

8 fUZh? ]b[ g`A Uf\_Yhd`UW`k Å\`h`Dc`m[ c b  
ZØf`A U]bghfYUa !B: H! 9]bZØ\ fi b[

8 fUZh? ]b[ g`A Uf\_Yhd`UW`\`Uh'g]W`a ]h`XYf`Ui Z`9h\YfYi a  
VUg]YfYbXYb`G\_U`Yfi b[ gd`UhhZcfa`Dc`m[ c b  
ni gUa a Yb[ YhUbž`i a`gY]bY`6`cW\_WU]b!: Å\][`\_Y]hYb`ni  
Yfk Y]hYfb`i bX`X]Y`5\_nYdhUbn`j cb`\_i bXYbgdYn]Z]gWYb`B: Hg  
Xi fW`X]Yb`A U]bghfYUa`ni`ZØfXYfb";`Y]W`nY]h][`UVYb`X]Y  
Y]bXYi h][`Yb`5XfYggYb`]a`Dc`m[ cb!BYh`k Yf`\_Y]bYb`bYi Yb  
FY\_cfX`j cb`ØVYf`%\$\$`A`j`cbYb`YffY]W`h"8 fUZh? ]b[ g`Yf\`Å`h  
Ni [ f]ZZ`Ui Z`Dc`m[ c b`B UW`X]Yf`DUf`hbYfgW`UZh`\`Uh`8 fUZh? ]b[ g  
bi b`Ni [ Ub[ `ni`Y]bYf`g\_U`YfVUfYb`i bX`i a k Y`hZFYi bX`]W`Yb  
6`cW\_WU]b!@Øgi b[ ž`XYf`:]fa`U`]b`Y]bYf`\_Øfn`]W`  
j YfØZZYb`h]W`hYb`5b\_ØbX][`i b[ `Yfk Å`b`h"DUi`"@VYfa`Ubž  
A`hVY[ fØbXYf`i bX`DfÅg]XYb`h`ZØf`[ `cVU`Y`DfcXi`\_hY`i bX  
HYW`bc`c [ ]Yb`VY]`8 fUZh? ]b[ gž`ghY`hY`ZYghž`XUgg  
G\_U`YfVUf`\_Y]h`i bX`B UW`\`U`h][`\_Y]h`X]Y`[ fØ`hY  
<YfUi`gZcfXYfi b[ `XYf`a`Y]ghYb`6`cW\_WU]b!BYh`k Yf`\_Y`ni  
gY]b`gW`Y]bYbž`k Yg\`U`V`g]W`gY]b`i b`hYfbY`a`Yb  
/ Ua`d`^`Y`d/

8 fUZh? ]b[ g`A Uf\_Yhd`UW`\`Uh'g]W`a ]h`XYf`Ui Z`9h\YfYi a  
VUg]YfYbXYb`G\_U`Yfi b[ gd`UhhZcfa`Dc`m[ c b`ni gUa a Yb[ YhUbž`i a  
gY]bY`6`cW\_WU]b!: Å\][`\_Y]hYb`ni`Yfk Y]hYfb`i bX`X]Y`5\_nYdhUbn  
j cb`\_i bXYbgdYn]Z]gWYb`B: Hg`Xi fW`X]Yb`A U]bghfYUa`ni`ZØfXYfb"  
;`Y]W`nY]h][`UVYb`X]Y`Y]bXYi h][`Yb`5XfYggYb`]a`Dc`m[ cb!  
BYh`k Yf`\_Y]bYb`bYi Yb`FY\_cfX`j cb`ØVYf`%\$\$`A`j`cbYb`YffY]W`h"

8 fUZh? ]b[ g`Yf\`Å`h`Ni [ f]ZZ`Ui Z`Dc`m[ c b

B UW`X]Yf`DUf`hbYfgW`UZh`\`Uh`8 fUZh? ]b[ g`bi b`Ni [ Ub[ `ni`Y]bYf  
g\_U`YfVUfYb`i bX`i a k Y`hZFYi bX`]W`Yb`6`cW\_WU]b!@Øgi b[ ž`XYf  
:]fa`U`]b`Y]bYf`\_Øfn`]W`j YfØZZYb`h]W`hYb`5b\_ØbX][`i b[  
Yfk Å`b`h"

DUi ``@]VYfa Ubž'A ]hVY[ fØbXYf'i bX'DfÀg]XYbh'ZØf' [ `cVU`Y`DfcXi \_hY  
i bX`HYWkbc`c [ ]Yb`VY]'8 fUZh? ]b [ gž'ghY`hY`ZYghž'XUgg`G\_U`YfVUf\_Y]h  
i bX`B UW\U'h] [ \_Y]h`X]Y' [ fØ» hY`<YfUi gZcfXYfi b [ `XYf`a Y]ghYb  
6`cW`WU]b!BYhmk Yf\_Y`ni`gY]b`gW`Y]bYbž'k Yg\U`V`g]W`gY]b  
l bhYfbY\`a Yb`Ui ZDc`m [ cb`\_cbnYbh]Yfh`\Uh"

Qck Yj YfžQ8 U`k ]f`\Yi hY`XYb'; fi bXghY]b`ZØf`X]Y`J ]g]cb`XYg  
8 fUZh? ]b [ g`A Uf\_Yhd`UW`j cb`a cf [ Yb`Y [ Ybž'g]bX`X]Y  
i a ZUggYbXYb`9f\_Ybbhb]ggY`i bX`VYk À\fhYb`DfcXi \_hY`j cb`Dc`m [ cb  
fi bX`i a `g\_U`YfVUfY`@Øgi b [ Yb`j cb`i bgW`ÀhnVUfYa`K Yfh ž'gU [ hY  
@]VYfa Ub"

8i fW`X]Y`Bi hni b [ `XYf`Dc`m [ cb!HYWkbc`c [ ]Y`k ]fX`8 fUZh? ]b [ g`X]Y  
: À\ [ \_Y]hYb`gY]bYg`B: H!A Uf\_hd`UhnYg`j YfVYggYfb`i bX`XYb  
6Ybi hnYfb`Y]b`j YfVYggYfhYg`9f`YVb]g`V]YhYbž`Y]bgW`Y]Y»`]W`XYg  
Ni [ Ub [ g`ni`Yi`\_i`g] Yb`b]W`h`Z`b [ ]V`Yb`Hc`Yb!GUa`a`i`b [ Ybž  
gU [ hY`GUbXYYd`BU]`k U`ž`A ]hVY [ fØbXYf`j cb`Dc`m [ cb"

⇒ a`5i [ i`gh`&\$`%`k`i`fXY`8 fUZh? ]b [ g`A Uf\_Yhd`UW`]b`DUfhbYfgW`UZh  
a ]h`Hca`6fUXmg`B: H!D`Uhhžcfa`5i`hc [ fUd`\` [ Y [ fØbXYh`9g`V]YhYh  
6Ybi hnYfb`X]Y`A`Ò [ `]W`\_Y]hž`Gdcfh!GUa`a`YfghØW`Y`j cb`Y]b [ ]Yb`XYf  
VY`YVhYghYb`5h\`YhYb`k ]Y`l`gU]b`6c`hi bX`G]a`cb`6]Ygž`XYa`l`G!  
Ua`Yf]\_Ub]gW`Yb`Hi`fbYfž`ni`\_Ui`ZYb`i bX`ni`j`Yf`\_Ui`ZYb"

8 fUZh? ]b [ g`k ]fX`Dc`m [ cb!J`U`]XUhc`f

⇒ a`F`U`a`Yb`XYf`DUfhbYfgW`UZh`ghY`hY`8 fUZh? ]b [ g`ZYghž'XUgg`Yg`X]Y  
A`Ò [ `]W`\_Y]h`\Uhž`Y]b`J`U`]XUhc`f`]a`Dc`m [ cb!BYhmk Yf`\_ni`k`YfXYbž  
k`Ug`Yg`8 fUZh? ]b [ g`Yfa`Ò [ `]W`hž`6`ØW`\_Y`ni`YfghY`Yb`i`bX  
HfUbgU`\_h]cbYb`a`]h`Y]bYa`DfccZ`cZ`GhU`\_Y`fDcGŁ!`?`cbgYbgdfc`hc`\_c`  
ni`Ui`h\Ybh]Z]n]YfYb"

Gc`hY`8 fUZh? ]b [ g`Ui`»`YfXYa`\_U`nYdh]YfYbž`Y]b`J`U`]XUhc`f`ZØf  
Dc`m [ cb`ni`k`YfXYbž`k`ØfXY`X]Yg`X]Y`≠`ZfUghfi`\_hi`fg]W`Yf\`Y]h`ZØf  
XUg`BYhmk Yf`\_V]YhYb`i`bX`Ui`W`X]Y`a`cbYh`Å`Yb`?`cghYb`j`cb  
HfUbgU`\_h]cbYb`fYXi`n]YfYb"

B: H`J ]g]cb`j`cb`Dc`m [ cb

8]Y`DUfhbYfgW\UZh`\_Ua`ni`Y]bYf`NY]hž`U`g`Dc`m[ cb`gY]bYb`i: c\_i g  
U`a`Å`]\W\`Ui ZX]Y`B: H!9bhk ]W\_`i b[ `j`Yf`U[ YfhY"

5bZUb[ `X]YgYg`đ\`fYg`\_ØbX][ hY`Dc`m[ cb`X]Y`GhUfh`j cb`Dc`m[ cb  
Ghi X]cgž`Y]bY`đ]h]Uhj`Yž`X]Y`g]W\`Ui ggW\`Y»`]\W\`Ui Z`6`c`W`W`U]b!  
[ YghØhnhY`Gd]Y`Ybhk ]W\_`i b[ Yb`gck ]Y`b]W\`h`Z`b[ ]V`Y`Hc`\_Yb  
\_cbnYbhf]YfYb`k ]fX"

8]Y`≠YY`VYghY\`h`XUf]bž`XUg`BYhmk`Yf`\_`UhhfU`\_hj`ni`a`UW\Yb`i`bX  
a`Y\`f`6`Ybi`hnYf`ZØf`X]Y`,`VYfbU\`a`Y`gY]bYf`DfcXi`\_hY`i`bX  
8]Ybgh`Y]ghi`b[ Yb`ni`i[ Yk`]bbYb"

A 5H=7!< U`hYf`,`VYfgdUbbi`b[ Yb

6]g\Yf`gW\Y]bh`X]Y`đ]h]Uhj`Y`ni`[ i`bghYb`j`cb`Dc`m[ cb`ni`gY]bž`XU  
X]Y`NU\`X`Yf`5XfYggYbž`X]Y`XYfnY]h`XYb`bUhj]Yb`Hc`\_Yb`A`5H=7`XYg  
BYhmk`Yf`g`\`U`hYbž`k`Y]hYf`ni`[ Ybca`a`Yb`\`Uh"

Dfc`8UhYb`j`cb`Dc`m[ cb`GWU]bž`[ ]Vh`Yg`XYfnY]h`ØVYf`%\$\$  
A`j``cbYb`Y]bXYi`h[ Y`5XfYggYbž`X]Y`X]Y`?`fmdhck`Å\`fi`b[`\`U`hYbž  
k`cVY]`X]Y`\`ØW\`ghY`5bnU\`bYi`Yf`?`cbhcUba`Y`Xi`b[ Yb`Ua`i`&`"  
GYdhYa`VYf`&\$&%`j`YfnY]W\`bYhk`i`fXYž`k`c`&ž)`A`j``cbYb`5XfYggYb  
\]bni`[ YZØ[`h`k`i`fXYb"

Dc`m[ cb!BYhnk Yf\_UXfYggYb" `Dc`m[ cbgWUj"

8YhU]`g

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