

9]b`NY]W Yb`XYf` : fYi bXgW UZh. `? i bgh'i bX  
: Ygh`Ui Z`XYa `5XX]g!5VYVU!D`Uhn

9]b`bYi Yg`?i bghk Yf`\_Ua `5XX]g!5VYVU!D`Uhn`gma Vc`]g]Yfh  
X]Y`GhAXhYdUfhbYfgW UZh`@Y]dn][ g`i bX`ZY]Yfh`X]Yg`a ]h`Y]bYa  
: Ua `]Y]bZYgh`Ua `&' "5i [ i gh'&\$&( "

9]bY`VYXYi hYbXY`\_i `hi fY`Y`J YfV]bXi b[ `nk ]gW Yb`@Y]dn][ `i bX  
5XX]g`5VYVU`k ]fX`a ]h`XYf`9]bk Y]`i b[ `Y]bYg`bYi ` [ YghU`hYhYb  
?i bghk Yf`\_g`Ui Z`XYa `5XX]g!5VYVU!D`Uhn` [ YZY]Yfh"8]YgYg  
?i bghk Yf`\_]gh`b]W h`bi f`Y]bY`Agh\Yh]gW Y`6YfY]W Yfi b[ `XYg  
D`UhnYgž`gcbXYfb`Ui W`Y]b`ghUf`\_Yg`Gma Vc``Z0f`X]Y`VYbX][ Y  
DUfhbYfgW UZh`nk ]gW Yb`XYb`VY]XYb`GhAXhYb"8]YgY  
GhAXhYdUfhbYfgW UZh`k i fXY`&\$\$( `]bg`@VYb` [ Yfi ZYb`i bX`gc`  
Xi fW`XUg`?i bghk Yf`\_Y]b`XUi Yf`UZhYgž]g]W hVUfYg`NY]W Yb  
Yf`U`hYb"

8Yf`5XX]g!5VYVU!D`Uhn`Ub`XYf` ; f0bYk U`XghfU»Y`k i fXY`&\$\$( `U`g  
GhUXh[ UfHYbd`Uhn`bYi [ YghU`hYhi bX`hfA[ h`gY]h`&\$%) `XYb`BUa Yb  
XYf`Ah\]cd]gW Yb`<Ui dhghUXh"8Ua ]h`k ]fX`X]Y`J YfV]bXi b[  
nk ]gW Yb`@Y]dn][ `i bX`5XX]g`5VYVU`b]W h`bi f`Xi fW`cZZ]n]Y`Y  
9f`\_Äfi b[ Yb`i bhYfgh0mhž`gcbXYfb`Ui W`Xi fW`\_fYUh]j Y`i bX  
\_0bghYf]gW Y`5i gXfi W\_gZcfa Yb" `Gc`W Y`&]h]Uh]j Yb`g]bX`k ]W h][ ž  
i a`XUg`J YfghAbXb]g`i bX`X]Y`K YfhgW`Ähni b[ `nk ]gW Yb  
j YfgW ]YXYbYb`?i `hi fYb`ni `Z0fXYfb"

? 0bgh`Yf]gW Yf`K YhhVYk YfV`i bX  
; Yk ]bbYfXYg][ b

Ni f`l a gYhni b[ `XYg`?i bghk Yf`\_g`k i fXY`Y]b`\_0bgh`Yf]gW Yf  
K YhhVYk YfV`]b`5XX]g`5VYVU`cf[ Ub]g]Yfhž]b`Ni gUa a YbUfVY]h`a ]h  
XYa `Xcfh][ Yb`9bhchc!7c`Y[ Y"5i g`Y]bYf`J ]Y`nU`^`j cb`&+

K YhhVYk YfVgVY]hfÅ [ Yb`Àh\]cd]gWXYf`? Øbgh`Yf]bbYb`i bX`? Øbgh`Yf  
k À\`hY`Y]bY`ž fmž`VYghY\YbX`Ui g`A ]h[ `]YXYfb`Ui g`@Y]dn][ `i bX  
5XX]g`5VYVUž`&\$&&`XYb`9b`hk i fZ]j cb`i: fYg\k cmYb`9bXf]Ug`Ui g`  
8]YgYg`gdUbbYbXY`Dfc`Y`\_h`nY][ hž`k ]Y`?i bgh`ØVYf`i; fYbnYb`\]bk Y[  
j Yfa ]hY`bX`k ]f`\_Yb`\_Ubb`i bX`\YVh`X]Y`?fYUh]j ]hÅh]j cb`? Øbgh`Yfb  
Ui g`Y`h\]cd]Yb`\Yfj`cf"

8]Y`9b`hgW`Y]Xi b[ `ZØf`Y]b`Àh\]cd]gWXYg`8Yg][ b`i bhY`fghfY]W`h`X]Y  
\_i`hi fY``Y`J YfV]bXi b[ `nk ]gWXYb`XYb`VY]XYb`GhÅXhYb`i bX`X]Y  
[ Y[ YbgY]h][ Y`žgd]fUh]cbž`X]Y`Ui g`X]YgYf`DUf`hbYfgW`UZh`Yb`hghY`\h`  
Gc`W`Y`K YhhVYk YfVY`ZØf`XYfb`b]W`h`bi f`X]Y`?fYUh]j ]hÅhž`gcbXYfb  
Ui W`X`Yb`]bhYf`\_i`hi fY``Yb`5i ghUi gW`ž`XYf`ZØf`X]Y`ni \_ØbZh][ Y  
Ni gUa`a`YbUfVY]h]b`j YfgW]YXYbYb`6YfY]W`Yb`Yb`hgW`Y]XYbX`]gh"

: Y]Yf`]W`\_Y]hYb`ni f`9]bk Y]\i b[

8]Y`9]bk Y]\i b[ `XYg`?i bghk Yf\_g`k ]fX`Ua`i`&`"5i [ i gh`&\$&(  
[ YZY]Yfž`i bX`ni`X]YgYa`5b`Ugg`k ]fX`Ui W`Y]b`i: Ua`j]YbZYgh  
ghUhhZ]bXYb`"5V`%)`.\$`\$`i` \f`g]bX`U`Y`6Øf[ Yf]bbYb`i bX`6Øf[ Yf  
\Yfn`]W`Y]b[ Y`UXYbž`Ub`XYb`i: Y]Yf`]W`\_Y]hYb`hY]`ni bY`a`Yb`"8 Ug  
: Ygh`V]YhYh`Y]b`i bhYf`U`hgUa`Yg`i bX`UVk YW`g`i b[ gfY]W`Yg  
Dfc[ fUa`a`ZØf`X]Y`[ Ub`nY`i: Ua`j]Y`i bX`]gh`Y]b`\Yfj`cffU[ YbXYg  
6Y]gd]Y`X`U`ZØfž`k ]Y`gc`W`Y`J YfUbghU`hi b[ Yb`XUg  
; Ya`Y]bgW`UZh]g[ YZØ`\`ghÅf`\_Yb"

: Øf`XUg`Y]V`]W`Y`K`c`\`k ]fX`[ Ygcf[ hž`i bX`X]Y`i; ÅghY`\_ØbbYb`g]W`  
Ui Z`Y`W`YfY`i; YhfÅb`\_Yž`YfZf]gWXYbXYg`9]g`i bX`hmd]gW`Àh\]cd]gWXY  
GdY]gYb`Ui g`Y]bYa`i: ccXhfi W`\_ZFYi Yb`"5i » YfXYa`k ]fX`XUg`8i c  
»Jnna`Uf]g`a`]h`Àh\]cd]gWXYf`A`i`g]\_ZØf`Y]bY`ZYgh]W`Y`5ha`cgd`\ÅfY  
gcf[ Ybž`X]Y`X]Y`\_i`hi fY``Y`J ]Y`ZU`h`@Y]dn][ g`i bX`5XX]g`5VYVUg  
k ]XYfgd]Y[ Y`h"

A ]h`X]YgYb`i: Y]Yf`]W`\_Y]hYb`k ]fX`b]W`h`bi f`XYf`i; YVi fhghU[ `XYf  
GhÅXhYdUf`hbYfgW`UZh[ YZY]Yfž`gcbXYfb`Ui W`X`Ug`9b[ U[ Ya`Ybh  
VY]XYf`GhÅXhYž`\fY`6Yn]Y]\i b[ Yb`Xi fW`?i`hi`f`i bX`?i bgh`k Y]hYf  
ni`j`Yfh]YZYb"

9]b`6`]W`\_]b`X]Y`Ni`\_i`bZh

8 Ug?i bghk Yf\_i bX`X]Y`XUa ]hj YfVi bXYbYb': Y]Yf`]W\`\_Y]hYb`g]bX  
a Y`f`U`g`bi f`Y]bY`\_i`hi fY`Y`J YfUbgU`hi b[ "G]Y`nY][ Yb`XUg  
9b[ U[ Ya Ybhj cb`@]dn][ `i bX`5XX]g`5VYVUž`X]Y` fYi bXgW\UZh  
nk ]gW\Yb`XYb`Gh`XhYb`ni`dZY[ Yb`i bX`ni`j Yfh]YZYb" `ϕXYa`X]Y  
Gh`XhY`k Y]hYf\]b`gc`W\Y`\_fYUh]j Yb`Dfc`Y`\_hY`i bhYfgh`hnYbž`\_ObbYb  
g]Y`b]W\h`bi f`XUg`J Yfgh`bXb]g`ZØfY]bUbXYf`ZØfXYfbž`gc bXYfb`Ui W\  
a Ø[ `]W\Y`ni`\_ØbZh][ Y`?ccdYfUh]cbYb`Ubghc» Ybž`X]Y`]b  
j YfgW\]YXYbYb`6YfY]W\Yb`XYg`@YVYbg`j cb`6YXYi hi b[ `gY]b  
\_ObbYb"

Gc`W\Y`ϕ]h]Uh]j Yb`Yf]bbYfb`i bg`XUfUbž`k ]Y`k ]W\h][ `i`hi fY`Yf  
5i ghUi gW\`]ghž`i bX`k ]Y`?i bgh`b]W\h`bi f`X]Y`GW\`Ob`Y]h`Y]bYg`C fhYg  
VYfY]W\Yfhž`gc bXYfb`Ui W\`U`g`6fØW`\_Y`nk ]gW\Yb`A YbgW\Yb`i bX  
?i`hi fYb`Z`b[ ]Yfh" `ϕ`Y]bYf`[ `cVU`]g]YfhYb`K`Y`hž`]b`XYf`\_i`hi fY`Y  
ϕXYbh]h`h`i bX`J Yfgh`bXb]g`Y]bY`nYbhfU`Y`F`c`Y`gd]Y`Ybž`g]bX`gc`W\Y  
DUfhbYfgW\UZhYb`j cb`i bgW\`hnVUfYa`K`Yfh"

## 8 ]Y`6YXYi hi b[ `XYf`Gh`XhYdUfhbYfgW\UZh

8 ]Y`Gh`XhYdUfhbYfgW\UZh`nk ]gW\Yb`@]dn][ `i bX`5XX]g`5VYVU`\`Uh  
Y]bY`VYXYi hYbXY`\]ghc]gW\Y`i bX`\_i`hi fY`Y`8]a Ybg]cb" `G]Y  
k i fXY`%-`+` `]bg`@YVYb`[ Yfi ZYb`i bX`ZØfXYfb]W\h`bi f`XYb  
5i ghUi gW\`j cb`?i`hi f`i bX`6]Xi b[ ž`gc bXYfb`Ui W\`X]Y  
k ]fhgW\UZh]W\Y`Ni gUa`a YbUfVY]h`nk ]gW\Yb`XYb`VY]XYb`Gh`XhYb`  
Gc`W\Y`DUfhbYfgW\UZhYb`g]bX`c`Zh`Y]b`A ]hhY`ž`i`a`XYb  
]bhYf`\_i`hi fY`Y`b`8]U`c[ `ni`ZØfXYfb`i bX`XUg`J Yfgh`bXb]g`nk ]gW\Yb  
j YfgW\]YXYbYb`BUh]cbYb`i bX`\`fYb`6Øf[ Yfb`ni`j Yfh]YZYb"

ϕ`XYb`Y`h`h`Yb`ϕ\`fnY`\`bhYb`\`Uh]g]W\`X]Y`GnYbY`XYf`]bhYfbUh]cbU`Yb  
Gh`XhYdUfhbYfgW\UZhYb`[ Yk`UbXY`h" `J ]Y`Y`Gh`XhY`\_c`bnYbhf]YfYb  
g]W\`Y`i`hni`hU[ Y`gh`f`\_Yf`Ui`Z`b`UW\`U`h][ Y`9b`hk ]W`\_i`b[ `i bX`gc]U`Y  
; YfYW\h][ `\_Y]hž`i bX`@]dn][ `]gh`XU`\_Y]bY`5i gbU`a`Y" `Dfc`Y`\_hY`k ]Y  
X]Y`?Øbgh`Yfk`Y`h`VYk`Y`fVY`i bX`XUg`UbgW\`]Y» YbXY` : Ua`j]YbZYgh  
Ui ZXYa`5XX]g]5VYVU!D`Uhn`g]bX`6Y]gd]Y`Y`XUZØfž`k ]Y`\_i`hi fY`Y  
J YfUbgU`hi b[ Yb`ni`f` : ØfXYfi b[ `j`cb` ; Ya`Y]bgW\UZh`gV]Xi b[ `i bX  
gc]U`Ya`Ni gUa`a Yb`U`h`VY]hfU[ Yb`\_ObbYb"

? i `hi fY`Y`9`Ya YbhY`XYf`9]bk Y]\i b[ gZY]Yf

8 Ug`VYj cfghY\YbXY` : Ua `]YbZYgh`k ]fX`Y]bY`J ]Y`nU\`j cb  
\_i `hi fY`Yb`9`Ya YbhYb`i a ZUggYbž`X]Y`gck c\`]b`@]dn][ `U`g`Ui W  
]b`Y`h\]cd]Yb`j Yfk i fnY`h`g]bX" `8 ]Y`Åh\]cd]gWY`A i g]\_ž`X]Y`j cb`XYa  
8 i c`Jnna Uf]g`d`f`ÅgYbh]Yfh`k ]fXž`gd]Y`h`Y]bY`nYbhfU`Y`F c`Y`]b`XYf  
: Y]Yf`i bX`j Yfk UbXY`h`XYb`D`Uhn`]b`Y]bYb`C`fh`XYg`\_i `hi fY`Yb  
5i ghUi gW`g" `A i g]\_`U`h`g]W`U`g`k ]f`\_i b[ gj c`Y`g`A ]hY`Y`Yfk ]YgYbž  
i a `A YbgWYb`ni gUa a Ybni Vf]b[ Yb`i bX`\_i `hi fY`Y`X`Ybh]h`Å`h`b`ni  
ZY]Yfbž`k Ug`X]Y`6`YXYi hi b[ `gc`W`Yf`J YfUbghU`hi b[ Yb  
i bhYfghfY]W`h"

8 Yg`K Y]hYfYb`k ]fX`XUg`\_i `]bUf]gWY`5b[ YVch`XYg` : YghYg`Xi fW  
Åh\]cd]gWY`GdY]gYb`Yf[ `Abnhž`X]Y`Y]bY`k ]W`h][ Y`F c`Y`]b`XYf  
Y`h\]cd]gWYb`?i `hi f`gd]Y`Yb" `8 ]Y`J Yfk YbXi b[ `hfUX]h]cbY`Y`Yf  
F YnYdhY`i bX`Ni hU`h`b`V]Y`h`h`b]W`h`bi f`Y]bY`\_i `]bUf]gWY  
9fZU\fi b[ ž`gcbXYfb`k ]f`\_h`Ui W`U`g`6`f`Ø`W`\_`nk ]gWYb`XYb`?i `hi fYb"

K ]fhgW UZh`]WY`5i gk ]f`\_i b[ Yb

8 ]Y`Gh`Å`X`h`Y`d`U`f`h`b`Y`f`g`W`U`Z`h`i` b`X`X]Y`VY[ `Y]hYbXYb`J YfUbghU`hi b[ Yb  
\UVYb`Ui W`k ]fhgW UZh`]WY`J c`fhY]`Y" `8 ]Y` : Ø`f`X`Y`fi b[ `XYg  
Hci f]ga i g`Xi fW`\_i `hi fY`Y` : Ygh]j U`g`i bX`J YfUbghU`hi b[ Yb`hf`Å[ h  
ni f`c`\_`U`Y`b`K ]fhgW UZh`VY]" `6`Y`gi W`Y`f`\_`Ø`b`b`Y`b`X`i fW`X]Y  
J YfUbghU`hi b[ `Ub[ YfY[ h`k YfXYbž`X]Y` : Ughfcbca ]Y`i bX`X]Y  
; YgW`Å`Z`h`Y`X`Y`f`I a [ YVi b[ `ni `VYgi W`Y`b`ž`k Ug`ni `Y]bYf`6`Y`YVi b[  
XYg`Ø`h]WYb`< UbXY`g`Z`Ø`f`h"

Ni g`Å`h`n`]W`k ]fX`X`i fW`X`Y`b`5i ghUi gW`nk ]gWYb`?Øbgh`Yfb`i bX  
?i `hi fgW UZZYbXYb`X]Y`?fYU`h]j k ]fhgW UZh`]b`VY]XYb`Gh`Å`X`h`Y`b  
[ Ygh`Å`f`\_`h" `8 ]Y`Ni gUa a YbUfVY]h]a `F`U`a Yb`j cb`?i bghd`f`c`Y`\_`h`Y`b  
gW UZh`b]W`h`bi f`Y]b`B`Y`h`nk Yf`\_ž`gcbXYfb`Z`Ø`f`X`Y`fh`Ui W`X]Y  
k ]fhgW UZh`]WY`B`U`W`\`U`h][ `Y]h]b`X`Y`b`\_`f`Y`U`h]j Yb`6`Y`f`Y]WYb"

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