

F i gg]gW\ Y`F Y[ ]Yfi b[ `[ YbY\ a ][ h'D`Ub`ni f  
F Y[ i `]Yfi b[ `j c b`? fmdhc k Å\fi b[ `  
F Y[ i `Uh]c b

8]Y`6i bXYgfY[ ]Yfi b[ `]b`A cg\_Ui `Uh`VYfY]hg`b`X]YgYa  
A cbUh`Y]b`? cbnYdhini f`F Y[ i `]Yfi b[ `XYg`fi gg]gW\ Yb  
? fmdhcfUi a g`j YfUVgW\]YXYh`"8 Ug`bYi Y`F U\ a Ybk Yf\_`gc``  
? fmdhc k Å\fi b[ gghfÒa Y`i bhYf`ghUUh`]W\ Y`5i Zg]W\ h`ghY``Ybž  
ghfYb[ Y`J YfdZ]W\ hi b[ Yb`ZØf`A Uf\_hhY]`bY\ a Yf`Y]bZØ\ fYb`i bX  
XYb`5b`Y[ YfgW\ i hn`[ Yk Å\`f`Y]ghYb``F i gg]gW\ Y`6Y\ ÒfXYb  
VYk Y[ Yb`g]W\ ni f`@Y[ U`g]Yfi b[ `XYf`? fmdhc Ò\_c bca ]Y`8]Y  
fi gg]gW\ Y`F Y[ ]Yfi b[ `Uh`X]Y`Ni \_i bZh`XYf`X][ ]hU`Yb  
K Å\fi b[ Yb`]b`F i gg`UbX`VYgh]a a h ž`Ub`6Y`Ubbha UW\ i b[  
j YfÒZYbh`]W\ hi Ua `gdÅhYb`8]YbghU[ `Ub[ Y[ YVYb``8]Y  
9I Y\_i h]j Y`]b`A cg\_Ui `ZØ\ fhY`Ui gž`XUgg[ Yd`Ub`h`gY]ž`XYb  
I a `Ui Zj c b`? fmdhc k Å\fi b[ Yb`]b`XUg`fi gg]gW\ Y  
: ]bUbngmgYhYa`ni`]bhY[ f]YfYb``8 Ug`? UV]bYhhin]Y`h`Ui W\  
XUfUi Z`UVž`X]Y`? c b hfc``Y`ØVYf`\_fmdhc VYnc[ YbY`GhfÒa Y`]a  
6Ub`\_Yb gmgYhYa`ni`Yf`Ub[ Yb``8]Y`6i bXYgfY[ ]Yfi b[ `k`]]b  
/ Ua d^Y``]d/

8]Y'6i bXYgfY[ ]Yfi b[ ]b'A cg\_Ui '\Uh'VYfY]hg' ]b'X]YgYa  
A cbUh'Y]b'? cbnYdh'ni f'FY[ i '\]Yfi b[ 'XYg'fi gg]gWYb  
? fmdhcfUi a g'j YfUVgW]YXYh" '8 Ug'bYi Y'F U\ a Ybk Yf\_'gc``  
? fmdhck Å\fi b[ gghfÒa Y'i bhYf'ghUUh' ]WY'5i Zg]W'h'ghY''Ybž  
ghfYb[ Y'J YfdZ']W'hi b[ Yb'ZØf'A Uf\_hhY]'bY\ a Yf'Y]bZØ\ fYb  
i bX'XYb'5b'Y[ YfgW'i hn'[ Yk Å\ f'Y]ghYb"

F i gg]gWY'6Y\ ÒfXYb'VYk Y[ Yb'g]W'ni f  
@Y[ U`]g]Yfi b[ 'XYf'? fmdhc Ò\_c b c a ]Y

8]Y'fi gg]gWY'FY[ ]Yfi b[ '\Uh'X]Y'Ni \_i bZi'XYf'X][ ]hU'Yb  
K Å\fi b[ Yb']b'Fi gg'UbX'VYgh]a a h žUb'6Y\_Ubbha UW i b[  
j YfÒZYbh']W'hiUa 'gdÅhYb'8]YbghU[ 'Ub[ Y[ YVYb" '8]Y'9i Y\_i hj] Y' ]b  
A cg\_Ui 'ZØ\ fhY'Ui gž'XUgg[ Yd'Ubh'gY]ž'XYb' l a 'Ui Zj cb  
? fmdhck Å\fi b[ Yb']b'XUg'fi gg]gWY': ]bUbngmghYa 'ni ' ]bhY[ f]YfYb"  
8 Ug'? UV]bYhh'n]Y'h'Ui W'XUfUi ZUVž'X]Y'? cbhfc''Y'ØVYf  
\_fmdhcVYnc[ YbY'GhfÒa Y']a '6Ub\_YbgmghYa 'ni 'Yf'Ub[ Yb"

8]Y'6i bXYgfY[ ]Yfi b[ 'k ]''b', VYfY]bgh]a a i b[ 'a ]h'XYf  
5i ZUggi b[ 'XYg': ]bUbna ]b]ghYf]i a g'XYb'6Yhf]YV'j cb  
? fmdhcd'UhhZcfa Yb']a 'F U\ a Yb'Y]bYg '@]nYbnfY[ ]a Yg'ni 'UggYb"  
l a 'X]Y'FYW'hY'XYf'fi gg]gWYb'6Øf[ Yf'ni 'gW'ØhnYbž'k YfXYb  
5b'Y[ Yf']b'ei U']Zn]YfhY'i bX'b]W'h'ei U']Zn]YfhY'? 'UggYb'Y]b[ YhY]'hž  
k Å\ fYbX'? fmdhc!8]Ybgh'Y]ghYf'j YfdZ]W'hY'h'k YfXYbž'VYgh]a a hY  
'? Ud]hU'!'i bX '@]ei ]X]hÅhgUbZc'fXYfi b[ Yb'ni 'YfZØ''Yb" 'G]Y'k YfXYb  
Ui W'XUa ]h'VYUi ZhfU[ hž'Fi ggYb'ØVYf'fY'Yj UbhY'F ]g]\_Yb'ni  
]bZcfa ]YfYb"

8]YgYf'fY[ i 'Uhc'f]gWY'5bgUhn'ghY\h]a ' ; Y[ YbgUhn'ni 'XYa 'XYf  
NYbhfU'VUb\_'j cb'Fi gg'UbX'J c f g W 'U[ 'UV'Ubi Uf'Y]b'dUi gW'U'Yg  
J YfVch'Y]bYf'FY]\Y'j cb'CdYfUh]cbYb'a ]h'? fmdhck Å\fi b[ Ybž  
Y]bgW'Y]Y>' ]W' ]\fYf'5i g[ UVYž'J Yfk YbXi b[ ž']\fYg'<UbXY'g'i bX  
6Yf[ VUi g" '8]Y'K Å\fi b[ gVY\ ÒfXY'\Uh'g]W' ]b[ YZ bXYb' =gc`Uh]cb  
i bhYf'XYb'fi gg]gWYb' ðgh]hi h]cbYbž'j cb'XYbYb'X]Y'a Y]ghYb'Y]bY  
FY[ i '\]Yfi b[ 'XYa 'J YfVch'j cfn]Y\Yb'i bX']\fY'6YXYb\_Yb  
\]bg]W'h]W'XYf': ]bUbngUV] ]hÅh'ni fØW\_k Y]gYb"

5b`XYb` ; YgdFÅWYb`bU\`a Yb`Ui W`Fi gg`UbXg  
: ]bUbna ]b]ghYf]i a`i bX`6Ub`\_j`cb`F`i gg`UbX  
GhYi YfX]Ybghž`XUg`A ]b]ghYf]i a`i ZØf`k ]fhgWÅUZh`]WÅY`9bhk ]W`i b[ ž  
XUg`bYba ]b]ghYf]i a`i žXYf` : ÒXYfU`Y`G]WÅYf\`Y]hgX]Ybgh`i bX`X]Y  
; YbYfU`ghUUhgUb`k U`hgWÅUZh`hY]`"8]Y`fi gg]gWÅY`F`Y[ ]Yfi b[ `VYhc`b`hY`.

8]Y`i a`gYhni b[ `XYg`?`cbnYdhg`k ]fX`X]Y`GWÅUZI b[ `XYg  
b`chk YbX][ Yb`fY[ i`U`hcf]gWÅYb`F`U\`a Yb`g`g]WÅYfghY`Ybž`X]Y  
X][ ]hU`Y`K`Å\`fi b[ g]bXi`ghf]Y`Ui`g`XYa`G`WÅUhhYb`\`c`Yb`i bX  
X]Y`A`Ò[ `]WÅ`\_Y]h`ZØf`Y[ U`Y` ; YgWÅ`Å`Zhgh`Åh][ `\_Y]hYb`gWÅ`UZZY`b`"

...

: ]bUbna ]b]ghYf]i a`i bX`6Ub`\_j`cb`F`i gg`UbX  
Yb`hk`YfZY`b`Y]b`?`fmd`hc[`YgY`hn`

I`bhYf`6Yfi`Z`b[ `Ui`Z`XUg`Df`hc`\_c``Y]bYg`j`cb`XYf`F`Y[ ]Yfi b[  
j`YfUbghU`hY`hYb`HfY`ZZY`bg`VYf]WÅ`hY`hY`XUg  
K`]fhgWÅ`UZhgb`UWÅ`f]WÅ`hY`b`d`c`f`hU`F`67`ž`XUgg`XYf`ghY`j`Yf`hY`hY`b`XY  
DfYa`]Yfa`]b]ghYf`i`bX`GhUV`gWÅ`YZ`8`a`]hfm`i`f][`c`fYb`\_c`X]Y  
F`Y[ i`]Yfi b[ `[ YbY\`a`][`h`\`Uh`?`c`b`n`Y`d`h`"9`f`k`]Yg`Ui`WÅ  
: ]bUbna ]b]ghYf`5`b`hc`b`G`i`Ubc`j`Ubž`gY]bY`5`V`hY]i`b[ `Ubni`k`Y]gYbž  
[ Ya`Y]bgUa`a`h`i`XYf`6`Ub`\_c`Z`F`i`gg]U`b`Yi`Y` ; YgYhnY`j`c`f`ni`VYfY]hYb`"  
9]b`Ui`Z`X]Y`i`a`gYhni b[ `XYg`D`Ub`g`ni`[`YgWÅ`b]hY`b`Yf  
; YgYhnYgYb`hk`i`f`Z`gc``V]g`ni`a`%`,`":`YVfi`Uf`&`\$`&`&`j`c`f[`Y`Y[`h  
k`YfXYb`"

⇒`i`?`Yfb`XYg`J`c`f`gWÅ`U[`g`XYg` : ]bUbna ]b]ghYf]i a`g`ghY`\`h`X]Y  
5b`Z`c`f`X`Y`fi`b[`ž`U``Y`\_`f`m`d`h`c`V`Y`n`c`[`Y`b`Y`b`C`d`Y`f`U`h]`c`b`Y`b`Ø`V`Y`f`  
]b`Å`b`X]gWÅY`6`Ub`\_Y`b`UV`ni`k`]W`\_Y`b`";`Y]WÅ`n`Y]h][`a`Ò`WÅ`hY`X]Y  
5`V`hY]i`b[ `Ui`WÅ`Ui`g`Å`b`X]gWÅY`6`Ø`f`g`Y`b`ZØf`X][`]hU`Y  
J`Y`fa`Ò[`Y`b`g`k`Y`f`h`Y`Ui`h`c`f]g]Y`f`Y`b`ž`Ui`Z`XY`a`fi`gg]gWÅY`b`A`Uf`\_`h`h`Å`h][`ni  
k`Y`f`X`Y`b`ž`k`Y`b`b`g]Y`Y]b`6`Ø`f`c`Y`f`Ò`Z`b`Y`b`c`X`Y`f`Y]b`i`b`h`Y`f`b`Y`\`a`Y`b`]b`XY`f`  
F`i`gg]gWÅY`b` : Ò`X`Y`f`U`h]`c`b`f`Y[ ]`g`h`f]Y`f`Y`b`"

8 Ug : ]bUbna ]b]ghYf]i a [ `Ui Vhž`XUgg`X]Yg`XYb  
FY [ i `]Yfi b[ gVY\ ÒfXYb`Yfa Ò [ `]WYb`k ØfXY`**XYbh]Z]n]YfYb**  
Fi gg]gWY`? fmdhc k À\fi b[ gVYbi hnYf"@Ui h`6YfYWbi b[ Yb`]b`XYa  
8c\_i a Ybh`VYg]hnYb`fi gg]gWY`6Øf[ Yf`%&`A ]``cbYb`? fmdhc!  
; Y`XVØfgYbž`X]Y`&`6]``cbYb`Fi VY``]b`X][ ]hU`Yb`A ØbnYb`f&+  
A ]``UfXYb`i G!8c``UfL`U`hYb`"i bhYf`6Yfi Z b[ `Ui ZUb[ YV`]W  
gUW`\_i bX][ Y`E i Y``Yb`U`h`6`cca VYf[ `\_Øfn`]W`VYf]W`hYh`  
**Ui Z[ YXYW`h`XUgg`Y]bY`U`hYfbUh]j`Y`GW`Àhni b[ ž`X]Y`k`À\fybX`XYf`  
6YfUhi b[ Yb`Yfk`À\b`h`k`i`fXYž`XUfUi`Z`]\bXYi`hYhž`XUgg`Fi`ggYb`ØVYf`  
%\*ž`6]``cbYb`Fi`VY``]b`? fmdhc k À\fi b[ `f&%)`A ]``UfXYb`i`G!8c``UfL`  
VYg]hnYb`"**

⇒a`j`Yf[ Ub[ YbYb`]U`f`U`h`Ui`W`Fi`gg`UbXg`6YXYi`hi`b[ `Ui`Z`XYf`  
? fmdhc!A`]b]b[ `!@UbX`\_UfhY`ni`[ Ybca`a`Yb``8 Ug`YbYf[ ]YfY]WY`@UbX`  
fUb[ ]Yfh`a`]h`Yfk`Y]Y`Ub`Xf]h`Yf`GhY``Y`]b`6Yni`[ `Ui`Z`X]Y`  
6Yf[ VUi`\_UdUn]h`Àhž`i`b`X`X]Y`6YUa`hYb`]b`A`cg`\_Ui`k`c``Yb`X]Y`  
; Yk`]bbY`X]YgYg`GY`\_hcf`g`UbnUdZYb`**Yf`\_Yb`b`Yb`Yg`U`g`  
k`]fhgW`UZh`]WY`H`Àh][`\_Y]hi`bX`**VYghYi`Yfb`Yg`Ybhgd`fYW`YbX``9]b`  
k`Y]hYfYf`A`YX]YbVYf]W`h`U`h`**Ub[ Y[ YVYb`XUgg`X]Y`FY[ ]Yfi`b[`  
Yfk`UfhYhž`]bg[ YgUa`h`%`A ]``UfXYb`8c``Uf`Ub`GhYi`Yfb`]cb`XYf`  
[ YgUa`hYb`fi`gg]gWYb`? fmdhc!K`]fhgW`UZh`ni`Yf`U`hYb`"******

*9fk`UfhYb`G]Yž`XUgg`Fi`gg`UbX`X]Y`J`c`fgW`f]ZhYb`ZØf`gY]bYb`  
? fmdhc k À\fi b[ ga`Uf`\_h`VU`X`ZYfh][`ghY``Yb`k`]fX3`HY]`Yb`G]Y`  
⇒fY`;`YXUb`\_Yb`ni`X]YgYa`H`Y`a`U`]a`?`ca`a`Yb`hUfVYfY]W`  
i`bhYb`a`]h`"*

@ Vca ]f`HUggYj`

@ 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`A`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 hhYfghcW`ž`D]l UVUmž`K ]\_]7ca`a`cbg

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

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

f[ bWh]cbfXž`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. #A`c`b`b`Y`W`h`Z`U`W`V`c`c`\_"`b`Y`h`#`b`S`l`G`#`g`X`\_"`g. l`Z`v`a` `1`%/  
j`Y`fg]cb1`j`'`"&"/Z`g"dUfYbhB`c`X`Y"]bgYfh6Y`Z`c`f`Y`f`gž`Z`gŁ`/`q`f`X`c`W`a`Y`bhž  
fgWf]d`hfž`fZ`U`W`V`c`c`\_!`g`g`X`\_`f`k`Ł`/`

8YhU]`g

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