

GhUXh`C`XYbVi f[ `ghfYVh  
B Ua YbgÀbXYfi b[ `Ub. `fC`XVŁ`ghUhh  
fC`XYbVi f[ Ł

C`XYbVi f[ `fC`XVŁ`ghfY]hYhi a `GWfY]Vk Y]gY. `F Uh`VYUbfU[ h  
ŸbXYfi b[ `XYf`?`Ua a YfVYnY]Wb i b[ `ZØf`fYW h]WY`?`Uf\Y]h  
i bX`?cghYbYfgdUfb]g"

⇒a `bcfXXYi hgWYb`FUi a `gcf[ hY]b`GhfY]hi a `X]Y`\_cffY\_hY  
GWfY]Vk Y]gY`XYf`GhUXh`C`XYbVi f[ `fC`XVŁ`ZØf`5i ZfY[ i b[ ""8Yf  
GhUXhfUh`\Uh]g]W`]b`gY]bYf`Øb[ ghYb`G]hni b[ `ZØf`Y]bYb`5bhfU[  
Ui g[ YgdfcWYbž`XYf`Y]bY`ŸbXYfi b[ `XYf`fYW h]WYb`GWfY]Vk Y]gY  
ni f: c`[ Y`\UVYb`\_ØbbhY""8]Yg`]gh`b]W h`bi f`Y]bY: fU[ Y`XYf  
6i W ghUVYbž`gcbXYfb`VYhf]Zh`Ui W`X]Y`≠Yb]h]h`h`XYf`GhUXh`i bX  
]\fY`fYW h]WYb`8c\_i a YbhY"

8]Y`JYfk ]ffi b[ `i a `X]Y`B Ua Ybg[ YVi b[ `fY]W h`V]g`]bg`>\f`%- (\*  
ni fØW\_ž`U`g`C`XYbVi f[ `ni a `YfghYb`A U`X]Y`GWfY]Vk Y]gY  
C`XYbVi f[ `fC`XVŁ` `]b`gY]bYf`<Ui dhgUhni b[ `j Yfk YbXYhY""8Yf  
; fi bX`ZØf`X]YgY`gdYn]Y``Y`5V\_Øfni b[ `\_cbbhY`V]g`Ub[ `b]W h  
UVgW`]Y»YbX`[ Y`\_`Àfh`k YfXYbž`XcW`X]Y`GhUXh] Yfk U`hi b[  
j Yfa i hYhž`XUgg`g]Y`Ui g`J YfgY\Yb`k`À`fYbX`XYf  
; YgYhn[ YVi b[ gdfcnYggY`XYf`; YV]YhgYfYzcf a Yb`]b`XYb`%- +\$Yf  
>\fYb`YbhghUbX"

C ZZYbY`HØf`VY]a `=bbYba ]b]ghYf]i a

8 Ug`b]YXYfg`ÀW]g]gWY`≠bYba ]b]ghYf]i a `nY][`h]g]W`XYf`G]hi Uh]cb  
[ Y[ YbØVYf`Ui Z[ YgW`cggYb""K ]Y`XUg`A ]b]ghYf]i a `]b`Y]bYf  
GhY`i b[ bU\ a Y`Yf`\_`ÀfhYž`\_ØbbhY`Y]b`Zcf a Y``Yf`5bhfU[ `ni f  
ŸbXYfi b[ `XYf`GWfY]Vk Y]gY`j cb` C`XYbVi f[ `fC`XVŁ`ni  
C`XYbVi f[ `fC`XYbVi f[ Ł `nk Uf`i bhYfghØhni b[ `Z]bXYbž`k ØfXY

YXcW`Ui W`Yf\YV`]WY`?cghYb`i bX`fYW`h`]WY  
<YfUi gZcfXYfi b[ Yb`bUW`g]W`n]Y\Yb`"Ni XYa`\_`ObbhY`X]Y  
I a gYhni b[ `VYghY\YbXYf`8c\_i a YbhY`i bX`XYfYb`F`YW`hgg]WYf\Y]h  
]bZfU[ Y`[ YghY`h`k YfXYb`"

5a`A`cbhU[ `VYgW`cgg`XYf`GhUXhfUhž`VY]a``bYba`]b]ghYf]i a`Y]bYb  
5bhfU[ `Y]bni`fY]W`Ybž`i a`X]Y`GW`fY]V`k Y]gY`j`cb`fC`XYbVi`f[`L`Ui`Z  
fC`XV`L`ni`Å`bXYfb`"8]YgYf`6YgW`i`gg`k`i`fXY`c`bY`;`Y[`Ybgh]a`a`Y  
Ub[`Ybca`a`Ybž`k`Ug`nY][`hž`XUgg`XYf`GhUXhfUh`Y]b`Y]h`]W`Y`b`hYf  
Y]bYf`@`Øgi`b[ `ghY`hž`X]Y`gck`c`X]Y`U`hY`GW`fY]V`k Y]gY`VY]VY`Å`h  
U`g`Ui`W`X`Yb`fYW`h`]W`Yb`J`cf[`UVYb`F`YW`bi`b[ `hf`Å[`h`Gca`]h  
\_`ObbhY`XYf`5bhfU[ `Y]bY`dfU[`a`Uh]gW`Y`@`Øgi`b[ `XUfghY`Ybž`X]Y`XYb  
5i`Zk`UbX`i`bX`X]Y`?`cghYb`Z`Øf`X]Y`GhUX`h`a`]b]a`]Yfh`"

## 8]Y`fYW`h`]W`Yb``a`d`]\_`Uh]cbYb

8Ug`b]YXYfg`ÅW`g]gW`Y`?`ca`a`i`bU`j`YfZUggi`b[`g[`YgYhn`g]Y`h`igY]h  
&\$%`X]Y`GW`fY]V`k Y]gY`C`XYbVi`f[`fC`XYbVi`f[`L`j`cf`"8]YgY  
FY[`Y`i`b[ `k`i`fXY`Y]b[`YZ`Ø`fhž`i`a`Y]bY`\_`UfY`l`bhYfgW`Y]Xi`b[  
nk`]gW`Yb`C`XYbVi`f[ `]b`B]YXYfgUW`gYb`i`bX`C`XYbVi`f[ `]b  
GW`Y`gk`][`!`<`c`ghY]b`ni`[`Yk`Å`f`Y]ghYb`"8]Y`?`Ua`a`Yf`a`ØgghY`U`gc  
]b`fYW`h`]W`\_`cffY`\_`hYf`:`cfa`[`Y`Å`bXYfh`k`YfXYbž`k`Ug`XYb  
GhUX`hj`YfhfYhYfb`Gcf[`Yb`VYfY]hYh`"

8]Y`5i`Zg]W`hgVY`Å`ØfXY`U`h`XUfUi`Z[`YXf`Åb[`hž`XUgg`X]Y`GhUXh  
C`XYbVi`f[ `X]YgY`J`cf[`UVYb`Y]b`Å`hž`k`Ug`Ui`Z`K`]XYfghUbX`XYf  
GhUX`hj`Yfk`U`hi`b[ `[`Yg`hc`»`Yb`]gh`"G]Y`Uf[`i`a`Ybh]Yfhž`XUgg`Y]bY  
gW`bY`Y`l`a`ghY`i`b[ `XYf`GW`fY]V`k Y]gY`bYVYb`XYb`a`Ø[ `]W`Yb  
Z]bUb`n]Y`Yb`6Y`Ughi`b[`Yb`Ui`W`ni`l`bg]W`Yf\Y]hYb`]b`XYb  
fYW`h`]W`Yb`6Y`Ub[`Yb`Z`Ø`fYb`\_`ObbhYž`VYgcbXYfg]b`6Yni`[ `Ui`Z  
V]g\Yf`Ui`g[`YghY`h`Y`8c\_i`a`YbhY`"

8Yf`B`Ua`Yb`ggghY]h`Øgh`b]W`h`bi`f`fYW`h`]W`Yž`gcbXYfb`Ui`W  
Ya`ch]cbU`Y`F`YU`\_`h]cbYb`Ui`g`":`Øf`j`]Y`Y`6Øf[`Yf`j`cb`C`XYbVi`f[ `]gh  
X]Y`GW`fY]V`k Y]gY`Y]b`HY]`\_`]`fYf`»`Yb`h]h`Å`h`"8]Y`5`hghUX`hž`X]Y  
`]g`hc`f]gW`Yb`Gh`Å`hhYb`i`bX`X]Y`?`i`hi`f`g]bX`ZYgh`a`]h`XYa`B`Ua`Yb  
j`YfUb`\_`Yfhž`i`bX`Y]bY`J`Yf`Å`bXYfi`b[ `k`ØfXY`Z`Øf`Y]b][`Y`6Øf[`Yf`Ub`XYf  
;`YgW`]W`hY`i`bX`HfUX]h]cb`\_`fUhnYb`"8Yf`GhUXhfUh`ghY`h`igca`]h]`cf`"

XYf' < YfUi gZcfXYfi b[ ž'XYb' [ YgYhn`]W\Yb' 5bZcfXYfi b[ Yb' [ YfYW\h  
ni 'k YfXYbž'c\ bY'X]Y''c\_U'Y' ðYbh]hÅhni ' [ YZÅ\ fXYb"

## 5i gk ]f\_i b[ Yb'Ui Z'X]Y'; Ya Y]bgW\ UZh

8]Y'9bhgW\Y]Xi b[ 'XYg'F Uhg'\_ØbbhY'k Y]hfY]W\YbXY': c'[ Yb'ZØf'X]Y  
JYfk U'hi b[ 'i bX'X]Y'6Øf[ Yf'\UVYb''6Y]'XYf'9]bZØ\fi b[ 'Y]bYf  
bYi Yb'GW\fy]Vk Y]gY'a ØgghYb'j ]Y'Y'cZZ]n]Y''Y'8c\_i a YbhY'i bX  
A UhYf]U']Yb'Ub[ YdUggh'k YfXYb''8]Yg'fy]W\h'j cb'6f]YZ\_ØdZyb'i bX  
K YVg]hY! ð\U'hYb'V]g'\]b'ni 'J Yf\_Y\fgnY]W\Yb'i bX'cZZ]n]Y''Yb  
l f\_i bXYb"

8Yf'5bhfU[ 'k ]fX'bi b'VY]a ' ðbYba ]b]ghYf]i a 'Y]b[ YfY]W\hž'XUg  
g]W\ 'a ]h'XYf'H\Ya Uh]\_ 'Ui gY]bUbXYfgYhnYb'k ]fX''8cW\ 'Y[ U'k ]Y  
XYf'5bhfU[ 'Ui g[ Y\h'8]Y': fU[ Y'XYf'B Ua YbggW\fy]Vi b[ 'V'Y]Vh'Y]b  
gdUbbYbXYg'H\Ya Už'XUg'VY]'XYb'6Øf[ Yfb'j cb'C'XYbVi f[ 'g]W\Yf  
bcW\ 'Y]bY'k Y]Y'ja ' ; YXÅW\hb]g'V'Y]VYb'k ]fX"

## F YW\ h`]W\ Y' < ØfXYb' i bX' ðXYbh]hÅh

8Yf'GhfY]hi a 'X]Y'GW\fy]Vk Y]gY'a U[ 'ni bÅW\gh'hf]j ]U'YfgW\Y]bYbž  
XcW\ 'Yf'k ]fZi[ fi bX'Y[ YbXY': fU[ Yb'ØVYf'ðXYbh]hÅhi bX'HfUX]h]cb  
]b'Y]bYa 'g]W\ 'k UbXY'bXYb'fYW\h`]W\Yb'F U\ a Yb'Ui Z''8]Y  
GhUXhj Yfk U'hi b[ 'a ØW\hY'X]Y'5V\_Øfni b[ ' fC'XVŁ 'U'g'NY]W\Yb  
]\fYf'Y][ YbYb'; YgW\]W\hY'i bX'\_i 'hi fY''Yb'ðXYbh]hÅh'VYk U\ fYbž  
hfchn'XYf'fYW\h`]W\Yb' Bchk YbX][ \_Y]hYb''K ]Y'X]YgY  
5i gY]bUbXYfgYhni b[ ''Ynh`]W\ '[ Y'Øgh'k ]fXž'V'Y]Vh'UVni k UfhYbž  
UVYf'g]Y'nY][ h'XYi h`]W\ž'k ]Y'Yb[ 'fYW\h`]W\Y': cfa U']Yb'a ]h'XYf  
K U\fbY\ a i b[ 'XYf'Y][ YbYb'ðXYbh]hÅhj YfVi bXYb'g]bX"

< ]ghcf]gW\ Y' < ]bhYf[ fØbXY'ni f

B Ua Ybg[ YVi b[

8]Y'8]g\_fYdUbni]b'XYf'GW\fy]Vk Y]gY'j cb'C'XYbVi f[ '\Uh  
\]ghcf]gW\Y'K i fnY'bž'X]Y'V]g']b'X]Y'NY]h'ibUW\XYa 'Nk Y]hYb  
K Y'h\_f]Y[ 'ni fØW\_fY]W\Yb'' ða ' ð\ f' % - ( \* ž'\_i fn'bUW\XYf'; fØbXi b[  
XYg'@UbXYg'B]YXYfgUW\gYbž'k i fXY'X]Y'GhUXh'C'XYbVi f[ 'Ui Z[ fi bX

]\fYf'dc`h]gWXYb`i bX`UXa` ]b]ghfUH]j Yb`6YXYi hi b[ `U`g` C`XYbVi f[ fC`XVŁ` VYnY]Wx bYh`8 ]YgY`GWfY]Vk Y]gY`gc`hY`Y]bY`\_`UfY  
I bhYfgWXY]Xi b[ `ni`f`GhUXh`C`XYbVi f[ `]b`<c`ghY]bž`X]Y`XUa` U`g  
À\b`]WXYb`<YfUi`gZcfXYfi b[ Yb`[ Y[ YbØVYfghUbXž`gW UZZYb"

8Yf`J`Yf[ `Y]Wx`ni`UbXYfYb`GhÀXhYbž`X]Y`À\b`]WXY`DfcV`Ya`Y`a` ]h  
XYf`BUa`Ybg[ YVi b[ `U`hYbž`]gh`Ui`ZgWx`i`ggfY]Wx`"9]b`6Y]gd]Y`]gh  
X]Y`GhUXh`fY]Vi f[ `]a`6fY]g[ Ui`ž`X]Y`YVYbZU`g`Xi`fW`X]Y  
5V[ fYbni b[ `ni`f`fY]Vi f[ `]b`XYf`GWk`Y]n`Y]bY`gdYn]Z]gWXY  
GWfY]Vk Y]gY`Ybhk`]W`Y`hY`" < ]YfVY]k`i`fXY`XYf`Ni`gUhn`ni`f  
I bhYfgWXY]Xi b[ `Yfgh`gd`ÀhYf`]a`@Ui`ZY`XYf`d\`fYb`Zcfa`Y`  
ZYgh[ Y`Y[ h`Gc`WXY`I`a`gh`ÀbXY`g]bX`Ài`Z[ `]b`XYf`; YgWx]Wx`hY`j`cb  
GhÀXhYb`ni`Z]bXYbž`X]Y`Ui`g`dc`h]gWXYb`cXYf`[ Yc[ fUZ]gWXYb  
; fØbXYb`fYWx`h]Wx`V]bXYbXY`BUa`Yb`VYbØh[ Yb"

## 5\_hi`Y`Y`[ YgYhn`]Wx`Y`F`U`a`Yb`VYX]b[ i`b[ Yb

8Ug`?ca`a`i`bU]`YfZUggi`b[ g[ YgYhnž`XUg`]b`B]YXYfgUWx`gYb`gY]h  
&\$%`X]Y`fYWx`h]Wx`Y`; fi`bX`U[ Y`ZØf`X]Y`GWfY]Vk Y]gY`XYf  
GhÀXhYbUa`Yb`V]YhYhž`g]Y\`h]j`cfž`XUgg`UbXYgk`Y]hY`FY[ Y`i`b[ Yb`ZØf  
X]Y`BUa`Ybg[ YVi b[ `j`cb`GhÀXhYb`Y]b\`Y]h]Wx`i`bX`fYWx`hgg]Wx`Yf  
g]bX`"8Yf`5bhFU[ `XYf`GhUXh`C`XYbVi`f[ ž`X]Y`GWfY]Vk Y]gY`gc`ni  
ÀbXYfbž`XUgg`g]Y`k`]YXYf`XYb`U\_hi`Y`Yb`J`cf[ UVYb`Ybhgd]Wx`hž  
\_ØbbhY`k`Y]hfY]Wx`YbXY`?`cbgYei`YbnYb`\`UVYb`"9]bY`5bdUggi`b[  
\_ØbbhY`i`bhYf`UbXYfYa`VYXYi`hYbž`XUgg`j`]Y`Y`8c`\_i`a`YbhYž`X]Y`X]Y  
U`hY`GWfY]Vk Y]gY`Ybh`U`hYbž`ØVYfdfØZh`i`bX`a`Ø[ `]Wx`Yfk`Y]gY`bYi  
Ui`g[ YghY`h`k`YfXYb`a`ØggYb"

≠`8Yi`hgWx`UbX`[ ]Vh`Yg`À\b`]Wx`Y`J`cf`gWx`f]ZhYbž`X]Y`X]Y  
cfXbi`b[ g[ Ya`À»`Y`GWfY]Vk Y]gY`j`cb`GhÀXhYbUa`Yb`fY[ Y`b`"8]Yg  
]ghj`cf`U`Ya`k`]Wx`h[ `ZØf`X]Y`?`Uf\`Y]h]b`XYf`Ua`h]Wx`Yb  
?`cffYgdc`bXYbn`i`bX`ZØf`J`Yfk`U`hi`b[ gU`hY`"GhÀXhY`k`]Y`6c`bb`cXYf  
?`Øb`\`UVYb`]b`XYf`J`Yf[ Ub[ Yb\`Y]h`À\b`]Wx`Y`<YfUi`gZcfXYfi`b[ Yb  
[ Ya`Y]ghY`fhž`U`g`g]Y`bYi`Yž`Y]b\`Y]h]Wx`Y`GWfY]Vk Y]gY`b`Y]bZØ\`fhYb"

; YgY`gWx`UZh`]Wx`Y`F`Y`U`\_`h]c`b`Y`b`i`b`X

8]g`\_i`gg]c`b`Y`b

8]Y`FYU\_h]cbYb`XYf`6Øf[ Yf`Ui Z`XYb`J cfgW`U[ `ni f  
BUa Ybg`ÀbXYfi b[ `g]bX`Xi fW`k UW`gYb"9]b][ Y`5bk c`bYf`nY][ Yb  
J Yfgh`ÀbXb]g`ZØf`X]Y`Bchk YbX][ \_Y]h`Y]bYf`FYW`hgg]W`Yf`Y]hž  
k `À`fYbX`UbXYfY`X]Y`6YXYi hi b[ `XYf`hfUX]h]cbY`Yb`GW`fY]Vk Y]gY  
U`g`HY]`XYf`c`\_U`Yb`≠XYbh]h`h`VYhcbYb"8]g\_i gg]cbYb`ØVYf`c`\_U`Y  
≠XYbh]h`h`i bX` ; Ya Y]bgW`UZhg[ YZØ`g]bX`]b`j ]Y`Yb`Gh`XhYb`j cb  
nYbhfU`Yf`6YXYi hi b[ ž`VYgcbXYfg`k Ybb`Yg`i a `]ghcf]gW`Y`BUa Yb  
i bX`5V\_Øfni b[ Yb`[ Y`h"6YZfU[ i b[ Yb`i bhYf`XYb`6Øf[ Yfb`j cb  
C`XYbVi f[ `\_ØbbhYb`XUni `VY]hfU[ Ybž`Y]b`\_`UfYfYg`6]X`ØVYf`X]Y  
U`[ Ya Y]bY`Gh]a a i b[ `ni `[ Yk ]bbYb`i bX`X]Y`9bhgW`Y]Xi b[ ghf`À[ Yf  
]b`]\fYf`5f[ i a YbhUh]cb`ni `i bhYfghØhnYb"

Ni XYa `UVYb`gcn]U`Y`A`YX]Yb`Y]bY`D`UhhZcfa `[ YVchYbž`Ui Z`XYf  
g]W`6Øf[ Yf`ØVYf`X]Y`BUa Ybg`ÀbXYfi b[ `Ui ghUi gW`Yb`\_ØbbYb"  
J ]Y`Y`bi hnYb`X]YgY`A`Ò[ `]W`\_Y]hž`i a `]\fY`J`cf`]YVYb`Ui gni XfØW`Yb  
i bX`J`cfgW``À[ Y`ni `i bhYfVfY]hYbž`k ]Y`XYf`BUa Y`XYf`GhUXh`g]W`]b  
Ni \_i bZ`idf`ÀgYbh]YfYb`\_ØbbhY"8]YgY`5fh`XYf`DUfh]n]dUh]cb`]gh]b  
XYf`Yi h][ Yb`NY]h`k ]W`h][ `i bX`nY][ hž`k ]Y`gY`f`X]Y`A`YbgW`Yb`g]W`  
a`]h`]\fYf`GhUXh`]XYbh]Z]n]YfYb"

8YhU]`g

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