

< UW\_Yf`k Y[ Yb`F Ui VØVYfZU``g`Ui Z  
j ]YhbUa Yg]gW\Y`? fmdhc!6 ÒfgY`]bg  
; YZÀb[ b]g` `9I W\Ub[ Yg

6Y\ÒfXYb`]b`J ]YhbUa ` \UVYb`Y]bYb`< UW\_Yf`[ YZUgghi bX  
j Yfi fhY]`hž`XYf`; Y`X`i bX`8UhYb`j cb`Y]bYf`c\_U`Yb  
? fmdhc k À\fi b[ gVÒfgY`[ Yghc` \`Yb` \Uh`"8Yf`A Ubbž`XYf  
ZYgh[ Ybca`a Yb`i bX`k Y[ Yb`9fdfYggi b[ `XYg`9][ YbhØa Yfg  
XYf`< UbXY`gd`UhhZcfa`Ub[ Y`\_U[ h`k i fXYž`k i fXY  
Ui Z[ YZcfXYfhž`XUg`j cb`]\a`i bhYfgW\U[ YbY`; Y`X  
ni fØW\_ni [ YVYb`"J ]YhbUa Yg]gW\Yg`; Yf]W\hj Yfi fhY]`h`< UW\_Yf  
k Y[ Yb`5b[ f]Zg`Ui Z? fmdhc!9I W\Ub[ Y!K YVg]hY`9]b`6Yk c`bYf  
j cb`<c!7\]!A ]b\!GhUXh`]b`J ]YhbUa `k i fXY`ni`%\$`>\fYb  
; YZÀb[ b]g`j Yfi fhY]`hž`k Y]`Yf`" \$\$`A ]``cbYb`j ]YhbUa Yg]gW\Y  
8cb[ `fZUghi`%` "\$\$\$`I G!8c``Ufł`j cb`Y]bYa`? fmdhc!  
I bhYfbY`a Yf`[ Yghc` \`Yb` \UhYž`XYggYb`Wc]b`< UbXY`ggY]hYž  
X]Y`Yf`7mVYfUb[ f]ZYZb`Ui g[ YgYhnh`k Uf`"8Yf`< UW\_Yf`B`Ua  
<cUb[ `?`Ub[ `k i fXY`k Y[ Yb`9fdfYggi b[ `Ub[ Y`\_U[ h`i bX`Ua  
: fY]hU[ `j ca` `Jc`\_g[ Yf]W\h`XYf`GhUXhj Yfi fhY]`hž`VYf]W\hYhY  
/ Ua d^Y``d/

6Y\ ÒfXYb`j]b`J ]YhbUa ` \ UVYb`Y]bYb`< UW\_Yf`[ YZUggh`i bX  
j Yfi fhY]`hž`XYf`; Y`X`i bX`8UhYb`j cb`Y]bYf`c\_U`Yb  
? fmdhc k Å\fi b[ gVÒfgY`[ Yghc`\`Yb`\Uh" `8Yf`A Ubbž`XYf  
ZYgh[ Ybca a Yb`i bX`k Y[ Yb`9fdFYggi b[ `XYg`9][ YbhØa Yfg  
XYf`< UbXY`gd`UhhZcfa `Ub[ Y\_`U[ h`k i fXYž`k i fXY  
Ui Z[ YZcfXYfhž`XUg`j cb`]a `i bhYfgW`U[ YbY`; Y`X  
ni fØW\_ni [ YVYb"

J ]YhbUa Yg]gW`Yg`; Yf]W`h`j Yfi fhY]`h`< UW\_Yf  
k Y[ Yb`5 b[ f]ZZg`Ui Z`? fmdhc! 9! W`Ub[ Y!  
K YVg]hY

9]b`6Yk c\bYf`j cb`<c!7\]!A ]b\!GhUXh`]b`J ]YhbUa `k i fXY`ni `%\$  
X\`fYb`; YZÅb[ b]g`j Yfi fhY]`hž`k Y]`Yf" \$`\$`A ]`]cbYb`j ]YhbUa Yg]gW`Y  
8cb[ `fZUgh`% "\$\$\$`i G!8c`UfŁ`j cb`Y]bYa `? fmdhc! I bhYfbY`a Yf  
[ Yghc`\`Yb`\UhhYž`XYggYb`Wc]b`< UbXY`ggY]hYž`X]Y`Yf`7mVYfUb[ f]ZYb  
Ui g[ YgYhnh`k Uf"

8Yf`< UW\_Yf`B`Ua `<cUb[ `?`Ub[ `k i fXY`k Y[ Yb`9fdFYggi b[  
Ub[ Y\_`U[ hi bX`Ua `: fY]hU[ `j ca `J c`\_g[ Yf]W`h`XYf`GhUXh`j Yfi fhY]`hž  
VYf]W`hYhY`X]Y`Yb[ `]gW`gdFUW`][ Y`5i g[ UVY`XYf`HU[ YgnY]hi b[ `J B  
9! dfYgg" `9f`k i fXY`Ui W`Ui Z[ YZcfXYfhž`XUg`[ Yghc`\`YbY`; Y`X  
ni fØW\_ni [ YVYb"

8]Y`? fmdhc! 6ÒfgY`k i fXY`&\$%, `j cb`J i `B[ cW7\Ui `[ Y[ fØbXYhž`i a  
dchYbn]Y`Y`? Åi ZYf`i bX`J Yf\_Åi ZYf`j cb`? fmdhc k Å\fi b[ Yb  
ni gUa a Ybni Vf]b[ Yb`i bX`Y]bY`; YVØ\`f`ZØf`X]Y`j cb`]f  
Yfa Ò[ `]W`hYb`HfUbgU\_h]cbYb`ni `Yf\`YVYb" `6Ybi hnyf`a i gghYb  
?cbhYb`YfÒZbYb`i bX`dYfgÒb`]W`Y`bZcfa Uh]cbYb`k ]Y  
HY`YZcbbi a a Yfž`9!A U]!5XfYggY`i bX`Y]bY`? cd]Y`Y]bYg  
5i gk Y]gXc\_i a Ybhg`Ub[ YVYb"

⇒a `C`\_hcVYf`&\$&\$`bi hnhY`?`Ub[ `gY]b`HY`YZcbž`i a `a Y\`fYfY`?cbhYb  
Ui ZXYf`D`UhhZcfa `ni `YfghY``Yb" `9f`YbhXYW`hYž`XUgg`X]Y`K YVg]hY`H!  
fYI "YI W`Ub[ Y`a Y\`fYfY`GW`k UW`ghY``Yb`Ui Zk ]Ygž`X]Y`Ui g[ Ybi hnh

k YfXYb`\_cbbhYbži a`gck c\`Ub`8 UhYb`U`g`Ui W\`Ub`X][`]hU`Y  
K Å\fi b[ Yb`ni`[ Y`Ub[ Yb`"

⇒ Zc`[ YbXYb`A cbUh[ Y`Ub[ `Yg`XYa` <UW\_Yfž`X]Y`?cbhfc``Y`ØVYf  
XUg`?cbhc`Y]bYg`H!FYI`!A`]hUfVY]hYfg`i bX`fi bX`" "\$\$\$`ni`Yf`Ub[ Yb  
**I G8H**"`8 Ug`HYUa`YbhXYW\_hY`X]Y`i b[ Yk`Ö\b`]W\Yb`HfUbgU\_h]cbYb  
i bX`gdYffhY`XUg`?cbhcž`i a`k Y]hYfY`CdYfUh]cbYb`a`]h`XYf  
?fmdhck Å\fi b[ `ni`j Yf\]bXYfb`"

5`g`Yf`ZYghghY`hYž`XUgg`Yf`\_Y]bYb`Ni`[ f]ZZ`a`Y`f`Ui`ZXUg  
\_ca`dfca`]hh]YfhY`?cbhc`\UhYž`Yf`Ub[ hY`?\Ub[ `X]Y`dYfg`Öb`]W\Yb  
8 UhYb`j`cb`&- "\$\$\$`?i bXYb`i bX`YfghY`hY`Y]bY`[ fc»Y`5bnU`\`  
[ YZ`gW\hYf`6YghY`i b[ Ybž`k Å\fYbX`Yf`a`]h`k Y]hYfYb`5b[ f]ZYb  
Xfc`hY`"

9f`ZcfXYfhY`Ui`W\`Y]bY`NU\`i b[ `j`cb`&\$ "\$\$\$`8c``Ufž`gcbgh`k`ØfXY`Yf  
Ybh`Ø`Ybž`XUgg`X]Y`6ÖfgY`[ Y\UW\_h`k`cfXYb`k`Uf``7\Ui`ž`XYf  
6Yg]hnYfž`Yf\]Y`h`a`Y`fYfY`8fc`i b[ Yb`i bX`ZcfXYfhY`gY]bY  
5b[ YghY`hYb`gW`Y]Y»`]W\`Ui`Zž`?\Ub[ `` \$\$`A`]]cbYb`8cb[ `ni  
gW]W\_Yb``9f`fY]W\hY`A`]hhY`&\$`%`Y]bY`6YgW`k`YfXY`VY]`XYb  
GhfUž`YfZc`[ i b[ gVY`\ÖfXYb`Y]b`"

⇒ **J ]YhbUa** ž? fmdhck Å\fi b[ Yb`g]bX`bcW`b]W\h`Y[ U`]g]Yfh`cXYf  
fY[ i`]Yfh`Hfchn`]fYf`6Y`YVh`Y]h`VY]`<ÅbX`Yfb`i bX`⇒j`Yghc`fYb  
k YfXYb`6]hW`b]i bX`XYf[ `Y]W\Yb`j`cb`XYf`GhUhY`6Ub`\_cZJ`]YhbUa  
i bX`XYa`j`]YhbUa`Yg]gW`Yb`FYW`h`b]W\h`U`g`J`Yfa`Ö[ Ybgk`YfhY`cXYf  
NU\`i b[ ga`]hhY`UbYf`\_Ubbh`"

K Ug`XYb`\_Yb`G]Y`ØVYf`XYb`5i`g[ Ub[ `XYg`:`U`g`a`]h`XYf  
[ Y\UW\_hYb`j`]YhbUa`Yg]gW`Yb`?fmdhc!6ÖfgY3`HY]`Yb`G]Y`g]Y  
Ja`?ca`a`YbhUfVYfY]W\`i`bhYb`"

@ Vca ]f`HUggYk`

@ Vca ]f`HUggYj` ]gh`Y]b`>i fbU`]gh`Ui g`XYa`hYw`b]gW`j Yfg]YfhYb`C ghYi fcdUž`XYa  
< ]hW`Ybg`N]hUh`[ YZ`h`h` Gw`f]ZhghY`Yf`ni`gY]bž`]gh`XUgž`k Ug`]W`V]bž`i bX`b]W`h`XUgž  
k Ug`]W`hi`Y" `BYVYb`? fmdhcž`6`cW`W`U]b`i bX`i` ]bhYw`g]bX`X]Y`]bhYfbUh]cbU`Y`Dc`]h`\_  
i bX`K` ]fhgW`UZ`h`nk`Y]k`Y]hYfY`-bgd]fUh]cbgei`Y`Yb"

6]`Xb`Uw`k`Y]g. `G\i`hhYfghc`W`ž`D]l`UVUmž`K`\_]7ca`a`cbg

6Y`]YV`hYfY`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[`B`Ua`YfgŁQ\$Q'  
]Z`fK"[`Yh9`Ya`Ybh6m`Xf]XŁ`fYhi`fb`/`g`1`X"WfYUhY9`Ya`YbhfgŁ`/`g"]X`1  
]X`/`g"gfWl`"\`hhdg.##Ac`bbYWh"ZUW`Vcc\_"bYh#YbSl`G#gX\_"g. l`Z`a`1`%/  
j`Yfg]cb1`j`'`"&"/Z`g"dUfYbhB`cXY"]bgYfh6Y`Zc`fYf`gž`Z`gŁ`/`qfXcW`a`Ybhž  
fgWf]dhfž`fZUW`Vcc\_!`g`gX`fŁ`/`

8YhU]`g

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