`\_C`ghYb`8Yi`hgW\`UbXg`VYgc`bXYfg  
VYXYi`hYbX`g]bX"

## 8 Ya`cbghfUh]cbYb`U`g`5i`ZZcfXYfi`b[ `ni`f J`YfĀbXYfi`b[

Hfchn`XYf`6Ygcf[ b]g`0VYf`XYb`5bgh]Y[ `XYf`5Z8`V`]YVYb`X]Y  
8Ya`cbghfUh]cbYb`[ Y[ Yb`XYb`FYW\`hgfUX]\_U`]ga`i`g`i`b[ YVfcW\ Yb"  
ϕ`XYb`K`cW\ Yb`j`cf`XYf`K`U\<`a`cV`]g]YfhYb`j`]Y`Y`A`YbgW\ Yb`]b  
8fYgXYb`i`bX`9fZi`fh[ Y[ Yb`X]Y`fYW\`hgYi`hfYa`Yb`HYbXYbnYb" `8cW\`  
A`Yf`\_Y`ž`X]Y`]b`XYf`J`Yf[ Ub[ Yb\`Y]h`U`g`Y]bY`UbYf`\_UbbhY`:]`[ i`f`[ U`hž  
gW\ Y]bh`\_Ui`a`9]bZi`gg`Ui`Z`X]Y`K`Ā\`Yf`i`bX`]fY`A`Y]bi`b[ Yb`ni  
\UVYb" `8]Y`Ya`ch]cbU`Y`GdU`hi`b[ `nk`]gW\ Yb`5Z8!5b\Āb[ Yfb`i`bX  
]\fYb`;`Y[ bYfb`]gh`h]Yž`i`bX`Y]b`8]U`c[ `nk`]gW\ Yb`X]YgYb`@U[ Yfb`]gh  
b`chk`YbX][`ž`V`Y]Vh`UVYf`i`b[ Yk`]gg"

K`Ā\`fYbX`X]Y`K`Ā\`YfnU\<`Yb`]a`\_C`ghYb`\`0\`Yf`k`UfYb`U`g`VY]`XYf  
`YhnhYb`K`U\<`ž`nY][`h`X]Yg`Y]b`j`Yfgh`Āf`hYg`9b[ U[ Ya`Ybhž`XUg`X]Y  
dc`]h]gW\ Yb`5`\_hYi`fY`Yfbgh`bY\`a`Yb`a`0ggYb" `Dc`]hc`c[ Y`<`Ubg  
J`cf`ĀbXYf`\`YVh`\`Yfj`cfž`XUgg`XUg`9]b[ Y\`Yb`Ui`Z`X]Y`6YX0fZb]ggY

XYf'6Yj Ò`\_Yfi b[ 'hfUX]h]cbY``Y]b'HY]'`XYf'8Ya c\_fUh]Y`]ghž'UVYf  
Y]bY'; fYbnY`YI ]gh]Yfhž'k Ybb`Yg`XUfi a`[ Y\hž'X]YgY`6YXØfZb]ggY  
Ui Z?cghYb`XYa c\_fUh]gWXYf`bgh]hi h]cbYb`ni`j`YfZc`[ Yb"

I ba ]hhY`VUf`VYj cf`X]Y`K U\`Yb`]b`6fUbXYbVi f[ 'ghUhhZ]bXYbž'ghY\h  
X]Y`GD8`j cf`Y]bYf`<YfUi gZcfXYfi b[ žX]Y`k Y]hfY]WXYbXY'; c`[ Yb`ZØf  
X]Y`DUfhY`i bX`X]Y`?cU`]h]cb`\UVYb`\_ÒbbhY``8Yf`5i g[ Ub[ `XYf`K U\`  
Ua`'&&"GYdhYa VYf`k ]fX`nY][ Ybž`cV`X]Y`GD8ž`i bhYf`XYf`@Y]hi b[  
j cb`8]Yha Uf`K c]X\_Yž`]b`XYf`@U[ Y`]ghž`XUg`J YfhfUi Yb`XYf`K À\`Yf  
Ui ZfYW`hni Yf\U`hYb``?Yj ]b`?Ø\bYfhž`XYf`; YbYfU`gY`fYhÀf`XYf`GD8ž  
XYi hYhY`VYfY]hg`Ubž`XUgg`X]Y`I bni Zf]YXYb\Y]h`]b`C ghXYi hgW`UbX  
a Ò[ `]WYfk Y]gY`Ui W`Ui Z6i bXYg\_Ubn`Yf`C`UZ`GW`c`n`ni fØW\_ZÀ`hž  
gc``hYb`X]Y`9f[ YVb]ggY`]b`6fUbXYbVi f[ `b]W`h`XYb`9fk Ufhi b[ Yb  
YbhgdFYWXYb"

8YhU]`g

6Ygi WXYb`G]Y`i bg`Ui Z.`a Y]b!VYf`]b`bYh