

' "\$\$\$BYi Y`Dc`nY]UbK ÅfhYf`]b`BFK .`9]b  
ghUf\_Yg`G][ bU`ZØf`X]Y`Ni \_i bZh

5a`%"GYdhYa VYf`&\$&( `ghUfhYb` "\$\$\$`5bk ÅfhYf`]\fY  
Dc`nY]Ui gV]`Xi b[ `]b`BFK ` `Y]b`9fZc`[ ga cXY``ZØf  
BUWk i Wgk YfVi b[ `

8]Y`Dc`nY]`BcfXf\Y]b!K YghZU`Yb`ZY]Yfh`Y]bYb`VYXYi hYbXYb  
A Y]`YbghY]bž`XYbb`Ua`%"GYdhYa VYf`&\$&( `hfYhYb` "\$\$\$`bYi Y  
?ca`a`]ggUfUbK ÅfhYf]bbYb`i bX`!UbK ÅfhYf`]\fYb`8]Ybgh`Ub``8]Yg  
a`Uf\_]Yfh`VYfY]hg`XUg`nk Y]hY`Å\`f`]b`:`c`[ Yž]b`XYa` `X]Y`bcfXf\Y]b!  
k YghZÅ`]gWY`Dc`nY]`]\f`N]Y`Ub`BYi Y]bghY``i b[ Yb`YffY]W`h`\Uh``9]b  
VYa`Yf`\_Ybgk YfhYf`5gdY`\_h`X]YgYg`Å\`f[ Ub[ g`]gh`X]Y`9]bVYn]Y\i b[  
j`cb`5Vgc`j`YbhYb`XYf`bYi` `Y]b[ YZØ`fhYb`:`UW`cVYfgW`i` `Y`Dc`nY]ž  
X]Y`X]Y`A`Ò[ `]W`\_Y]h`\UVYbž`bi`b`HY]` `XYg`Dc`nY]X]YbghYg`ni  
k YfXYb"

≠bYba`]b]ghYf`<YfVYfh`F`Yi` `VYhcb`h`X]Y`6YXYi hi b[ `X]YgYf  
9bhk`]W`\_i b[ .` `8Ug`g]bX`\Yfj`c`ffU[ YbXY`B`UW`f]W`hYb`ZØf`XUg`@UbX  
i bX`[ i hY`5i`gg]W`hYb`ZØf`X]Y`Ni`\_i`bZh`XYf`Dc`nY]`BcfXf\Y]b!  
K YghZU`Yb``K`]f`\UVYb`\_Y]bY`B`UW`k`i`W`gdfcV`Ya`Y`` `8]YgY  
dcg]hj`Y`GhY``i b[ bU`a`Y`]gh`XUg`F`Ygi` `hUh`]bhYbg]j`Yf`6Ya`Ø\i b[ Ybž  
a`Y`f`↑`b[ Y`A`YbgW`Yb`ZØf`XYb`Dc`nY]X]Ybgh`ni` `[ Yk`]bbYbž  
XUfi`bhYf`Ui`W`gc`W`Yž`X]Y`a`Ò[ `]W`Yfk`Y]gY`ni`j`c`f`b]W`h`XUfUb  
[ YXUW`h`\UhYbž`Y]bY`?Uff]YfY`]b`XYf`Dc`nY]`]b`6YhfUW`h`ni  
n]Y\Yb"

≠bhYbg]j`Y`DYfgcbU`k`YfVi`b[

8]Y`DYfgcbU`k`YfVi`b[ `XYf`Dc`nY]`\Uh`g]W`]b`XYb` `Y`h`h`Yb` `Å\`f`Yb  
ghUf`\_]b`hYbg]j`]Yfh`Gc`k`i`fXYb`ØVYf`%"`&\$`6Yk`YfVi`b[ Yb`ZØf`XYb  
\_ca`a`YbXYb`Å\`f[ Ub[ `Y]b[ YfY]W`h``8Ub`\_Y]bYf`[ Yn]Y`hYb

?Ua dU[ bYž`X]Y`i bhYf`XYa `BUa Yb` HUg\_ : cfW` " \$\$\$ `Z]fa ]Yfhž  
k ]fX`BUWk i W`g`gmghYa Uh]gW`Ub[ Yk cfVYb" `8 ]YgY` ðh]Uh]j Y`n]Y`h  
XUfUi Z`UVž`Y`b`VfY]hYfYg`GdY\_`hf`a `Ub`? UbX]XUhYb`Ubni gdfYW`Ybž  
Y]bgW`]Y» `]W`Ghi X]YfYbXYf`Ui`g`UbXYfYb`8 ]gn]d`]bYbž`X]Y`g]W`ZØf  
XYb`K`YW`gY`ni`f`Dc`]nY`]bhYfYgg]YfYbž`gck ]Y`† b[ Yf`A`YbgW`Yb  
a ]h`UbXYfYb`6Yfi ZgUi`gV]Xi b[ Yb"

9]b`gc`W`Yg`J`cf[ Y`Yb`]gh`b]W`h`bi`f`k ]W`h][ `ZØf`X]Y`6YgYhni b[ `XYf  
c`ZYbYb`GhY`Ybž`gcbXYfb`Ui`W`ZØf`X]Y`8 ]j`Yfg]h`h]bbYf`U`V`XYf  
6Y`Y[ gW`UZh" `8 ]Y`Dc`]nY`]B`F`K`a`ÒW`hY`Y]b`HYUa`Ui`ZVUi`Ybž`XUg  
X]Y`;`YgY`gW`UZh`fYd`f`ĀgYbh]Yfhi`bX`X]Y`i`bhYfgW`]YX`]W`ghYb  
<]bhYf[ fØbXY`XYf`6Yj`Ò`\_Yfi`b[ `UVV]`XYh" `9g`]gh`Yfa`i`h][ YbX`ni  
gY`Ybž`XUgg`g]W`gck`c` : fUi`Yb`U`g`Ui`W`A`ĀbbYf`ZØf`X]YgYb  
6Yfi`ZYbhgW`Y]XYb`i`bX`XUa`]h`Y]b`ghUf`\_Yg`NY]W`Yb`gYhYb"

J`cf`nk`Y]`ſ\`fYb`k`i`fXY`Y]bY`gdYn]Y`Y`6]`Xi`b[`g[`Ub[`!C`dh]`cb  
bUa`Ybg` : UW`cVYfgW`i`Y`Dc`]nY`]fi`C`G`Ě`Y]b[`YZØ`fh" `8 ]YgY  
GW`i`Zcfa`f]W`hYh]g]W`Ub`5Vgc`j`Ybh]bbYb`i`bX`5Vgc`j`YbhYb`XYf  
FYU`gW`i`Yb`i`bX`VYfY]hYh`X]Y`GW`Ø`Yf`Ui`Z]\`fYb`gd`ĀhYfYb`8 ]Ybgh  
]a`Dc`]nY`]j`c`ni`[`gX]Ybgh]`cf" `8 ]Y`GW`Ø`Yf`Yf`U`hYb`b]W`h`bi`f  
[`fi`bX`Y[`YbXYb`i`bhYff]W`h]b`FYW`hg!`i`bX`GhUUhg`Y`fYž`gcbXYfb  
UVgc`j`]YfYb`Ui`W`DfU`h]\_U`]b`XYb`?`fY]gdc`]nY]VY`ĀfXYbž`i`a  
dfU`h]gW`Y`9fZU`fi`b[`Yb`ni`gUa`a`Y`b"

## K UW`gYbXYg` ðbhYfYggY`Ua`Dc`]nY]X]Ybgh

9]b][`Y`&`,`%`5bk`ĀfhYf`XYg`bYi`Yb`ſ\`f[`Ub[`g`\`UVYb`]`fYb  
GW`i`UVgW`i`gg`Ub`XYf` : UW`cVYfgW`i`Y`Dc`]nY`]Yfk`cfVYbž`k`Ug  
nY][`hž`XUgg`XUg` ðbhYfYggY`Ub`XYf`Dc`]nY`]i`bhYf`XYb`†`b[`Yb  
A`YbgW`Yb`k`ĀW`gh" `ðg[`YgUa`h`k`YfXYb`Y]bgW`]Y» `]W`XYf`bYi`Yb  
5i`gni`V]`XYbXYb`Yhk`U`\*`"\$`\$`\$`DYfgcbYb`VY]`XYf`Dc`]nY`]B`cfXf`Y]b!  
K`YghZU`Yb`VYgW`ĀZh][`hž`k`cj`cb`a`Y`f`U`g`(`%`\$`\$`\$`hUhg`ĀW`]W`]a  
Dc`]nY`]j`c`ni`[`gX]Ybgh`h`h][`g]bX"

8]YgY`VYY]bXfi`W`YbXYb`NU`Yb`ghY`Yb`]a`9]b`\_`Ub[`a`]h`XYb  
6Ya`Ø`i`b[`Yb`XYf`@`UbXYgfY[ ]Yfi`b[`ž`XYb`Dc`]nY]gY`hcf`ni`gh`Āf`Yb  
i`bX`ZØf`Y]b`g]W`YfYg`l`a`ZY`X`ni`gc`f[`Yb" `8 ]Y`9f`Ā`i`b[`XYf  
5i`gV]`Xi`b[`gd`ĀhY`i`bX`X]Y`n]Y`[`Yf]W`hYhY`DYfgcbU`k`YfVi`b[`g]bX

YggYbhjY`Y`GWf]hhYž`i a`X]Y`Dc`nY]`ZØf`\_ØbZh[ Y  
<YfUi gZcfXYfi b[ Yb`Z]h`ni`a`UWYb`"8]Y`9]bgWfY]Vi b[ `j`cb`gc  
j`Y`Yb`bYi`Yb`5bk`ÅfhYfb`]gh`Y]b`d`cg]hj`Yg`G][`bU`ZØf`X]Y  
dc`nY]`]WY`5fVY]h`]b`B`cfXf\Y]b!K`YghZU`Yb`i`bX`nY][`hž`XUgg`Yg  
k`Y]hYf\]b`Y]b`ghUf`\_Yg`b`hYfYggY`Ua`8]Ybgh]a`ÖZYbh]WYb`GY`\_hcf  
[ ]Vh"

## 9]bV`]W\_`]b`X]Y`Ni`\_i`bZh`XYf`Dc`nY]`B`F`K

8]Y`8mbUa`\_]`XYf`Dc`nY]Ui`gV]`Xi`b[ `i`bX`X]Y`k`UW`gYbXY`NU`U`Ub  
BYi`Y]bghY`i`b[ Yb`gd]Y[ Y`b`Y]bYb`h]YZYb`K`UbXY`]b`XYf  
9]bghY`i`b[ `↑`b[ Yf`A`YbgWYb`k`]XYf`"9g`k`]fX`b]W`h`bi`f`XUfUi`Z  
UV[ Yn]Y`hž`bYi`Y`?`fÅZh`Y`]bg`6`c`ch`ni` `c`Yb`ž`gc`bXYfb`Ui`W`Y`]bY  
bUW`U`h][`Y`i`bX`ni`\_i`bZh`gc`f]Ybh]YfhY`Dc`nY]ghfi`\_hi`f`Ui`Zni`VUi`Yb`"  
8Yf`9]bgh]Y[ `]b`XYb`Dc`nY]X]Ybgh`V]YhYh`b]W`h`bi`f`Y]bY`ghUV]`Y  
?`Uff]YfY`ž`gc`bXYfb`Ui`W`X]Y`A`Ò[ `]W`\_Y]hž`U`\_h]j`Ub`XYf`;`YghU`hi`b[  
Y]bYg`g]WYfYb`@YVYbgi`a`ZY`Xg`a`]hni`k`]f`\_Yb`"

9g`V`Y]Vh`UVni`k`UfhYb`ž`k`]Y`g]W`X]Y`5i`gV]`Xi`b[ `i`bX`b`hY[`fUh]cb  
X]YgYf`bYi`Yb`5bk`ÅfhYf`Yb`hk`]W`\_Y`b`k`]fX`"Bi`hnYb`g]Y`X]Y`7`U`bW`ž  
X]Y`g]Y`Yf`U`hYb`U`VYb`ž`k`YfX`Yb`g]Y`g]W`Yf`]W`Y`]bYb`d`cg]hj`Yb  
6Y]hfU[ `ni`f`;`YgY`g`W`UZh`Y]ghYb`"8]Y`J`c`fnY]WYb`ZØf`X]Y`Dc`nY]  
B`cfXf\Y]b!K`YghZU`Yb`g]bX`j`]Y`j`Yfgd`fYWYbX`"

## 8]Y`F`c`Y`XYf`Dc`nY]`]b`B`c`f`X`f`\`Y]b!K`YghZU`Yb

8]Y`Dc`nY]`B`c`f`X`f`\`Y]b!K`YghZU`Yb`hfÅ[`h`Y]bY`Yb`hgWY]XYbXY  
J`Yf`Ub`hk`c`f`hi`b[ `ZØf`X]Y`ÖZYbh]WY`G]WYf\Y]h]a  
VYj`Ö`\_Yfi`b[`gfY]W`ghYb`6i`bXYg`UbX`8Yi`hgW`U`bXg`"A`]h`ØVYf  
\*`\$`\$`\$`\$`A`]hUfVY]hYf]bbYb`i`bX`A`]hUfVY]hYfb`ž`j`cb`XYbYb`a`Y`f`U`g  
(`%`\$`\$`\$`U`\_h]j`Y`Dc`nY]VYUa`h]bbYb`i`bX`!VYUa`hY`g]bX`ž`]gh`g]Y`Y]bY  
XYf[`f`Ò»`hYb`Dc`nY]VY`U`f`X`Yb`]b`9i`f`cd`U`"8]Y`Dc`nY]`U`h`X]Y  
5i`Z[`UVY`ž`?`f]a`]bU`]h`h`ni`VY`\_`A`d`ZYb`ž`ZØf`X]Y`G]WYf\Y]h]a  
J`Yf`\_Y`f`g`VY`fY]W`ni`g`c`f[`Yb`i`bX`X]Y`6`Øf[`Yf]bbYb`i`bX`6`Øf[`Yf`VY]  
:`fU[`Yb`XYf`G]WYf\Y]h`ni`i`b`hYfgh`Ø`hnYb`"

Ni`g`Å`h`ni`W`ni`f`fY]bYb`Dc`nY]UfVY]h]gh`X]Y`Dc`nY]`Ui`W`]b`XYf  
Df`Å`j`Yb]cb`U`\_h]j`"G]Y`c`f[`Ub]g]Yfh`b`Zc`fa`U]cb`gj`Yf`Ub`ghU`hi`b[`Yb`ž

i a '6Øf[ Yf'ØVYf'H\Ya Yb'k ]Y'9]bVfi W\gW\i h'n'cXYf  
GhfU» Ybg]W\Yf\Y]h'Ui Zni \_'ÀfYb"'æ ' ?cbhYI h'XYf'ghUf\_  
ni bY\ a YbXYb' ?f]a ]bU' ]hÀhgUfhYbž'k ]Y'7mVYfWf]a Yž'\Uh'X]Y'Dc`nY]  
gdYn]Y`Y'9]b\Y]hYb' [ YV]'XYhž'X]Y'g]W\Ui Z'X]YgY'bYi Yb  
<YfUi gZcfXYfi b[ Yb'\_cbnYbhf]YfYb"

5\_hi Y`Y' < YfUi gZcfXYfi b[ Yb'i bX  
9bhk ]W`i b[ Yb

æ'XYb`YhnhYb' ð\ fYb'gU\ 'g]W\X]Y'Dc`nY]'BFK 'a ]h] YfgW\]YXYbYb  
<YfUi gZcfXYfi b[ Yb'\_cbZfcbh]Yfhž'X]Y'gck c\` [ YgY`gW\UZh]W\Yf  
U'g'Ui W\hYW\bc`c [ ]gW\Yf'B Uhi f'g]bX"'8Yf'ni bY\ a YbXY  
: UW\\_fÅZhYa Ub[ Y`]b'j ]Y'Yb'6YfY]W\Yb'\Uh'Ui W\X]Y'Dc`nY]  
VYhfcZYbž'k Yg\U'V'X]Y'9]bZØ\fi b[ 'j cb'æ]h]Uh] Yb'k ]Y'XYf' HUg\_  
: cfW` " \$\$\$ 'j cb' [ fc» Yf'6YXYi hi b[ ' ]gh"'8]YgY'æ]h]Uh] Y'n]Y'h  
XUfUi Z'UVž'↑ b[ Y'A YbgW\Yb'ZØf'XYb'Dc`nY]VYfi Z'ni 'VY[ Y]ghYfb  
i bX'XUg'6Yk i gghgY]b'ZØf'Y]bY'VYfi Z]W\Y'@Ui ZVU\ b' ]bbYf\U'V'XYf  
Dc`nY]ni 'gW\ÀfZYb"

9]b'k Y]hYfYf'5gdY\_h'g]bX'X]Y' [ YgY`gW\UZh]W\Yb'9fk Ufhi b[ Yb'Ub  
X]Y'Dc`nY]" æ'NY]hYbž']b'XYbYb': fU[ Yb'XYf': YfYW\h][ \_Y]h'i bX'XYf  
; `Y]W\Y]h]b'XYf': YgY`gW\UZh] YfghÅf\_h'X]g\_i h]Yfh'k YfXYbž']gh'Yg  
YbhgW\Y]XYbXž'XUgg'X]Y'Dc`nY]'U'g'ægh]hi h]cb'XUg'J YfhfUi Yb'XYf  
6Øf[ Yf' [ Yk ]bbhi bX'Yf\À'h"'8]Y'X]j Yfg]Z]n]YfhY'F Y\_fi h]Yfi b[ ž  
Y]bgW\`Y» ]W\XYf'6Ya Ø\i b[ Yb'i a 'a Y\ f': fUi Yb'i bX'A YbgW\Yb  
Ui g'i bhYfgW\]YX`]W\Yb'gcn]U'Yb'< ]bhYf[ fØbXYbž']gh'XU\Yf'Y]b  
k ]W\h][ Yf'GW\ f]h]b'X]Y'f]W\h][ Y'F]W\hi b[ "

GhUh]gh]\_Yb'ni a 'H\Ya U'Dc`nY]VYk YfVi b[ Yb

æ'U\_hi Y`Yb'9]bghY`i b[ g'U\ f'\UVYb'g]W\ 'a Y\ f'U'g'%&\$\$  
A YbgW\Yb'VY]XYf'Dc`nY]'BcfXf\Y]b!K YghZU'Yb'VYk cfVYbž'k Ug  
X]Y'Ub\U'hYbXY'5hhfU\_h]j ]hÀh'XYg'Dc`nY]VYfi Zg'i bhYfghfY]W\h"'8]Y  
VYY]bXfi W\_YbXY'NU\`XYf' " \$\$\$ 'BYi UbghY`i b[ Yb'gd]Y[ Y'h'b]W\h  
bi f'XUg'9b[ U[ Ya Ybh'XYf'bYi Yb'5bk ÅfhYf]bbYb'i bX'5bk ÅfhYf  
k ]XYfž'gcbXYfb'Ui W\X]Y'i a ZUggYbXYb'A U» bU\ a Ybž'X]Y'ni f  
J YfVYggYfi b[ 'XYf'5fVY]hgVYX]b[ i b[ Yb'i bX'ni f'GhY][ Yfi b[ 'XYf

5 hhfU\_hj] ]hÀh'XYg'6Yfi ZgghUhi g'i bhYfbca a Yb'k i fXYb"

9]b`]bhYfYggUbhYf'5gdY\_h]gh'X]Y'9]bZØ\fi b[ 'XYf': UW\cVYfgW\i `Y  
Dc`nY]`fi C Głż'X]Y'gdYn]Y``ZØf'FYU`gW\i `UVgc`j YbhYb`\_cbn]d]Yfh  
k i fXY"8]YgY'6]`Xi b[ ga U» bU\ a Y`U\h'X]Y'5bnU\`XYf  
ei U]Z]n]YfhYb'6Yk YfVYf'g][ b]Z]\_Ubh'Yf\Ø\hž'XU'&, %5bk ÀfhYf'Ui g  
X]YgYa `gdYn]Y`Yb'6]`Xi b[ g[ Ub[ `ghUa a Yb"8i fW\`XUg'Xi U`Y  
5i gV]`Xi b[ g\_cbnYdh'i bX'dfU\_h]gW\Y'9]bV`]W\_Y`]b`X]Y'5fVY]h'XYf  
Dc`nY]`k YfXYb`X]Y`\_ØbZh][ Yb'Dc`nY]VYUa h]bbYb'i bX'!VYUa hYb  
VYghYbg'Ui Z]\fY'5i Z[ UVYb`j cfVYfY]hYh`

8]YgY'9bhk ]W\_`i b[ Yb'g]bX`Y]b`NY]W\Yb`XUZØfž'XUgg'X]Y'Dc`nY]  
BcfXf\Y]b!K YghZU`Yb'dfcU\_hj] `Ui Z'X]Y'6YXØfZb]ggY`XYf  
; YgY`gW\UZh'i bX`XYb`Y][ YbYb'DYfgcbU`VYXUfZ'fYU[ ]Yfhž'i a `Ui W\  
]b`Ni \_i bZh`Y]ghi b[ gZÀ\][ `i bX`YZZY\_hj] `ni `gY]b"

8 YhU]`g

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