

; fØbXi b[ g\_`]a U`]b`8Yi hgWΛ`UbX. `8 ≍ ?  
k Ufbh`j cf`g][ b]Z]\_Ub hYa `F ØW\_ [ Ub [

8Yf`8 ≍ ?!FYdcfh`&\$&( `k Ufbh`j cf`j YfgWΛ`YWΛhYfhYb  
; fØbXi b[ gVYX]b[ i b[ Yb`]b`8Yi hgWΛ`UbX`i bX`ZcfXYfh  
A U» bU\ a Yb`ni f`J YfVYggYfi b[ "

8]Y`G]hi Uh]cb`ZØf`; fØbXYf`]b`8Yi hgWΛ`UbX`[ YghU`hYh`g]WΛ  
ni bY\ a YbX`gWΛk ]Yf][ žgc`Y]b`U\_hi Y`Yf`6Yf]WΛh`XYf`8Yi hgWΛYb  
≍Xi ghf]Y!`i bX`< UbXY`g\_Ua a Yf`fB ≍ ? Łž`XYf`U`Ufa ]YfYbXY`HfYbXg  
Ui ZnY][ h``6YfY]hg`]a `»\f`&\$&( `gY\Yb`j ]Y`Y`XUg`@UbX`U`g`k Yb][  
UhfU`\_hj `ZØf`i bhYfbY\ a Ybg[ fØbXi b[ Yb`` ≍WΛ`a UWΛY`a ]f`[ fc»Y  
Gcf[ Yb`i a `i bgYfYb`GhUbXcfh ž`Äi »YfhY`DYhYf`5Xf]Ubž`DfÄg]XYbh  
XYf`8 ≍ ? ži bX`j Yfk Y]gh`Ui ZY]bY`VYgcf[ b]gYffY[ YbXY  
9bhk ]W\_`i b[ ""

8Yf`6Yf]WΛhž`XYf`X]Y`9f[ YVb]ggY`Y]bYf`U\_hi Y`Yb`5bU`mgY  
ni gUa a YbZUgghž`nY][ h`Y]bYb`F ØW\_ [ Ub[ `XYf`6YfUhi b[ g[ Ygd fÄWΛY  
ni f`9i ]ghYbn[ fØbXi b[ `i a `gYWΛg`DfcnYbh]a `J Yf[ `Y]WΛ`ni a  
J cf`U\ f``8]Yg`]gh`VYa Yf`\_Ybgk Yfhž`XU`Yg`g]WΛ` \]YfVY]`i a `XYb  
h]Y ZghYb`GhUbX`gY]h`6YghY\Yb`XYf`8 ≍ ? ` \UbXY`h`8]Y`NU\`Yb`g]bX  
Y]b`\_`UfYf`< ]bk Y]g`XUfUi Zž`XUgg`dchYbn]Y`Y`; fØbXYf`b]WΛh`bi f  
g]b`\_YbXYg`≍hYfYggY`nY][ Ybž`gc bXYfb`Ui WΛ`X]Y  
FU\ a YbVYX]b[ i b[ Yb`U`g`i bj cfhY]` \UZh`Ya dZ]bXYb"

K UWΛ gYbXY`6Ygcf[ b]g`ØVYf`XYb

; fØbXi b[ gghUbXcfh`8Yi hgWΛ`UbX

8]Y`8 ≍ ? `VYZØfWΛhYhž`XUgg`]a a Yf`k Yb][ Yf`6Øf[ Yf]bbYb`i bX  
6Øf[ Yf`XYb`GWΛf]h]b`X]Y`GY`VghghÄbX][ \_Y]h`k U[ Yb``5Xf]Ub`ZØ\fhY  
Ui gž`XUgg`X]Yg`ni `Y]bYa `XfUa Uh]gWΛYb`J Yf`i gh`Ub  
≍bcj Uh]cbg`\_fUZh`i bX`K UWΛgh`a gdchYbh]U`ZØ\fyb`\_ØbbhY`` K Ybb

X]Y' ðXi ghf]Y'Ui Z[ fi bX'j cb'DfcXi \_h]cbgVYgW fÅb\_i b[ Yb'i bX  
5Vk UbXYfi b[ ghYbXYbnYb'Y]bYb'5VgW]YX'Ui ZF UhYb'Yf'YVhž'XUbb  
]gh'XUg'Y]b'5'Ufa g][ bU' žk UfbhY'Yf''

8]Y'<YfUi gZcfXYfi b[ Yb'g]bX'gY\ f'fYU''@Ui h'Y]bYf'Ghi X]Y  
Yf\]Y'hYb'GhUfh!i dg]a 'j Yf[ Ub[ YbYb'š\ f'XYi h]W'k Yb][ Yf  
K U[ b]g\_Ud]hU'U'g'&\$&&ž']bgVYgcbXYfY']b' B c f X f \ Y ] b ! K Y g h Z U ' Y b "  
8]YgY'UVbY\ a YbXY' ðj Ygh]h]cbgVYfY]hgW UZh]gh'Y]b'k Y]hYfYg  
5bnY]WYb'ZØf'X]Y' i bZfYi bX'jWYb'6YX]b[ i b[ Yb'ZØf  
I bhYfbY\ a Ybg[ fØbXi b[ Yb''K Å\ fYbX'X]Y']bX]j ]Xi Y''Yb  
; fØbXi b[ gVYfUhi b[ Yb'hUhgÅW'W'W' i a '%+ 'DfcnYbh'ni [ Ybca a Yb  
\UVYbž'a U'hY'XYf'6Yf]W'h'Y]b'6]'X'XUj cbž'XUgg'X]Yg'b]W'h'Ui ZY]bY  
J YfVYggYfi b[ 'XYf'G]hi Uh]cb'ni fØW\_ni ZØ\ fYb' ]gh''J ]Y'a Y\ f'g]bX'Yg  
BUW\ c'YZZY\_hY'bUW'XYf'7cfc bU\_f]gYž'X]Y'X]Y'< ]ZgUbZfU[ Yb  
UbghY][ Yb''Y» Yb''

8]Y'8 =? 'VYZFU[ hY'Ui » YfXYa (-) &'; fØbXYf'i bX'; fØbXYf]bbYb  
gck ]Y'† b[ Y'I bhYfbY\ a Yb'i bX'GhUfh!i dgž'i a 'XYfYb'A Y]bi b[ Yb  
ni a 'i; fØbXi b[ gghUbXcfh'8Yi hgW'UbX'ni 'Yf\U'hYb''8]Y  
9f[ YVb]ggY'X]YgYf'I a ZFU[ Y'g]bX'YVYbZU'g'VYgcf[ b]gYffY[ YbX.  
8]Y'6Yk Yfhi b[ 'XYg'; fØbXi b[ gghUbXcfhg'ZÅ''h'a ]h'Y]bYf  
8i fW'gW'b]hgbchY'j cb'' ž\* 'gc'gW'YW'h'Ui g'k ]Y'b]Y'ni j cf''5i g  
Y]bYa ' VYZf]YX][ YbX' ]gh'Y]b' Ui gfY]WYbX' [ Yk c f X Y b ž'k Ug'ZØf  
X]Y'U\_hi Y''Yb'6YX]b[ i b[ Yb'gdf]W'h''

6YgcbXYfg'\Yfj cf[ Y\cVYb'k YfXYb']b'XYb'5bhk cfhYb'XYf'; fØbXYf  
X]Y'J YfY]bZUW'i b[ 'XYf'6YghYi Yfi b[ 'gck ]Y'XYf'5VVUi  
VØfc\_fUh]gW'Yf'<ØfXYb''5Xf]Ub'VY'\_U[ hYž'XUgg'X]Y'Ybcfa Yb  
?cghYbž'X]Y'a ]h'XYa 'i: Ø\ fYb'Y]bYg'I bhYfbY\ a Ybg'j YfVi bXYb  
g]bXž'i bX'XUg'X]W\_Y'6Øfc\_fUh]Y!8]W\_]W'h'X]Y'A ch]j Uh]cb'ni a  
I bhYfbY\ a Yfhi a 'Yfgh]W\_hYb''8]Yg']gh'Y]b'XYi h]W'Yf'5i Zfi ZUb'X]Y  
Dc'h]\_ž'g]W'a ]h'XYb'5b'Y[ Yb'j cb'; fØbXYf]bbYb'i bX'; fØbXYfb  
Ui gY]bUbXYfni gYhnYb''

I a 'X]Y'G]hi Uh]cb'ni 'j YfVYggYfbž'ZcfXYfh'X]Y'8 =? 'Y]bY  
9f'Y]W'hYfi b[ 'VY]'XYf'I bhYfbY\ a Ybg[ fØbXi b[ 'Xi fW  
6Øfc\_fUh]YUVVUi ''8Yf'6Yf]W'h'gW'Å[ h'\_cb\_fYhY'A U» bU\ a Yb'j cfž  
k ]Y'VY]gd]Y'gk Y]gY'XUg'9bhgW'UW\_Yb'j cb': cfa i 'UfYb'gck ]Y'X]Y

GWUZZI b[ 'Y]bYf'nYbhfU`Yb`5b`Ui ZghY`Y`ZØf`BYi [ fØbXi b[ Yb``8]Yg  
k ØfXY`XYb`5i Zk UbX`ZØf`; fØbXYf`Yf\YV`]W`fYXi n]YfYb`i bX`]\bYb  
\Y`ZYbž'gW`bY`Yf`]b`X]Y`GY`Vghgh`AbX][ \_Y]h'ni `ghUfhYb"

## < UbX`i b[ gVYXUfZ`VY]`XYf`GhUbXc fhd c`]h]\_

8]Y`8 =? `Uh`X]Y`\_`UfY`6chgW`UZh`XUgg`XYf`< UbX`i b[ gVYXUfZ]b  
XYf`GhUbXc fhd c`]h]\_`b]W`h`][ bcf]Yfh`k YfXYb`XUfZ`` 8]Y`G][ bU`Y`ZØf  
Y]bY`VYggYfY`GhUbXc fhd c`]h]\_`\_ØbbhYb`\_Ui a`X`Yi h`]W`Yf`gY]b ž  
fYgØa` ]Yfh`5Xf]Ub``8]Yg`nY][ h`XYi h`]W`ž`XUgg`b]W`h`bi f`]bX]j` ]Xi Y`Y  
5bgfhYb[ i b[ Yb`XYf`; fØbXYf`[ YZfU[ h`g]bXž`gcbXYfb`Ui W`Y]b  
I a`XYb`\_Yb`Ui Z`dc`]h]gW`Yf`9VYbY`bchk YbX][ `]ghž`i a`cdh]a`U`Y  
6YX]b[ i b[ Yb`ZØf`BYi [ fØbXi b[ Yb`ni `gW`UZZYb"

8]Y`< YfUi gZcfXYfi b[ ž`X]Y`; fØbXYf`]b`8Yi hgW`UbX`\Yi hY`ni  
VYk`À`h][ Yb`\UVYbž`]gh`b]W`h`bi f`Y]b`k`]fhgW`UZh]W`Yg`DfcV`Ya ž  
gcbXYfb`Ui W`Y]b`bX]\_Uhc`f`ZØf`X]Y`Ni`\_i`b`ZhgZ`À`][ \_Y]h`XYg  
[ YgUa`hYb`GhUbXcfhg``; Y`h`Yg`a`]h`XYb`; fØbXi b[ Yb`VYf[ UVž`\Uh  
XUg`k`Y]hfY]W`YbXY`?`cbgYei`YbnYb`ZØf`b`bcj`Uh]cbYb`i bX`X]Y  
K`YhhVYk`YfVgZ`À`][ \_Y]h`XYg`@UbXYg"

9]b`6`]W`\_Ui Z`X]Y`U`\_hi`Y`Y`b`9b`hk`]W`\_i`b[ Yb`nY][ hž`XUgg`b]W`h`bi f  
df]j`UhY`b`j`Ygh]h]cbYbž`gcbXYfb`Ui W`c`f[ Ub]gUhc`f]gW`Y`Ghfi`\_hi`fYb  
i bX`ghUUh]W`Y`i`bhYfghØ`hni b[ `Yb`hgW`Y]XYbX`g]bXž`i a`X`Yb  
; fØbXYf[ Y]gh]b`8Yi hgW`UbX`bYi`ni`Yb`hZUW`Yb``9]b`X`mb`Ua`]gW`Yg  
I a`Z`X`ZØf`i`bhYfbY`a`Ybg[ fØbXYf`\_ØbbhY`b]W`h`bi f`X]Y  
K`]fhgW`UZh`Ub`\_i`fVY`bž`gcbXYfb`Ui W`X`Uni`VY]hfU[ Ybž`X]Y  
b`bcj`Uh]cbg`\_fUZh`Ub[ Zf]gh][ `ni`g]W`Yfb"

## Dc`]h]gW`Y`F`U`a`YbVYX]b[ i b[ Yb

8]Y`; fØbXi b[ g`\_i`h`i`f`]b`8Yi hgW`UbX`k`]fX`ghUf`\_`j`cb`dc`]h]gW`Yb  
F`U`a`YbVYX]b[ i b[ Yb`VY]bZi`ggh``b`X`Yb`Y`hnhYb`b`U`fYb`\UVYb  
g]W`j`YfgW`]YXYbY`Y`bXYfi b[ Yb`]b`; YgYhnYb`i bX`J`c`fgW`f]ZhYb  
Yf[ YVYbž`X]Y`g]W`\_Ui Z`I`bhYfbY`a`Ybg[ fØbXYf`Ui`gk`]f`\_Yb"  
b`gVYgcbXYfY`X]Y`GhYi`Yfd`c`]h]\_`i`bX`X]Y`5fVY]hga`Uf`hfY[ i`Uh]cbYb  
\UVYb`]a`a`Yf`k`]YXYf`ZØf`8]g`\_i`gg]cbYb`[ Ygc`f[ h``9]b`\`Ài`Z][  
[ Y`Ài`»`YfhYg`5b`]Y[ Yb`]gh`X]Y`6ØfXYb`fYXi`n]Yfi b[ `ZØf`GhUfh`i`dgž`X]Y

cZhi]a`ghUffYb`VØfc\_fUh]gWXYb`i a`ZY`X`Y]XYb`"

8 Ug`6i bXYga`]b]ghYf]i a`ZØf`K`]fhgWUZh`i bX`?`]a` UgW`i hn`\Uh]b`  
XYb`j Yf[ Ub[ YbYb`j\`fYb`nU`\fY]WXY`b]h]Uh]j Yb`[ YghUfhYh`zi a`X]Y`  
; fØbXYf`UbXgWUZh`ni`ZØfXYfb`ž`XUfi bHyf`gi Vj Ybh]cb]YfhY`  
: ]bUbn]Yfi b[ ga`Ø[ `]W`\_Y]hYb`i bX`b`bcj Uh]cbggh]dYbX]Yb`"  
8 YbbcW`[ ]Vh`Yg`?`f]h]\_`Ub`XYf`Ub[ gUa`Yb`i a`gYhni b[ `i bX`XYf`  
a`Ub[ Y`bXYb`G]W`hVUf`\_Y]h`X]YgYf`5b[ YVchY`ZØf`dchYbn]Y`Y`  
; fØbXYf`"8]Y`8`≡`?`gdf]W`h]b`j`fYa`6Yf]W`h`Ui W`j`cb`Y]bYa`  
fYz`fa`VYXØfZh][ Yb`b`j`Ygh]h]cbg`\_]a`Už`k`Ug`X]Y`B`chk`YbX][`\_Y]h`  
ZØf`Y]bY`k`Y]hfY]W`YbXY`j`VYfUfVY]hi`b[ `VYghY`YbXYf`; YgYhnY`  
i`bhYfghfY]W`h`"

2`\_`cbca`]gWXY`5i`gk`]f`\_i`b[ Yb`XYf`  
; fØbXi`b[ gdc`]h]\_`

8]Y`k`]fhgWUZh]WXYb`f`U`a`YbVYX]b[ i`b[ Yb`ZØf`; fØbXYf`]b`  
8Yi`hgW`UbX`\UVYb`g]W`]b`XYb`Y`hnhYb`j\`fYb`j`YfgW`Y`W`hYfhž`  
k`Ug`g]W`b]W`h`bi`f`Ui`Z`X]Y`5bnU`\`XYf`B`Yi`[ fØbXi`b[ Ybž`gcbXYfb`  
Ui`W`Ui`Z`X]Y`U`[ Ya`Y]bY`b`bcj Uh]cbg`\_fUZh`XYg`@UbXYg`Ui`gk`]f`\_h`"  
9]b`f`ØW`[ Ub[ `VY]`K`U[ b]g`\_Ud]hU`]bj`Ygh]h]cbYb`]gh`Y]b`YhUV`]YfhYg`  
DfcV`Ya`ž`XUg`ghUf`\_a`]h`XYf`; fØbXi`b[ gdc`]h]\_j`Yf`\_bØdZh]gh`"a`  
j\`f`&\$&`VYhfi`[ Yb`X]Y`K`U[ b]g`\_Ud]hU`]bj`Ygh]h]cbYb`]b`  
8Yi`hgW`UbX`Y`hk`U`\*`ž`(`A`j`]UfXYb`9i`fcž`Y]b`f`ØW`[ Ub[ `]a`  
J`Yf[ `Y]W`ni`XYb`J`cf`U`fYbž`k`]Y`X]Y`6i`bXYga`]b]ghYf]i`a`g`ZØf`  
K`]fhgWUZh`i`bX`?`]a` UgW`i`hn`VYf]W`hYb`"

5`\_hi`Y`Y`GhUh]gh]\_Yb`nY][ Ybž`XUgg]b`j`]Y`Yb`Yi`fcd`À]gWXYb`@`AbXYfbž`  
X]Y`U[ [ fYgg]j`YfY`; fØbXYfZØfXYfi`b[ gdfc[ fUa`a`Y]a`d`Ya`Ybh]YfYbž`  
X]Y`B`Yi`[ fØbXi`b[ gfUhYb`k`YgYb`h]W`h`\`Ø`Yf`g]bX`"8Yi`hgW`UbX`  
j`YfnY]W`bYhY`]a`J`Yf[ `Y]W`X`Uni`]a`j\`f`&\$&`Y]bY`  
; fØbXi`b[ gfUhY`j`cb`)`ž`i`ž`k`À`fYbX`@`AbXYf`k`]Y`GW`k`YXYb`%`%`ž&i`  
YffY]W`hYb`"8]YgY`8]g`\_fYd`Ub`n`XYi`hYh`XUf`Ui`Z`\]bž`XUgg`Yg`b]W`h`  
bi`f`Ub`XYf`NU`\`XYf`; fØbXYfž`gcbXYfb`Ui`W`Ub`XYf`5`h`f`U`\_h]j`]h`h`  
XYg`GhUbXc`fhg`gY`Vgh`]Y[ h`"

J`Yf`À`bXYfi`b[ Yb`]b`XYf`GhUfhi`d!`?`i`h`i`f`

8 Yf'FØW\_[ Ub[ 'VY]'XYb'; fØbXi b[ Yb' ]b'8 Yi hgWÅ`UbX'gd]Y[ Y'h'g]WÅ  
Ui WÅ` ]b`XYf'GhUfhi d! ?i`hi`f`k` ]XYf" ` ð; fc» ghÅXhYb`k` ]Y`6Yf` ]b`i` bX  
A ØbWÅYb` \Uh'g]WÅ`Y]bY`J` ]Y`nU` \`j` cb`BYhmk` Yf`\_Ybž` ð`\_i` VUhc fYb  
i` bX`5WÅ`YfUhc fYb`YhUV` ]Yfhž`X` ]Y`XUfUi` Z`UVn]Y`Ybž` ↑ b[ Yb  
l`bhYfbY\`a` Yf]bbYb`i` bX`l` bhYfbY\`a` Yfb`l` bhYfghØhni` b[  
Ubni`V]YhYb" `8YbbcWÅ`VYf]WÅ`hYb`j` ]Y`Y`; fØbXYf`j` cb`Y` ]bYf  
ni`bY\`a` YbXYb` ðgc`Uh]cb`i` bX`Y` ]bYa` `A` Ub[ Y`Ub`d`fU`\_h]gWÅYf  
l`bhYfghØhni` b[ `k` Å` \fYbX`XYf`\_f]h]gWÅYb`ZfØ`Yb`D` \UgYb` ]\`fYf  
l`bhYfbY\`a` i` b[ "

8 ]Y`hfchn`gc`WÅYf` ð]h]Uh]j` Yb`Zc`fhVYghY` \YbXYb` <YfUi` gZc`fXYfi` b[ Yb  
k`YfXYb`c`Zh`U`g`<Ya` a` gWÅ`i` \`ZØf`\_fYUh]j` Y`@Øgi` b[ Yb`i` bX  
]bbc`j` Uh]j` Y`Dfc`Y`\_hY`Ub[ YgY` \Yb" ` ð`K` YhhVYk` YfVgUbU`mgYb  
Yfn]Y`Yb`UbXYfY`Yi` fcd`À]gWÅY`@ÅbXYf`Ui` Z[ fi` bX`VYggYfYf  
: ØfXYfghfi`\_hi` fYb`i` bX`U[ [ fYgg]j` YfYf` ðj` Ygh]h]cb`ggghfUhY[ ]Yb  
j`Yf[ `Y]WÅVUfY`c`XYf`gc[ Uf`VYggYfY`9f[ YVb]ggY` ]b`XYf`GhUfhi`d!  
GnYbY"

## 9fk Ufhi b[ Yb`i` bX`6YXØfZb]ggY`XYf`; fØbXYf

; fØbXYf` ]b`8 Yi hgWÅ`UbX`Åi` » Yfb` ]b`l` a` ZfU[ Yb` ]a` a` Yf`k` ]YXYf`XYb  
K`i` bgWÅ`b`UWÅ`gdYn]Z]gWÅYb`J`YfÅbXYfi` b[ Ybž`X]Y` ]\`bYb`X]Y`5fVY]h  
Yf`Y]WÅ`hYfb`k` ØfXYb" `Ni` `XYb` \`Åi` Z[ ` [ YbUbbhYb`6YXØfZb]ggYb  
[ Y\`ØfYb`Y` ]bY`hfUbgdUfYbhY`i` bX`j` YfY` ]bZUWÅ`hY`6YghY`i` Yfi` b[ ž`XYf  
Ni` [ Ub[ `ni` `?`Ud]hU`i` bX`FYggci` fWÅ`b`gck` ]Y`Y` ]b`U` [ Ya` Y` ]bYf`5VVUi  
j`cb`6Øfc`\_fUh]Y" `@Ui`h`XYa` `8` ð`?`!`FYdcfh`k` ØbgWÅYb`g]WÅ`+,`i` `XYf  
; fØbXYf`Y` ]bY`\_`UfYfY`?`ca`a`i`b`\_Uh]cb`j`cb` : ØfXYfdfc[ fUa`a`Ybž`  
i`a` `b]WÅ`h` ]a` `VØfc`\_fUh]gWÅYb`8`gWÅ`i` b[ Y`ghYW`\_Yb`ni` `V`Y]VYb"

8 ]YgY`5bZc`fXYfi` b[ Yb`gd]Y[ Y`b`XYb`K`i` bgWÅ`k` ]XYfž`XUgg`X]Y  
dc`h]gWÅY`i` bX`k` ]fhgWÅUZh]WÅY`@UbXgWÅUZh]b`8 Yi hgWÅ`UbX  
XmbUa` ]gWÅYf`i` bX`UbdUggi` b[ gZÅ` ] [ Yf`k` ]fXž`k` Ug`Yhnh]WÅ`gck`c` \`  
XYb`; fØbXYfb`U`g`Ui` WÅ`XYf` [ YgUa` hYb`K` ]fhgWÅUZh`ni` [ i`hY`\_ca`a`Yb  
k`ØfXY"

6Ygi WYb'G]Y'i bg'Ui Z'b!U[ "XY