

; Ua Yghcd!DUfhbYfgW\ UZh`Vf]b[ h'≠A L`i a  
' ) `i ` \ Ò \ Yf' `A Uf\_hU\_hi U`]g]Yfi b[ Yb

≠a a i hUV`Y`L`j`Yfa`]YX`X]Y`fch`Y`K`Y``Y`Ua`'8`cbb`YfghU[ `i`bX  
k`Uf`Y]b`Yf`XYf`[`fÒ»`hY`b`?`fmdhc!;`Yk`]bb`Yf`X]Yg`Yf`K`c`W`Y`ž  
bU`W`X`Y`a`'j`cb`Y]b`Yf`DUfhbYfgW\ UZh`a`]h;`Ua`Yghcd`V`Yf]W`h`Y`h  
k`i`f`X`Y`" `≠A`L`'gh]Y[ ` \ `Yi`h`Y`i`a`'Ø`V`Y`f`' ) `i`ž`k`c`V`Y]`Ui`W`'E`B`H`X]Y  
`Ø`b[`gh`Y`b`;`Yk`]bb`Y`Ui`g`V`Ui`h`Y`" `Ni`a`'NY]hdi`b`\_`h`X`Y`g  
G`W`f`Y]V`Y`b`g`k`U`f`Y`b`'X]Y`?`fmdhca`À`f`\_`h`Y`Z`U`gh`(`i`'b]Y`X`f][`Y`f`"  
;`f`Ò»`h`Y`;`Yk`]bb`Y`f`H`f`c`h`n`X`Y`g`f`Ø`W`\_`À`i`Z][`Y`b`'8`fi`W`\_`g`'Ui`Z`X]Y  
?`fmdhca`À`f`\_`h`Y`'Ub`'X]Y`g`Ya`'8`cbb`YfghU[ `[`U`V`'Y`g`]a`'@`Ui`Z`Y`'X`Y`f  
` \ `Yi`h][`Y`b`<`Ub`X`Y`'gg]hni`b[ `Y]b][`Y`[`fc»`Y`'6`Y`k`Y[ `i`b[ `Y`b`" `E`i`Ub`h  
k`U`f`'k`]Y`X`Y`f`'Y]ba`U` \ `Ò` \ `Y`f`i`b`X`'gh]Y[ `ni`'6`Y[ `]bb`'X`Y`f`'G]hni`b[  
`i`a`'V]g`ni`'%( `i`ž`U`V`Y`f`'Y`g`k`U`f`'X`U`g`i`bj`Y`f`À`b`X`Y`f`'W`X`Y`L`ž`X`U`g  
X]Y` \ `Yi`h][`Y`b`'G`W`\_`U[ `n`Y]`Y`b`'gh`U` \ `" `Ni`a`'NY]hdi`b`\_`h  
/`Ua`d`^`Y`" `d/

⇒ a a i hUV`Y`L`j`Yfa`]YX`X]Y`fchY`K`Y``Y`Ua`'8`cbbYfghU[ `i`bX`  
k`Uf`Y]bYf`XYf`[`fÒ»`hYb`?`fmdhc!;`Yk`]bbYf`X]YgYf`K`cW`Yž`  
bUW`XYa`'j`cb`Y]bYf`DUf`hbYfgW`UZh`'a`]h;`Ua`Yghcd`VYf]W`hYh`  
k`i`fXY""⇒A`L`'gh]Y[ `Yi`hY`i`a`'ØVYf''` )`i`ž`k`cVY]`Ui`W`'E`B`H`  
X]Y`'Øb[`ghYb`';`Yk`]bbY`Ui`gVUi`hY""Ni`a`'NY]hdi`b`\_`h`XYg`  
GW`fY]VYbg`k`UfYb`X]Y`?`fmdhca`Āf`\_`hY`ZUgh`(`i`'b]YXf][`Yf"

;`fÒ»`hY`';`Yk`]bbYf`

Hfchn`XYg`fØW`\_`Āi`Z[`Yb`'8fi`W`\_`g`Ui`Z`X]Y`?`fmdhca`Āf`\_`hY`Ub`X]YgYa`  
8`cbbYfghU[ `i`[`UV`Yg`]a`'@Ui`Z`Y`XYf`Y`h[`Yb`<`UbXY`gg]hni`b`[`Y]b][`Y`  
[`fc»`Y`'6Yk`Y[`i`b[`Yb""`

E`i`Ub`h`k`Uf`k`]YXYf`Y]ba`U``\`Ø`Yf`i`bX`'gh]Y[ `ni`'6Y[ `]bb`XYf`G]hni`b[`  
i`a`'V]g`ni`'%(`i`ž`UVYf`Yg`k`Uf`XUg`i`bj`YfĀbXYf`]W`Y`L`ž`XUg`X]Y`  
\`Yi`h[`Yb`GW`\_`U[`nY]`Yb`'ghU`\_`""`

Ni`a`'NY]hdi`b`\_`h`XYg`GW`fY]VYbg`\_`UbXY`hY`'⇒A`L`'Ua`'8`cbbYfghU[`  
ØVYf''`\$`i`ž`bUW`XYa`'VY`\_`Ub`b`h`k`i`fXY`ž`XUgg`Y]bY`DUf`hbYfgW`UZh`'a`]h`  
;`Ua`Yghcd`Y]b[`Y[`Ub[`Yb`]'ghž`X]Y`X]Y`VY]XYb`ni`a`'5i`Z`VUi`'Y]bYg`  
B: `H!A`Uf`\_`hd`UhnYg`j`YfV]bXYb`k`ØfXY"

6Y]`XYf`Y`h[`Yb`'F`U``mY`Xi`fW`VfUW`'XYf`'⇒A`L`#`G8`'&`  
K`]XYfghUbXgb]j`YUi`gž`VYj`cf`Yf`gW`\_`Y]»`\_`]W`X]Y`Xf]hhY`<`ØfXY`  
j`YfZY`\`hY`ž`XU`<`ĀbX`Yf`k`U`f`gW`Y]b`]W`';`Yk`]bbY`'a`]hbU`\_`a`Yb""`

6YhfUW`hYh`a`Ub`XUg`'8]U[`fUa`a`ž`gh]Y[ `XYf`DfY]g`ni`b`ĀW`gh`ØVYf`  
XYb`K`]XYfghUbX`j`cb`''`ž`\$`\$`\_`\_`\_`\_`bUi`gž`VYj`cf`Yf`X]Y`C`VYf[`fYbnY`j`cb`  
'`ž`+`-`\_`\_`Xi`fW`VfUW`'i`bX`XUbUW`'Y]b`'`hfUXUml`<`cW`j`cb`'(`ž&)`\_`\_`  
YffY]W`hY""`



CVk c\`b'XYf\Yi h[ Yb'G]hni b[ 'j ]Y`Y'6ÅfYb'Ubk YgYbX'k UfYbž  
a i gghYb'G]Y'V]g[ Ubn'bUW' i bhYb']b'X]Y'Hcd'%'\$'\$gWfc``Ybž'i a  
XYb'[ f0» hYb'j ca '8cbbYfghU[ 'ni 'Z]bXYb"

F YbXYf'Hc\_Yb'Yf\]Y'h'X]Y`\Yi h[ Y'9\fy'i bX'k Uf'ni a 'NY]hdi b\_h  
XYg'GW'fY]VYbg'i a 'ZUgh%' 'i '[ YZU`Yb'i bX'YffY]W'hY'XUVY]'Y]b  
⇒hfUXUm'H]YZj cb'' ž%, '~ ""

B UW'Y]bYf'FY]\Y'j cb'F U`mYg]b`Yhhyf'NY]h'a UW'hY'F B 8 F # G8  
YbX`]W'Y]bY'5hYa dUi gYž'k cVY]'X]Y'DfY]gY'bU\Y'XYa 'K ]XYfghUbX  
j cb'' ž- \* '~ 'UVj Yf\_Ui Zh'k i fXYb"

F B 8 F # G 8 ' ' H U [ Y g W \ U f h

8 ] Y g Y f ' 5 i g j Y f \_ U i Z Z \ f h Y ' X U n i ž ' X U g g ' X ] Y ' D f Y ] g Y ' U i Z ' X ] Y  
I b h Y f g h Ø h n i b [ ' j c b ' ' ž % ( ' ~ ' Z ] Y ' Y b ' i b X ' X Y b ' % ( ! h Å [ ] [ Y b ' F G = i b h Y f ' ) \$  
X f Ø W \_ h Y ž ' b U W \ X Y a ' Y f ' ] b ' X Y b ' ' Y h n h Y b ' K c W \ Y b ' f Y ' U h ] j ' Ø V Y f \_ U i Z h  
k U f "

K YfXYb`k ]f`X]YgY`K cWXY`Y]bYb`k Y]hYfYb`FØW\_[ Ub[ `XYf  
FYbXYf!Hc\_Yb`gY\Yb3`HY]`Yb`G]Y`i bg`≠fY`; YXUb\_Yb`]b  
XYb`?ca a YbhUfYb`a ]h"

9]a Ub`8Ua Y`

9]a Ub`Vf]b[ hY]bY`X]j Yfg]Z]n]YfhY`G]W`hk Y]gY`]b`X]Y`A Uf\_hUbU`mgY`Y]bž`bUWXYa`Yf  
U`g`A U\_`YfX]fY\_hcfž`5i`gV]`XYf`]a`9]bnY`\UbXY`i bX`A Uf\_h\_ca a YbhUhc]b`XYb  
6YfY]WYb`?fmdhcž`5\_h]Yb`i bX`8Yj`]gYb`[ YUfVY]hYh`Uh"

6]`XbUW`k Y]g.`G\i`hYfghcW\_ž`D]l UVUmž`K ]\_]7ca a cbg

6Y`]YVhYfY`B UW`f]W`hYb

: U`g`8i`Yg`j YfdUggh`\Ugh

f bWh]cbfKž`gž`]XŁ`o`j Uf`^gž`Z`g`1`X"[ Yh9`Ya Ybhg6mHU[ BUa YfgŁQ\$Q'  
]Z`fK"[ Yh9`Ya Ybh6mXf]XŁ`fYhi`fb`/`g`1`X"WfYUhY9`Ya YbhfgŁ`^g"]X`1  
]X`/`g`"gfWl`"\`hhdg`#AcbBYWh"ZUWVcc\_"bYh#bSl`G#gX\_"^g.`I`ZVa`1`%/  
j`Yfg]cb1`j`'`"&`/`Z`g"dUfYbhBcXY"]bgYfh6YZcfYf^gž`Z`gŁ`/qfXcW`a`Ybhž  
fgWf]dhfž`fZUWVcc\_!`^ggX`fŁ`/

6Ygi W\Yb`G]Y`i bg`Ui Z.`\_fmdhc!bYk g"Uh