

9]Wł gZY`X. : Øb Zh\_`Ägg`Yf`Yf`YVYb  
gd]Y`Yf]gWł Yb`9]b gh]Y[ `]bg`GWł i`^U\ f

9]Wł gZY`XYf: Øb Zh\_`Ägg`Yf`Yf`YVYb`Y]bYb`]bhYfU\_h]j Yb  
H\YUhYfUVYbXž`XYf`8Ya c\_fUh]Y`i bX`[ Ya Y]bgUa Y  
9bhgWł Y]Xi b[ Yb`gd]Y`Yf]gWł`j Yfa`]hhY`h"

9]Wł gZY`X""9]b`bYi Yf`@YVYbgUVgWł b]hh`VY[ ]bbh`ZØf`X]Y  
: Øb Zh\_`Ägg`Yf`XYf`< Y]`][ Ybgh`ÄXhYf`FY[ Y`gWł i`Y` @cfYbn`?Y`bYf` "  
8Yf`6Y[ ]bb`XYg`bYi Yb`GWł i`^U\ fYg`k ]fX`b]Wł h`bi f`a`]h`bYi Yb  
: ÄWł Yfb`ž`gcbXYfb`Ui Wł`a`]h`gdUbbYbXYb`5\_h]j ]h`ÄhYb`[ YZY]Yfhž`X]Y  
XYb`GWł`Ø`Yfb`^Y`ZYb`gc`^Yb`ž`g]Wł`gWł bY`^Yf`Y]bni`^YVYb""9]b  
VYgcbXYfYg`< ][ \`][ \h`g]bX`X]Y`?YbbYb`YfbhU[ Yž`X]Y`XYb  
GWł i`ghUfh`ni`Y]bYa`i`bj Yf[ Ygg`]Wł Yb`9f`YVb]g`a`UWł Yb"

I a`X]Y`bYi Yb`GWł`Ø`Yf]bbYb`i`bX`GWł`Ø`Yf`Ub`X]Y`GWł i`Y  
\YfUbni`ZØ\ fYb`ž`k`i`fXY`Y]b`\_fYUh]j Yg`Dfc[ fUa`a`]bg`@YVYb  
[ Yfi`ZYb`" `a`f`U\ a`Yb`X]YgYf`?YbbYb`YfbhU[ Y`k`i`fXY`Y]b  
Di`ddYb`h\YUhYfgh`ØW`\_df`ÄgYbh]Yfhž`XUg`XYb`^ b[ Yb`Ni`^ØfYfb`Ui`Z  
i`bhYf`^U`hgUa`Y`K`Y]gY`k`]Wł h][ Y`[ YgY`^gWł`UZh]Wł Y`H\Ya`Yb  
b`Ä`YfVf]b[ h`8`Ug`9fZfYi`^]Wł Y`H\YUhYf`^Ui`g`9fZ`fhk`Uf`ni`^; Ugh  
i`bX`ghY`^h`X]Y`5i`ZØ\ fi`b[ ^`Wł`k`]^`XUgž`k`Ug`Xi`b]Wł h`k`]^`gh`j`cfž  
X]Y`]b`XYf`5i`^U`ghUhhZUbX`i`bX`X]Y`GWł`Ø`Yf]bbYb`i`bX`GWł`Ø`Yf`Ub  
XUg`H\Ya`U`8Ya`c\_fUh]Y`^YfUb`ZØ\ fhY"

8Ya c\_fUh]gWł Y`9bhgWł Y]Xi b[ Yb`gd]Y`Yf]gWł  
j Yfa`]hhY`h

8Ug`nYbhfU`Y`H\Ya`U`XYg`H\YUhYfgh`ØW`\_g`XfY`^h`g]Wł`i`a`Y]bY  
: Ua`j]Yž`X]Y`]b`Y]bYa`bYi Yb`< Ui`g`^YVh`i`bX`bi`b`Yb`hgWł Y]XYb  
a`i`ggž`k`Yf`k`Y`Wł Yg`N]a`a`Yf`VYn]Y`Yb`XUfZ`?`UggYb`Y`fYf]b`< Y]\_Y  
< YbgY`^gWł`]^XYfh`8Ug`Gh`ØW`\_j`YfUb`gWł`Ui`^]Wł`hY`XYb`?`]bXYfb`Ui`Z

i bhYf\U`hgUa Y`K Y]gYž`k ]Y`k ]W\h[ `Yg`]ghž`[ Ya Y]bgUa Y  
9bhgW\Y]Xi b[ Yb`ni `hfYZZYb`i bX`XUVY]`j YfgW\YXYbY`5bg]W\hYb`ni  
VYfØW\_g]W\h[ Yb" `8]YgY`5fh`XYf`J Yfa `]h`i b[ `k Uf`b]W\h`bi f  
`Y\ffY]W\ž`gcbXYfb`Ui W\`gdUbbYbX`i bX`[ YgdfcW\Yb"

6YgcbXYfg`YfZFYi h`Ai » YfhY`g]W\`< YbgY``ØVYf`XYb`]bhYfU\_h]j Yb  
5VgW\`i gg`XYg`GhØW\_gž`VY]`XYa `X]Y`?`]bXYf`U\_h]j `]b`XYb  
9bhgW\Y]Xi b[ gdfcnYgg`Y]bVYnc[ Yb`k i fXYb" `8]Y`GW\Ø`Yf]bbYb  
i bX`GW\Ø`Yf`\UhYb`X]Y`A Ø[ `]W\`\_Y]hž`gY`Vgh`GhY``i b[ `ni `VYn]Y\Yb  
i bX`ni `Yf`YVYbž`XUgg`A Y]bi b[ Yb`g]W\`AbXYfb`\_ØbbYbž`k Ybb  
ØVYfnYi [ YbXY`5f[ i a YbhY`Ui Z`XYb`H]gW\`\_ca a Yb ž`VYf]W\hYh`g]Y  
VY[ Y]ghYfh"

8]Y`J YfUbgU`hi b[ `k Uf`b]W\h`bi f`Y]bY`i bhYf\U`hgUa Y  
5Vk YW\g`i b[ `]a `GW\i `U``hU[ ž`gcbXYfb`Ui W\`Y]bY`[ fc» Ufh][ Y  
; Y`Y[ Yb\Y]hž`i a `gcn]U`Y`?ca dYhYbnYb`ni `ZØfXYfb" `K A\fybX`XYg  
H\YUhYfg`k i fXY`XYf`; fi bXghY]b`ZØf`Y]b`ghÅf`YfYg  
; Ya Y]bgW\UZhg[ YZØ\``[ Y`Y[ hž`k Ug`VYgcbXYfg`k ]W\h[ `]ghž`XU`g]W\  
X]Y`bYi Yb`i: ØbZh\_`Ägg`Yf`]b`Y]bYa `j Ø``][ `bYi Yb`i a ZY`X  
ni fYW\hZ]bXYb`a ØggYb"

8]Y`FYU\_h]cb`XYf`HY]`bY\`a Yf`k Uf`Xi fW\k Y[ `dcg]h]j ž`k Ug`g]W\  
Ui W\`]b`XYf`V]g\Yf][ Yb`FYgcbUbn`nY][ hž`X]Y`XUg` 9fZFYi `]W\Y  
H\YUhYf `]b`UbXYfYb`GW\i `Yb`gUa a Y`b`\_cbbhY" `8 Ug`?cbnYdhž  
6]Xi b[ `i bX`i bhYf\U`hi b[ `ni `ca V]b]YfYbž`nY][ h`XYi h`]W\ž`k ]Y  
YZZY\_h]j `gc`W\Y`5bgÅhnY`gY]b`\_ØbbYbž`i a `GW\Ø`Yf`ZØf`k ]W\h[ Y  
H\Ya Yb`ni `gYbg]V`]g]YfYb"

## 9]b`[ Y`i b[ YbYf`GhUfh`]bg`GW\i `U\`f

: Øf`X]Y`bYi Yb`i: ØbZh\_`Ägg`Yf`ghY``hY`X]YgY`H\YUhYfUi ZZØ\fi b[ `b]W\h  
bi f`Y]bYb`gdUbbYbXYb`9]bgh]Y[ `]b`XUg`GW\i `U\`f`XUfž`gcbXYfb  
Ui W\`Y]bY`Y]bn][ Ufh][ Y; Y`Y[ Yb\Y]hž`X]Y`A ]hgW\Ø`Yf`VYggYf  
\_YbbYbni `YfbYb" `<Y]\_Y`<YbgY``\YVh`\Yf] cfž`XUgg`Xi fW\`XUg  
H\YUhYfghØW`\_Y]b`h]YZYfYg`J YfghÅbXb]g`ZØf`XYa c`\_fUh]gW\Y  
DfcnYggY`[ Yk cbbYb`k i fXYž`k Ug`XYb`GW\Ø`Yfb`]b`XYf`k Y]hYfYb  
gW\i `]gW\Yb`@Ui ZVU\`b`ni [ i hY`\_ca a Yb`k ]fX" `8]YgYg`9f`YVb]g  
\_ØbbhY`XYb`; fi bXghY]b`ZØf`Y]b`bYi Yg`i bX`cZZYbYg`A ]hY]bUbXYf`ja

?`UggYbfUi a ``Y[ Ybž`XUg`Ui Z`F YgdY`hi bX`8 ]g\_i gg]cb`VUg]Yfh"

⊕`XYf`\Yi h][ Yb`NY]hž]b`XYf`8Ya c`\_fUh]Y`cZn]b`: fU[ Y`[ YghY``h`k ]fXž  
]gh`Yg`j cb`YbhgWXY]XYbXYf`6YXYi hi b[ ž`?]bXYfb`X]Y`K ]W`h][ \_Y]h  
j cb`[ Ya`Y]bgW`UZh]W`Yb`9bhgWXY]Xi b[ Yb`i bX`A`Y]bi b[ gj`]Y`ZU`hini  
j Yfa`]hY`b``Gc`W`Y`Dfc`Y`\_hY`hfU[ Yb`XUni`VY]ž`XUgg`X]Y`b`ÅW`ghY  
; YbYfUh]cb`K`YfhY`k`]Y`Hc`YfUbn`i bX`: U]fbYgg`Yf`Yfb`hi bX  
Ubk`YbXYhž`k`Ug`Y`hnh]W`Ui`W`ni`f`Gh`Åf`\_i b[ `XYg`[ YgY``gW`UZh]W`Yb  
Ni`gUa`a`Yb`U`hg`VY]hf`Å[ h"

fYX

8Ya c`\_fUh]YV]`Xi b[ `]a`G`W`i`U`hU[ ``8]Y`: ÕfXYfi b[  
XYa c`\_fUh]gW`Yf`K`YfhY`]b`G`W`i`Y`b`]gh`Y]b`nYbhfU`Yg`5b`]Y[ Yb`XYf  
6`]Xi b[ gdc`]h]\_`]b`8Yi hgW`UbX"

⊕`XYb`Y`hnhYb`⊕\fYb`\Uh`g]W`XUg`6Yk`i`gghgY]b`ZØf`X]Y`6YXYi hi b[  
XYf`8Ya c`\_fUh]Y`Yfn]Y`i b[ `]b`G`W`i`Y`b`]Yfgh`Åf`\_h``8Yf`6i bX`i bX`X]Y  
@ÅbXYf`\UVYb`nU`\fY]W`Y`⊕]h]Uh]j`Yb`]bg`@YVYb`[ Yfi`ZYbž`i`a  
↑ b[ Yb`A`YbgW`Yb`X]Y`; fi bX`U[ Yb`Y]bYf`Z`b`\_h]cb]YfYbXYb  
8Ya c`\_fUh]Y`b`Å\Yfni`Vf]b[ Yb``Dfc[ fUa`a`Y`k`]Y`8Ya c`\_fUh]Y  
`YVYb`°`i bX`⊕]h]Uh]j`Y`ZØf`8Ya c`\_fUh]Y`i bX`Hc`YfUbn`g`Y`h`m`Y`b`g]W`  
U`\_h]j`ZØf`X]Y`: ÕfXYfi b[ `]j`cb`DUfh]n]dUh]cb`i bX`dc`]h]gW`Yf`6`]Xi b[  
Y]b``8]YgY`Dfc[ fUa`a`Y`V]YhYb`G`W`i`Y`b`F`Yggci`fW`b`i bX  
l`bhYfghØ`hni b[ `Ubž`i`a`G`W`Ø`Yf`]b`XYb`9bhgWXY]Xi b[ gdfcnYggYb  
]\fYf`@YVYbgk`Y`h`U`\_h]j`Y]bni`V]bXYb"

8Yf`9]bZ`i`gg`j`cb`H`Y`U`h`Y`f`U`i`Z`6`]`Xi`b`[

8]Y`J`Yfk`YbXi b[ `]j`cb`H`Y`U`h`Y`f`U`g`d`Å`X`U`[`c`[ `]gW`Y`g`A`]hY``]gh`b]W`h  
bYi`ž`\U`h`Y`X`c`W`i`]b`XYb`Y`hnhYb`⊕\fYb`ni bY`a`YbX`Ub`6YXYi hi b[  
[ Yk`c`b`b`Yb``G`h`i`X]Yb`nY][ Ybž`XUgg`H`Y`U`h`Y`f`U`i`Z`Ø`fi b[ Yb`b]W`h`bi`f  
XUg`\_fYUh]j`Y`8Yb`\_Ybž`gcbXYfb`Ui`W`gcn]U`Y`?ca`dYhYbnYb  
ZØfXYfb``8Ug`H`Y`U`h`Y`f`ghØ`W`\_`⊕W`k`]XUgž`k`Ug`Xi`b]W`h`k`]gh`gh  
Y]b`6Y]gd]Y`XUZØfž`k`]Y`?i`bgh`i`bX`6`]Xi b[ `\_ØbbYbž`i`a`]b`hYfU`\_h]j`Y`@YfbYfZU`fi b[ Yb`ni`gW`UZZYb``G`W`Ø`Yf  
\_ØbbYb`Xi`fW`F`c``Ybgd]Y`Y`9a`dU`h`]Y`Y`b`h`k`]W`\_Y`b`i`bX`X]Y  
DYfgdY`\_h]j`Yb`UbXYfYf`A`YbgW`Yb`j`YfghY`Yb"

9]b`k Y]hYfYf`J cfhY]`gc`WXYf`H\YUHyfj YfUbgH`hi b[ Yb`]gh`X]Y  
A Ò[ `]W\_X]hž`H\Ya Yb`Ui ZY]bY`UbgdfYWXYbXY`i bX`ni [ `Àb[ `]WXY  
K Y]gY`ni `j Yfa `]hY`b`"G]Y`YfÒZbYb`8]g\_i fgY`i bX`fY[ Yb`X]Y  
GW`Ø`Yf`XUni `Ubž`ØVYf`[ YgY`gW`UZh]WXY`H\Ya Yb`bUW`ni XYb`\_Yb`  
Gc`k ]fX`X]Y`Bchk YbX][ \_Y]hj`cb`8]g\_i gg]cbYb`i bX`5Vgh]a a i b[ Yb  
]a `FU`a Yb`XYf`8Ya c\_fUh]Y`b]W`h`bi f`h\YcfYh]gW`Yf`Ài hYfž  
gcbXYfb`dfU\_h]gW`YfZU`fVUf`[ Ya`UW`h"

5\_hi Y`Y`GhUh]gh]\_Yb`ni f`8Ya c\_fUh]YYfn]Y\ i b[

@Ui`h`Y]bYf`l a ZFU[ Y`XYg`8Yi hgW`Yb`š [ YbX]bgh]hi hg`Ui g`XYa` `U\`f  
&\$&&[ UVYb`+, `i` `XYf`VYZFU[ hYb`š [ YbX`]WXYb`Ubž`XUgg`g]Y`Y]b  
VYggYfYg`J Yfgh`ÀbXb]g`ZØf`8Ya c\_fUh]Y`Xi fW`dfU\_h]gW`Y  
@YfbUbg`ÀhnY`k ]Y`K`cf\_g`cdg`cXYf`H\YUHyfdfc`Y`hY` `UVYb`"Ni XYa  
VYf]W`hYhYb`\*) `i` `j`cb`Y]bYf`dcg]h]j Yb`9bhk ]W`i b[ `]fYf`gcn]U`Yb  
?ca`dYhYbnYb`Xi fW`gc`WXY`J YfUbgH`hi b[ Yb`"8]YgY`NU`Yb  
i bhYfghfY]WXYb`X]Y`K`]f\_gUa`\_Y]h`i]bhYfU\_h]j Yf`5bg`ÀhnY`ni f  
: ÒfXYfi b[ `XYa`c\_fUh]gW`Yf`K`YfhY`gck ]Y`XYf`gcn]U`Yb  
J YfUbhk`cfhi b[ `i`bhYf`GW`Ø`Yfb"

≠g[ YgUa`h`nY][`h]g]W`ž`XUgg`J YfUbgH`hi b[ Yb`k ]Y`X]Y`XYg  
`9fZfYi` `]WXYb`H\YUHyfg` `b]W`h`bi f`i`bhYf`U`hgUa` `g]bXž`gcbXYfb  
Ui`W`Y]bY`k ]W`h][`Y`F`c`Y`]b`XYf`6]`Xi b[ g`UbXgW`UZh`gd]Y`Ybž  
]bXYa` `g]Y`XUg`XYa`c\_fUh]gW`Y`6Yk`i`gghgY]b`↑ b[ Yf`A`YbgWXYb  
gh`Àf`\_Yb`i`bX`g]Y`U\_h]j` `]b`XYb`DfcnYgg`XYf`A`Y]bi b[ gV]`Xi b[  
Y]bVYn]Y\Yb"

fYX

8YhU]`g

6Ygi WXYb`G]Y`i bg`Ui Z.`b!U[ "XY