

Ghi X]Y`Z]bXYh`X]Y`VY`]YVhYghYb  
? fmdhc k Å\ fi b[ Yb`VY]`fi gg]gWk Yb`Gc W]U`!  
A YX]U!B i hnYfb`

⊕`Y]bYa`⊕\f`a`]h`ghY][ YbXYb`? fmdhcdfY]gYb`\UhXUg`Cb`]bY!  
; YgWk Åhn`ØVYf`? fmdhc k Å\ fi b[ Yb`XYi`h]Wk`ni [ Ybca`a`Yb`"  
⊕`XYb`fi`gg]gWk Yb`gcn]U`Yb`A YX]Yb`Xi`fWk [ YZØ\fhY  
F YWk YfWk Yb`\UVYb`Yf[ YVYbž`XUgg`A ØbnYb`Ua``a`Y]ghYb  
X]g`\_i`h]Yfh`k`YfXYbž`i`bX`Yg`]gh`b]Wk`h`bi`f`6]hWk]b`]b`XYb  
? ØdZYb`XYf`A`YbgWk Yb`"9l`dYfhYb`"ghYb`X]Y`Ua``\Åi`Z][ ghYb  
Yfk`Å\bhYb`? fmdhc g`]b`fi`gg]gWk Yb`gcn]U`Yb`A YX]Yb`Ui`Z`6fUbX  
5bU`mh]Wgž`Y]b`Ui`Z`A`YX]YbVYc`VUWk`hi`b[ `gdYn]U`]g]YfhYg  
l`bhYfbY`a`Yb`]b`XYb`]; l`G`UfYUž`\Uh`\_Øfn`]Wk`Y]bYb`6Yf]Wk`h  
j`YfØZYb`h]Wk`hž`]b`XYa``X]Y`VY`]YVhYghYb`? fmdhc k Å\ fi b[ Yb  
bUWk`XYf`<`Åi`Z][`\_Y]h`]\fYg`5i`ZhYhYbg`]b`fi`gg]gWk`gdfUWk`][ Yb  
; YgdfÅWk Yb`]b`gcn]U`Yb`A YX]Yb`Y]b[ Yghi`Zh`k`YfXYb`"l`a`XUg  
⊕`hYfYggY`Ub`? fmdhc!H\Ya`Yb`ni`VYk`YfhYbž`\UVYb`gY]bY  
9l`dYfhYb`ØVYf`&ž(`A`j`]UfXYb`ØZYb`h]Wk`Y`B`UWk`f]Wk`hYb  
/ Ua`d^Y`]d/

⇒b`Y]bYa`'u\`f`a` ]h`ghY][`YbXYb`?`fmdhcdFY]gYb` \`Uh`XUg  
Cb`]bY!;`YgWk`Àhn`ØVYf`?`fmdhck`À\`fi`b[`Yb`XYi`h`]W  
ni`[`Ybca`a`Yb" `⇒b`XYb`fi`gg]gW`Yb`gc n]U`Yb`A`YX]Yb  
Xi`fW`[`YZØ\`fhY`F`YW`YfW`Yb` \`UVYb`Yf[`YVYbž`XUgg`A`ØbnYb  
Ua`'a`Y]ghYb`X]g\_i`h]Yfh`k`YfXYbž`i`bX`Yg`]gh`b]W`h`bi`f  
6]hW`]b`]b`XYb`?`ØdZYb`XYf`A`YbgW`Yb"

9I`dYfhYb`'`]ghYb`X]Y`Ua`' \`Ài`Z][`ghYb  
Yfk`À\`bhYb`?`fmdhcg`]b`fi`gg]gW`Yb`gc n]U`Yb  
A`YX]Yb`Ui`Z

6fUbX`5bU`m]Wgž`Y]b`Ui`ZA`YX]YbVYcVUW`hi`b[`gdYn]U`]g]YfhYg  
I`bhYfbY\`a`Yb`]b`XYb` ;`I`G`UfYUž`\`Uh`\_Øfn`]W`Y]bYb`6Yf]W`h  
j`YfØZZYb`h]W`hž`]b`XYa`'X]Y`VY`YVhYghYb`?`fmdhck`À\`fi`b[`Yb`bUW  
XYf`<`Ài`Z][`\_Y]h]\`fYg`5i`ZhYhYbg`]b`fi`gg]gW`gdfUW`][`Yb  
;`YgdfÀW`Yb`]b`gc n]U`Yb`A`YX]Yb`Y]b[`Yghi`Zh`k`YfXYb" `I`a`'XUg  
⇒bhYfYggY`Ub`?`fmdhc`!`H\`Ya`Yb`ni`'VYk`YfhYbž`\`UVYb`gY]bY`9I`dYfhYb  
ØVYf`&ž(`A`j`]UfXYb`ØZZYb`h]W`Y`B`UW`f]W`hYb`a`]h`a`Y\`f`U`g`(`\*`ž+  
A`j`]UfXYb`K`ØfhYfb`Ub`U`mg]Yfhž`X]Y`ja`'C`\_hc`VYf`&\$`&%`j`YfØZZYb`h]W`h  
k`i`fXYb"

A ]h\]ZY`XYf`7`i ghYf]b[ !HYW\bc`c[ ]Y`YbXhYW\_hYb`X]Y` : cfgW\Yf`ØVYf`  
\* \$\$`B Ua` Ybgj` Uf]UbhYbžY]bgW\`Y»` ]W\`Gmbcbma` YbžX]Y`g]W\`Ui` Z  
? fmdhck` Å\fi` b[ Yb`VYn]Y\YbžX]Y`j` cb`fi` gg]gW\gdFUW\][ Yb  
6Ybi` hnYfb`]a` ``YhnhYb`A` cbUh]b`]\fYb`6Y]hfÅ[ Yb`Yfk` Å\bh`k` i` fXYb`"  
BYVYb`XYa` `GhUbXUfX` ` ` ž`XYf`\_mf]``]gW\Yb`GW\fy]V`k`Y]gY  
j`cb`6]hW\]bžYbh`Å`h`X]Y`GhUh]gh]\_`VY]gd]Y`gk`Y]gY`K` ÕfhYf`k` ]Y  
 ` ž` ` `gck` ]Y`XUg`U`hY]b]gW\Y` `V]hW\]b` ž` **6H7** ž  
i`bX`UbXYfY`"

6]hW\]b`f**6H7**ž`X]Y`k`Y`hk`Y]h`ZØ\`fYbXY`? fmdhck` Å\fi` b[ `bUW\  
A`Uf`\_h`Ud]hU`]g]Yfi` b[ ž`ZØ\`fh`a` ]h`(`(``%)`"&\$`\$`9fk` Å\bi` b[ Yb`X]Y`@]ghY`  
XYf`%\$`VY`]YVhYghYb`X][ ]hU`Yb`A` ØbnYb`]b`fi` gg]gW\gdFUW\][ Yb  
gcn]U`Yb`A` YX]Yb`j`cb`6fUbX`5bU`mh]Wg`Ub`"8`Ug`GhUV`YW\]b!`HYh`Yf`  
fI` **G8H**ž`]gh`Nk`Y]hYf`a` ]h`,`)`"`,`\$`ž`@]hYW\]b`f@**H7**ž`X]Yb`Xf]hYb`D`Uhn`  
a` ]h`(`&(`"``\$\$`i`bX`Yh`YfYi`a`f**9H<**ž`Y[ `h`a` ]h`(`%+`"-`\$\$`BYbbi` b[ Yb  
Ub`j` ]YfhYf`GhY``Y`"

...

**LFD**`Zc`[ `h`a` ]h`&%+`"(`\$\$`9fk` Å\bi` b[ YbžX]W\h`[ YZc`[ `h]`cb`8C` ;` 9  
a` ]h`&%\*`"``` \$\$`"Gc`UbU`fGC`@ž`VY`Y[ `h`a` ]h`%-`\*`"-` \$\$`XYb`g]YVhYb`D`Uhnž`  
A`cbYfc`f**LA F**ž`Y[ `h`a` ]h`%+`+"`-` \$\$`BYbbi` b[ Yb`Ui`ZXYa` `UW\hYb`  
D`Uhnž`[ YZc`[ `h]`cb`6ck`gW\]b`f**6G7**ž`a` ]h`%)`,`"(`\$\$`"A` ]h`%&&`"\$\$\$`  
j`Yfj`c``gh`ÅbX][ `h`hfUj`U`U`f**5J**5ž`X]Y`@]ghY`XYf`%\$`ZØ\`fYbXYb`  
? fmdhck` Å\fi` b[ Yb`Xi`fW\`9fk` Å\bi` b[ Yb`]b`fi` gg]gW\Yb`gcn]U`Yb`  
A`YX]Yb`"

8]Y`5i` hc`fYb`XYf`**YfbYb**`6YUW\hYb`G]Yž`XUgg`]b`X]YgYa` `Ů\`f`Y]bY`  
F`U``mY`ZØ`f`6]hW\]b`ghUh[ YZi`bXYb`U`h`f**6H7**ž`a` ]h`XYa` `DfY]g`dfc`  
W\]b`a` Y\`f`U`g`Y]ba`U`Y]b`5``nY]h`cW\`YffY]W\Yb`"8]Y`  
5i`ZnY]W\bi` b[ Yb`i`a`ZUggYb`**6H7**`9f`YffY]W\hY`]a` `C`\_hc`VYf`ZUgh`  
\*`+`"\$\$\$`i`G8`i`bX`b`Å\`YfhY`g]W\`5bZUb[ `Bcj`Ya`VYf`XYf`\*`-`"\$\$\$`i`G8`!  
A`Uf`\_Y`"

8Yb'5bU'mghYb'ni Zc`[ Y`UhXUg'`hYfYggY`XYf`Fi ggYb`Ub`? fmdhc!  
H\Ya Yb'gY]bYb`<O\Ydi b`h'bcW`b]W`h'YffY]W`h" 9g`[ ]Vh  
HUi gYbXY`j cb`j YfgW`]YXYbYb`? fmdhck A`fi b[ Yb`Ui ZXYf`K Y`hž  
j cb`XYbYb`]a`fi gg]gW`gdfUW`][ Yb`FUi a`bi f`\* \$\$`Yfk A`bh  
k YfXYb ž`VYa Yf`Yb`g]Y`i bX`k Y]gYb`XUfUi Z`\]bž`XUgg`Fi gg`UbX  
Y]b`[ fc»Yg`DchYbn]U`U`hž`U`g`Yg`\_Øfn`]W`]b`X]Y`Hcd`" `Y]bgh]Y[ `

**6]hWc]b!A ]b]b[ `8Ygh]bUh]cbYb"**

8]Y`8i fW`Xf]b[ i b[ `j cb`? fmdhck A`fi b[ Yb`k ]fX`ni bY`a Ybž`gU[ Yb  
X]Y` : cfgW`Yf`j cfUi gž`i bX`XUg'`hYfYggY`Ub`? fmdhc`k ]fX`k Y]hYf  
ni bY`a Yb`"8YfnY]h`g]bX`? fmdhck A`fi b[ Yb`]b`Fi gg`UbX`gck ]Y  
XUa ]h`j YfVi bXYbY`5\_hj]h`hYb`k ]Y`Wc]b`8]Y`DfA[ i b[ `k i fXY`bi f  
hY]`k Y]gY`fY[ i `]Yfž`U`i dhg`W`]W`Xi fW`XUg` ; YgYm` Cb`8][ ]hU`  
: ]bUbW]U`5ggYhg "8]Y`fi gg]gW`Yb`6Y`ØfXYb`VYfY]hYb`g]W`XUfUi Z  
j cfž`Y]bY`F Y]\Y`k Y]hYfYf`fY[ i `Uhc]gW`Yf`5gdY`hY`Ubni [ Y`Ybž  
Y]bgW`Y`Y»`]W`XYf`Yb][ Yb`]a`Ni gUa`a Yb`Ub[ `a ]h**A ]b]b[ `i bX  
6YghYi Yfi b[ "**

*K ]Y`VYi fhY]`Yb`G]Y`X]Y`9f[ YVb]ggY`XYf`Ghi X]Y`ni f  
Dcdi `Uf]h`h`j cb`? fmdhck A`fi b[ Yb`]b`fi gg]gW`Yb`gc`n]U`Yb  
A YX]Yb3`@UggYb`G]Y`Yg`i bg]a` ?ca`a YbhUfVYfY]W`i bhYb  
k ]ggYb`"*

*6]`XbUW`k Y]gY. `G`i hhYfghcW`ž`D]i UVUmž`K ]\_]`7ca`a cbg*

K Y]hYfY`VY`]YVhY`B UW`f]W`hYb

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

f bW]cbfXž`gž`]XŁ`o`j Uf`gž`Z`g`1`X"[ Yh9`Ya Ybhg6mHU[ BUa YfgŁO\$Q'  
]ZfK"[ Yh9`Ya Ybh6mXf]XŁ`fYhi fb/`g`1`X"WfYUhY9`Ya YbhfgŁ/`g"]X`1  
]X/`g"gfW "hhdg. #WcbbYW"ZUW`Vcc\_"bYh#YbSl G#gX\_"g. l ZVa `1 %/  
j Yfg]cb1 j ' "&/Z`g"dUfYbhBcXY"]bgYfh6YZcfYfłgž`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