

I %+! ? ]W\_Yfg'i bhYf`]Y[ Yb`GUUfVfØW\_Yb  
i b[ `ØW\_]Wk`a ]h'\$.%

8]Y`I %+`XYf`Ghi hh[ UfhYf`?]W\_Yfg`j Yf`Yfh'i b[ `ØW\_]Wk`\$.%  
[ Y[ Yb`GUUfVfØW\_Yb`"BÀW\_ghYg`<Y]a gd]Y`Ua ` "%\$, ""[ Y[ Yb`  
K U`X\cZ`A Ubb\Y]a "

⊕`Y]bYa `gdUbbYbXYb`i bX`\Ufh`i a \_Àa dZhYb`Gd]Y`\Uh`X]Y`I %+  
XYg`GJ`Ghi hh[ UfhYf`?]W\_Yfg`Y"J`"Ua `j Yf[ Ub[ YbYb`K cWkYbYbXY`]b  
XYf`8: 6!BUWk`i Wk`g][ U`Y]bY`i b[ `ØW\_]Wk`Y`B]YXYf`U[ Y`[ Y[ Yb`XYb`  
%": 7`GUUfVfØW\_Yb`a ]h'%. \$`\]bbY`a Yb`a ØggYb`"CVk`c`\`X]Y  
Ghi hh[ UfhYf`ØVYf`k`Y]hY`GhfYW\_Yb`XYg`Gd]Y`g`a Y`f`6U`VYg]hn  
\UhhYb`i bX`nU`\fY]Wk`Y`HcfWk`UbW`b`\_fY]YfhYb`ž`fY]Wk`hY`Yg`Ua `9bXY  
b]Wk`h`ZØf`dcg]hj`Y`Di`b`\_hY"

8]Y`DUfh]Y`VY[ Ubb`fUgUbh`i bX`j`cb`XYb`?]W\_Yfg`[ YdfÀ[ h`X]Y`j`cf  
U`Ya`ni`6Y[ ]bb`Xi`fWk`GhUbXUfXg]hi Uh]cbYb`[ YZÀ`f`Wk`k`i`fXYb`  
@]f`c`b`5VXi`"U`i`nY][ hY`]b`XYf`YfghYb`<U`VnY]h`nk`Y]  
j`]Y`j`Yfgd`fYWk`YbXY`A`Ò[ `]Wk`\_Y]hYb`ž`XcWk`XUg`; `ØW`\_ghUbX`]`a  
b]Wk`h`ni`f`GY]hY`"Gc`gWk`Y]hYfhY`Yf`]b`XYf`%"`A`]bi`hY`bi`f`\_bUdd`a`]h  
Y]bYa`?`cdZVU`"Ub`XYf`@UhhY`i`bX`j`Yf[ UV`Y]bYb`9`Za`YhYf`ž`XYb`Yf  
gY`Vgh`\YfUi`g[ Y`c`h`\UhhY`ž]b`XYf`%"`A`]bi`hY`"8Yf`Hcfk`Ufh]`cb  
GUUfVfØW\_Yb`ž`8Uj`]X`A`]UWk`Y`6U]nY`ž`dUf]YfhY`XYb`GWk`i`gg"

8Yf`Gd]Y`j`Yf`Ui`Z`i`bX`X]Y`Yb`hgWk`Y]XYbXYb  
A`ca`Yb`hY

B`UWk`UbZÀb[ `]Wk`Ya`8fi`W`XYf`?]W\_Yfg`\_Ua`Yb`X]Y`GUUf`ÀbXYf`]a  
@]i`Z`Y`XYf`YfghYb`<U`VnY]h`VYggYf`]bg`Gd]Y`"⊕`XYf`" `%"`A`]bi`hY  
\UhhY`@`\_U`DYh`\_c`j`X]Y`[`f`Ò`hY`7\UbWk`XYf`YfghYb`<`À`ZhY`ž`U`g`Yf  
U`Y]bY`j`cf`XYa`Hcf`ni`b`ÀWk`gh`Y]bYb`\YfUi`ggh`ØfnYbXYb`Hcfk`Ufh  
i`a`gd]Y`hY`"@Y]XYf`gWk`UZhY`Yg`XYf`GUUfVfØW\_Yf`j`YfhY]X][`Yf`x`bUg

GY]XY`ž`XYb`6U``[ YfUXY`bcW`j`cb`XYf`@]b]Y`ni`\_fUhnYb`"Bi`f`nk`Y`  
A`]bi`hYb`gd`ÀhYf`Vch]g]W`ZØf`@]f`čb`5VXi` ``U\i`YfbYi`h`Y]bY`  
A`Ò[ `]W`\_Y]hž`XcW`Ui`W` \]Yf`\_Ua`Y]b`J`YfhY]X][ Yf`nk`]gW`Yb`6U``  
i`bX`Hcf"

≠`XYf`B`UW`gd]Y`nY]h`XYf`YfghYb`<`U`VnY]h`[`Y`Ub`[`Y`g`XYb`  
;`Ugh`[`YVYfb`X`Ubbž`]b`:`Ø\fi`b`[`ni`[`Y`Yb`"8`i`fW`Y]bYb`gW`bY`Yb`  
l`a`gW`U`hgd]Y`ni`[`bi`hnhYb`g]Y`Y]bY`l`bUW`hgUa`\_Y]h`i`bX`gd]Y`hYb`  
XYb`6U``df`Ān]gY`ni``JmXYb`7`Uf`Yg`7`c`Y`hUž`XYf`YfZc`[`fY]W`  
j`Yfk`UbXY`hY"

8]Y`nk`Y]hY`<`U`VnY]h`j`Yf`]YZ`ni`b`ÀW`gh`Y`Yf`fi` \][`ž`c`b`Y`  
bYb`bYb`gk`YfhY`7`U`bW`b`Ui`Z`VY]XYb`GY]hYb`"9fgh`]b`XYf`+`%"`A`]bi`hY`  
\_Ua`Yb`X]Y`?]W`\_Yfg`YfbYi`h`[`YZ`À`f`]W`j`cf`XUg`[`Y`[`bYf]gW`Y`Hcfž`U`g`  
ž` `]Ub`G`W`a`]Xh`6Yb`Ua`]b`HY`\_]b`a`]hY]bYa`WYj`YfYb`DUgg` \]bhYf`  
X]Y`5V`k`Y`f`\_]ddhY`"8`cW`Ui`W` \]Yf`j`Yf` \]bXYfhYb`X]Y`U`[`[`fYgg]j`Yb`  
5V`k`Y`f`U`\_h]cbYb`XYf`GUUf`ĀbXYf`Y]bYb`5i`g`[`Y]W`"

## 9a`ch]cbU`Y`9bXd`UgY`

A`]h`XYa`g]W`ni`gd]hnYbXYb`Gd]Y`j`Yf`Ui`Z]b`XYb`Y`hnhYb`A`]bi`hYb`  
k`i`fXY`Yg`bcW`Y]ba`U`f]W`h][` \]hn][`"≠`XYf`,``,`"`A`]bi`hY`a`i`gghY`Y]b`  
GUUfVfØW`\_Yf`Gd]Y`Yf`bUW`Y]bYa`:`ci`gd]Y`a`]hYf`\_`ÀfhYf`F`chYb`  
?`UfhY`j`ca`D`Uhnž`k`Ug`ni`Y]bYf`Fi`XY`V]Xi`b`[`ZØ`fhY`"Hf`ch`  
bi`a`Yf]gW`Yf`,`VYf`Y`[`Yb`Y]h`ZØf`X]Y`?]W`\_Yfg`[`Y`Ub`[`Y`g`Y`XcW`  
b]W`hž`X]Y`8`YZYbg]j`Y`XYf`GUUf`ĀbXYf`ni`ØVYfk`]bXYb`"8]Y`Y`hnhYb`  
GY`\_i`bXYb`k`i`fXYb`Ui`ZfY`[`YbXž`XcW`XYf`Yf`c`ZhY`5i`g`[`Y]W`V`]YV`  
Ui`g"

B`UW`X]YgYa`Gd]Y`V`Y]Vh`X]Y`9b`hh`Āi`gW`i`b`[`VY]`XYb`?]W`\_Yfg`  
gdØfVUf`"C`V`k`c` \`g]Y`]b`XYf`;`YgUa`hVYhfUW`hi`b`[`a`Y`f`\_`UfY`  
7`U`bW`b`YfUfVY]h` \`U`hYb`ž`\_`c`b`b`h`a`Ub`X`Ug`Gd]Y`b]W`h`ZØf`g]W`  
Yb`hgW`Y]XYb`"8]Y`A`Ubb`gW`U`Zh`k`]fX`Ua`\_`ca`a`YbXYb`GUa`ghU`[`ž`  
XYb`" `%"`\$,`"ž`VY]a`YfghYb`<`Y]a`gd]Y`i`a``%(`.```\$`I` \`f`[`Y`[`Yb`K`U`X`c`Z`  
A`Ubb`Y]a`X]Y`A`Ò[ `]W`\_Y]h` \`UVYbž`g]W`ni`fY` \`UV]`]h]YfYb`i`bX`X]Y`  
:`Y` \`Yf`Ui`gni`VYggYfbž`X]Y`Y`hnh]W`ni`f`B]YXYf`U`[`Y`ZØ`fhYb`"

B`UW`X]YgYa`Y]XYbgW`U`Zh]W`Yb`5i`Zh]h`V`Y]Vh`XYf`?`Ua`dZ`[`Y]gh`

XYf'I %+ 'XYg'GJ 'Ghi hh[ UfhYf'? ]W\_Yfg'i b[ YVfcWXYb" '8]YgY  
6Y[ Y[ bi b[ '\Uh[ YnY][ hž'XUgg'X]Y 'A UbbgW UZh'fch'F ØW\_gW `À[ Yb  
ØVYf' [ fc» Y : À\][ \_Y]hYb'j YfZØ[ hž'k Y`WXY`]b`XYb`b`ÅW ghYb`Gd]Y`Yb  
k ]YXYf'ni f'; Y`hi b[ `\_ca a Yb`a ØggYb" '8 Ug`HYUa `k ]fX`Ui`g`X]YgYf  
B]YXYf`U[ Y`YfbYb`i bX`j Yfgi WXYbž`]a `b`ÅW ghYb`A UhW`ghUf`\_Y  
@Y]ghi b[ Yb`ni `nY][ Yb"

## 5 b U`mgY`XYf`DUfh]Y

8]Y'I %+ 'XYf'? ]W\_Yfg`nY][ hY`]b`XYf`6Y[ Y[ bi b[ `[ Y[ Yb`GUUfVfØW\_Yb  
Y]bY`Yb[ U[ ]YfhY`@Y]ghi b[ ž`]bgVYgcbXYfY`]b`XYf`YfghYb`<U`VnY]h"  
8]Y`8ca ]bUbn`]a `6U`VYg]hn`i bX`X]Y`5bnU\`XYf`YfUfVY]hYhYb  
7\UbW`b`gdfYWXYb`ZØf`X]Y`C ZYbg]j \_fUZh`XYf`Ghi hh[ UfhYf" `Hfch`XYf  
\_`UfYb`A Ø[ `]W`\_Y]hYb`gWXY]hYfhYb`g]Yž`]bgVYgcbXYfY`Xi fW`XYb  
j Yf[ YVYbYb`9`Za YhYf`j cb`@]f`cb`5VXi ``U\i ž`XYf`XUa ]h`XYb  
: Ø\fi b[ ghfY ZYf`ZØf`gY]b`HYUa `j YfdUgghY" '8 ]YgY`G]hi Uh]cb  
j YfXYi h`]W`hž`k ]Y`Yb`hgWXY]XYbX`X]Y`9ZY`\_hj ]h`h`j`cf`XYa `Hcf`]gh"

5i ZXYf`UbXYfYb`GY]hY`VYk ]Yg`X]Y`8YZYbg]j UfVY]h`XYf  
GUUfVfØW\_Yfž`XUgg`g]Y`Ui W`i bhYf`8fi W`\_fYg`]Ybh`V`Y]VYb`\_ØbbYb"  
=fY` : À\][ \_Y]hž`YbhgWXY]XYbXY`6U`YfcVYfi b[ Yb`ni `Yfn]Y`Yb`i bX  
XYb`J`cfdgf`i b[ `Xi fW`gW`bY`Yg`i a`gW`U`hYb`i bX`U[ [ fYgg]j Yg  
J`YfhY]X][ Yb`ni `j`YfhY]X][ Ybž`k Uf`Ui ggW`U[ [ YVYbX`ZØf`XYb`G]Y[ "  
8]Y`gW`bY`Y`Gd]Y`j`Yf`U[ Yfi b[ `ØVYf`8Ua ]Yb`9Xi`gY]ž`X]Y`ni `XYa  
Y]bn][ Yb`Hcf`ZØ\fhYž`nY][ h`X]Y` ; YZ`A`f`]W`\_Y]hž`X]Y`XUg`GUUfVfØW\_Yf  
HYUa `hfc`h`k`Yb][ Yf`6U`VYg]hn`Yb`hk ]W`\_Y`hY"

## GhUh]gh]gWXY`5i`gk`Yfhi`b[ `XYf`GU]gcb

8]Y`U`\_hi`Y`Y`GU]gcb`V]YhYh`Y]b][ Y`]bhYfYggUb`hY`GhUh]gh]\_Ybž`X]Y`X]Y  
9bhk ]W`\_i`b[ `XYf'I %+ 'XYf'? ]W\_Yfg`VY`Yi W`hYb" `= `XYf`V]g\Yf][ Yb  
GU]gcb`\UVYb`X]Y`? ]W\_Yfg`ØVYf`\* \$i `6U`VYg]hn`]b`XYb`a`Y]ghYb  
]\fYf`Gd]Y`Yž`k Ug`Ui ZY]bY`Xca ]bUbhY`Gd]Y`k`Y]gY`\]bk`Y]gh"  
8YbbcW`\_ØbbhY`X]Y`7cbj`Yfg]cb!F`UhY`f]Yf`\`À`hb]g`j`cb  
Hcf`gW`ØggYb`ni`hUhg`ÅW`]WXYb`HcfYb`Ě`j`YfVYggYfh`k`YfXYbž`XU`j`]Y`Y  
HcfW`UbW`b`b]W`h`[`Ybi`hnh`k`i`fXYb" '8 ]Y`I` %+ `'\Uh`]b`]`fYb`Y`hnhYb  
ZØb`Z`Gd]Y`Yb`]a`8i`fW`gW`b]h`i`%`G`W`ØggY`dfc`Gd]Y`UV[ Y[ YVYbž  
YXcW`bi`f`&`HcfY`Yfn]Y`h"

8 UfØVYf` \]bUi g`nY][ h`Y]bY`5bU`mgY`XYf`YhnhYb`Gd]Y`Yž`XUgg`X]Y  
8 YZYbg]j Y`XYf`? ]W\_Yfg`]b`XYf`YfghYb`< U`VnY]h`cZh`UbZ`Ä`][ `]gh`"8 ]Y  
`YhnhYb`ZØbZ`Gd]Y`Y` \UVYb`[ YnY][ hž`XUgg`+\$i` `XYf`; Y[ Ybhc fY`]b  
XYb`YfghYb` ( ) `A ]bi hYb`ZU`Yb`"8 ]YgY`GhUh]gh]\_ `Vf]b[ h`X]Y`HfU]bYf  
XUni ž`ghfUhY[ ]gWY`5bdUggi b[ Yb`]bgVYgc bXYfY`]b`XYf  
5bZUb[ gd`UgY`XYf`Gd]Y`Y`ni`VYXYb`\_Ybž`i a`ZfØ`nY]h][ Y  
FØW\_gh`ÄbXY`ni`j`Yfa`Y]XYb`"

Ni \_ØbZh][ Y`< YfUi gZcfXYfi b[ Yb`i bX  
5i gV`]W\_Y

8 ]Y`bÄW`ghY`6Y[ Y[ bi b[ `ZØf`X]Y`i` %+`ghY`h`VYfY]hg`Ua  
\_ca a YbXYb`GUa ghU[ `]Y[ Yb`K U`X`cZ`A Ubb`Y]a`Ub`"8 ]YgYg`Gd]Y`  
k ]fX`YbhgW`Y]XYbX`gY]bž`i a`XUg`j Yf`c fYbY`GY`Vghj YfhfUi Yb`bUW  
XYf`B]YXYf`U[ Y`[ Y[ Yb`GUUfVfØW`Yb`ni fØW`ni [ Yk ]bbYb`"K U`X`cZ  
A Ubb`Y]a` \Uh]b`XYf`U`hi Y`Y`b`GU]gcb`YVYbZU`g`Y]b][ Y  
GW`k ]Yf][ \_Y]hYb`[ YnY][ hž`k Ug`Y]bY`7`UbW`ZØf`X]Y`? ]W\_Yfg  
XUfghY`hž`]\fY`C ZZYbg]j \_fUZh`YbX`]W`]b`XYb`HcfYb`ni`j`Yfk`UbXY`b`"

K ]f`a ØggYb`XYb` : c\_i g`Ui Z`i bgYfY`7`UbW`b`Y[ Yb`i bX`YfbYbž  
X]YgY`Y]g\_U`h`ni`bi`hnYb`ž`gc`XYf`HfU]bYf`bUW`XYf`DUfh]Y`"9g`k ]fX  
YbhgW`Y]XYbX`gY]bž`XUgg`X]Y`Gd]Y`Yf`b]W`h`bi`f`X]Y`A`Ö[ `]W`\_Y]h  
`UVYbž`]fY`HU`h]\_`i a`ni`gY`hnYbž`gcb`XYfb`Ui`W`X]Y`a`YbhU`Yb  
6`c`W`UXYb`UVni`Y[ Ybž`i a`XUg`bÄW`ghY`<Y]a`gd]Y`YfZc`[ fY]W`ni  
[ YghU`hYb`"8 Yf`Gi`ddcfh`XYf`Y]a`]gW`Yb` : Ubg`\_ØbbhY` \]YfVY`]Y]bY  
k ]W`h][ Y`F`c`Y`gd]Y`Ybž`i a`X]Y`A`UbbgW`UZh`ni`a`chj ]YfYb`i bX`X]Y  
@Y]ghi b[ `Ui ZXUg`[ Yk ØbgW`hY`B]j YUi`ni`Vf]b[ Yb`"

8 YhU]`g

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