

GWX ]`X\_f0hY `]b `A 0bXYfgVUWX `[ YZi bXYb `
9][ Ybh0a Yf`Xf]b [ YbX `[ Ygi WX h°

GWX ]`X\_f0hY `]b `A 0bXYfgVUWX `[ YZi bXYb `9][ Ybh0a Yf
Xf]b [ YbX `[ Ygi WX h" < ]bk Y]gY`V]hY`Ub`X]Y`Dc`nY]
< UWX YbVi f[ "

⊕`Y]bYf`i b [ Yk 0\b`]WXYb`5\_h]cb`k i fXYb`Ua `&\$"5i [ i gh&\$&( `]b
A 0bXYfgVUWX ž`Y]bYa ` \_`Y]bYb`C fh]b`F \Y]b`UbX!DZU`nž
Ui Za Yf\_gUa Y`NYi [ Yb`Ui Z`Y]bY`j Yf]ffhY`GWX ]`X\_f0hY`Ui Za Yf\_gUa "
8 Ug`H]Yfž`k Y`WXYg`j Yfa`i h]W`U`g`[ f]YWX]gWXY`@UbXgWX ]`X\_f0hY
]XYbh]Z]n]Yfh`k i fXYž`ZUbX`g]W`]b`Y]bYf`dchYbn]Y`[ YZÀ`f`]WXYb
G]hi Uh]cb`k ]YXYfž`XU`X]Y`i a `]Y [ YbXY`UbXk ]fhgW`UZh]WXY` :`ÀWXY
VU`X`VYUfVY]hYh`k YfXYb`gc`hY`"Gc`WXY`J cfZÀ`Y`g]bX`b]W`h
U`hÀ [ `]W`i bX`k YfZYb` : fU [ Yb`ni f`J YfUbhk`cfhi b [ `]cb
< Ui gh]YfVYg]hnYfb`Ui Z'

8 ]Y`GWX ]`X\_f0hY`k i fXYž`XUb`\_`XYg`gW`bY`Yb`< UbXY`bg`XYf
NYi [ Ybž`]b`G]WXYf\Y]h [ YVfUWX`hi bX`VYZ]bXYh`g]W`Y`mh]b`XYf
C V\i h`XYf`Dc`nY]]bgdY`\_h]cb`< UWX YbVi f[ "6YgcbXYfg
\Yfj`cfni \YVYb`]gh`Y]bY`a Uf`UbhY`fchY`?YbbnY]W`bi b [ `Ui Z`XYa
DUbnYf`XYg`H]YfYgž`X]Y`U`g`< ]bk Y]g`XUfUi Z`X]YbYb`\_0bbhYž`XYb
fYWX`ha`À» ][ Yb`6Yg]hnYf`ni `]XYbh]Z]n]YfYb`"Gc`WXY`A Uf\_]Yfi b [ Yb
g]bX`b]W`h`bi f`Z0f`X]Y`K ]YXYfYf`\_Ybbi b [ `k ]W`h][ ž`gcbXYfb`Ui W
Z0f`XYb`GWX i hn`XYg`H]YfYg`gY`Vghž`XU`g]Y`XUfUi Z`\]bk Y]gYbž`XUgg
Yg`g]W`i a `Y]b`< Ui gh]Yf`UbXY`h"

5i Zfi Z`Ub`XYb`9][ Ybh0a Yf

8 ]Y`Dc`nY]\`Uh`Y]bYb`5i Zfi Z`Ub`XYb`cXYf`X]Y`9][ Ybh0a Yf#b
[ YghUfhYhž`g]W`ni `a Y`XYb`"⊕hYfYgg]YfhY`\_0bbYb`i bhYf`XYf
HY`YZcbbi a a Yf`\$&\* \* &!- ) ) , !\$`?cbhU`h`Ui ZbY`a Ybž`i a `k Y]hYfY

⊕Zcfa Uh]cbYb'ni 'Yf\U'hYb"8]Yg'gh'Y]bY'k ]W'h[ Y'⊕h]Uh]j Yž'X]Y  
g]W'YfghY''Yb'gc'ž'XUgg'a Ò[ 'W'gh'gW'bY''Y]bY'F ØW\_\_Y\ f'XYg  
H]YfYg'ni 'gY]bYa 'Ni \Ui gY'ghUhZ]bXYb'\_Ubb"5i W'k Ybb  
GW']X\_fØhYb'cZi'ZØf'\fY'F cVi gh\Y]h'VY\_Ubb'h'g]bXž'gc'VYbØh[ Yb  
g]Y'XYbb'cW'gdYn]Y''Y'DZY[ Y'i bX'5i Za Yf\_gUa \_Y]hž'i a '[ Ygi bX'ni  
V'Y]VYb"

8 Ug': ]bXYb'j cb'<Ui gh]YfYb' ]b'XYf'K ]'Xb]g'gh'Y]XYf'\_Y]bY  
GY'hYb\Y]h" <Ài Z[ '\UbXY'h'Yg'g]W'XUVY]'i a 'GW']X\_fØhYbž  
?Ub]bW'Yb'cXYf'UbXYfY'H]YfYž'X]Y'Xi fW' i bUW'hgUa \_Y]h]\fYf  
6Yg]hnYf'Yb'h'Ui ZYb'g]bX"⊕XYf'a cXYfbYb'; YgY''gW'UZhž'k c'j ]Y'Y  
<Ui gh]YfY'U'g'6Y[ 'Y]hYf''YVYbž]gh'Yg'k ]W'h[ ž'XUgg'X]Y'H]Yf\U'hYf  
gck c'\VYk i ggh'g]bXž'k ]Y'Ui W'J YfUb'k c'fhi b[ 'ØVYfbY\ a Yb"  
9]bY'A Ò[ 'W'\_Y]hž'X]Yg'ni 'hi bž]gh'Xi fW'Ui gfY]W'YbXY  
?YbbnY]W'bi b[ 'i bX'⊕Yb]Z\_Uh]cb'XYf'H]YfY"8]YgY'A U» bU\ a Yb  
\_ØbbYb'XUni 'VY]hfU[ Ybž'XUgg'j Yfa ]gghY'<Ui gh]YfY'gW'bY''Yf'ni  
]\fYb'6Yg]hnYfb'ni fØW\_\_Y\ fYb"

A ]h'X]YgYa 'J cfZU''k ]fX'Ui W'X]Y'6YXYi hi b[ 'XYf'7ca a i b]hm  
XYi h]W'"8]Y'NYi [ Ybž'X]Y'X]Y'GW']X\_fØhY'VYa Yf\_hYbž'\UVYb  
Xi fW' ]\fY'K UW'gUa \_Y]h'b]W'h'bi f'Y]b'H]Yf'YVYb'[ YfYhYhž  
gcbXYfb'Ui W'Y]bY'k ]W'h[ Y'6chgW'UZh'Ub'UbXYfY'H]YfVYg]hnYf  
[ YgYbXYh'5W'hYb'G]Y'ja a Yf'Ui ZXUg'K c\Yf[ Y\Yb'⊕fYf  
<Ui gh]YfY'i bX' ]bZcfa ]YfYb'G]Y'g]W'ØVYf'X]Y'gdYn]Z]gW'Yb  
6YXØfZb]ggY'XYf'H]YfYž'X]Y'G]Y'g]W'Ub'gW'UZZYb"

## K Y]hYfY' < ]b hYf[ fØbXY

8]Y'[ f]YW' ]gW'Y '@UbXgW']X\_fØhY' ]gh' ]b'j ]Y'Yb'Yi fcdÀ]gW'Yb  
@AbXYfb'Y]b'VY' ]YVhYg'<Ui gh]Yf"8]YgY'5fh'VYbØh[ h'gdYn]Y''Y  
@VYb'gVYX]b[ i b[ Ybž'i a '[ Ygi bX'ni 'V'Y]VYb"9]b'A Ub[ Y'Ub  
[ YY][ bYhYb'@VYb'gfÀi a Yb'cXYf'X]Y'ZU'gW'Y'9fbÀ\ fi b[ '\_Ubb'ni  
Yfb'ghYb'[ Ygi bX\Y]h]W'Yb'DfcV'Ya Yb'ZØ\ fYb"8U\Yf']gh'Yg'j cb  
Yb'hgW'Y]XYbXYf'6YXYi hi b[ ž'XUgg'6Yg]hnYf'g]W'[ YbUi 'ØVYf'X]Y  
DZY[ Y'i bX'X]Y'5bZcfXYfi b[ Yb']\fYf'H]YfY' ]bZcfa ]YfYb"

⊕XYf'F Y[ ]cb'i a 'A ØbXYfgVUW' [ ]Vh'Yg'Y]bY'J ]Y'nU\''j cb'5fhYb  
i bX'@VYb'gfÀi a Ybž'X]Y'ZØf'j YfgW' ]YXYbY'H]YfUfhYb'[ YY][ bYh

g]bX"8]Y'GWX]X\_f0hYž'X]Y' [ YZi bXYb'k i fXYž]gh'Y]b'k Y]hYfYg  
6Y]gd]Y'Z0f'X]Y'i bhYfgW]YX'W]Yb'< YfUi gZcfXYfi b[ Ybž'XYbYb  
g]W'< Ui gh]YfY' [ Y[ Yb0VYfgY\Yb' \_0bbYbž'k Ybb'g]Y'i bUW]hgUa  
VY\UbXY'h'k YfXYb"Gck c\X]Y'B Uhi f'U'g'Ui W'X]Y'J YfUbhk cfhi b[  
XYf'A YbgW]Yb'g]bX'j]b'X]YgYa '6Y]gd]Y' ghUf\_'a ]hY]bUbXYf  
j Yf\_b0dZn"

9g'V'Y]Vh'UVni k UfhYbž'cV'XYf'fYW]ha Å»][ Y'6Yg]hYf' [ YZi bXYb  
k ]fX"8]Y'Dc'nY'\Uhg]W'VYfY]h'Yf\_`Åfhž'a ]h'U''Yb' bchk YbX][ Yb  
A U» bU\ a Yb'ni 'i bhYfgh0hYbž'i a 'XUg'H]Yf'g]W]Yf'ni f0W\_ni Z0\ fYb"  
8Yf'J cfZU''Z0\ fhi bg'bcW]a U'g'j cf'5i [ Ybž'XUgg'H]YfY'b]W]h'bi f  
6Y[ 'Y]hYf'g]bXž'gcbXYfb'Ui W'J YfUbhk cfhi b[ Yb'a ]h'g]W'Vf]b[ Ybž'  
X]Y'j cb'XYb'6Yg]hYfb'Yfbgh[ Ybca a Yb'k YfXYb'gc`hYb"

8Yf'GW]i h'i bX'X]Y'b0h][ Y'l a g]W]h'VY]X'Yf'< U'hi b[ 'j cb  
< Ui gh]YfYb'g]bX'b]W]h'bi f'Y]bY': fU[ Y'XYg'dYfg0b`]W]Yb  
≠hYfYggYgž'gcbXYfb'Ui W'Y]b'k ]W]h][ Yf'HY]'X'Yf'; Ya Y]bgW]UZh"  
≠XYf'H]Yf']YV\UVYf'gc`hY'g]W'X'Yf'5i gk ]f\_i b[ Yb'gY]bYf  
< UbX'i b[ Yb'Ui ZXUg'H]Yf'i bX'X]Y'; YgY`gW]UZh'VYk i ggh'gY]b"8 Ug  
K c\X'Yg'H]YfYg'gc`hY'ja a Yf'Ub'YfghYf'GhY''Y'ghY\Yb"

< ]bhYf[ fi bX]bZcfa Uh]cb'ni f'< U'hi b[ 'j cb  
GW]X\_f0hYb

GW]X\_f0hYbž']bgVYgcbXYfY'X]Y' [ f]YW] ]gW]Y '@UbXgW]X\_f0hYž'g]bX  
VY']YVhY'< Ui gh]YfYž'X]Y'\Åi Z[ 'j]b'; YZUb[ YbgW]UZh'[ Y\U'hYb  
k YfXYb"8]YgY'5fh']gh'VY\_Ubbh'Z0f'']\fY '@Ub[ 'YV][ \_Y]hi bX'\fYb  
fi \][ Yb'7\UfU\_hYfž'k Ug'g]Y'ni 'Y]bYf'UhhfU\_h]j Yb'K U\Z0f  
H]Yf']YV\UVYf'a UW]h"≠8Yi hgW'UbX'g]bX'X]Y'gdYn]Y''Yb  
5bZcfXYfi b[ Yb'Ub'X]Y'< U'hi b[ 'j cb'FYdh']Yb'Xi fW'XUg  
H]YfgW]i h[ YgYhni[ YfY[ Y'hž'k Y'W]Yg'Y]bY'Ufh[ YfYW]hY  
l bhYfVf]b[ i b[ 'ZcfXYfh"

8]Y'< U'hi b[ 'j cb '@UbXgW]X\_f0hYb'YfZcfXYfh'b]W]h'bi f'Y]bYb  
[ YY][ bYhYb '@VYbgfUi a ž'XYf'Ui gfY]W]YbX'D'Uhn'gck ]Y'K Åfa Y  
i bX '@]W]h'V]YhYhž'gcbXYfb'Ui W'Y]bY'Ybhgd'fYW]YbXY'9fbÅ\ fi b[ ž  
X]Y'Ui g'Zf]gW]Ya ' ; Ya 0gY'i bX'gdYn]Y''Yb'DZUbnybhY]Yb'VYghY\h"  
Ni XYa 'g]bX'fY[ Y'a Å»][ Y'h]YfÅfnh]W]Y'?cbhfc`Yb'k ]W]h][ ž'i a

g]W\Yfni ghY`Ybž`XUgg`X]Y`H]YfY`[`Ygi`bX`V`Y]VYb"@Y]XYf`\_ca`a`h`Yg  
]a`a`Yf`k`]YXYf`j`cfž`XUgg`GW`]X\_f`ÒhYb`U`hYf`]\fY`H]YfY`b]W\h  
Ufh[`YfYW\h`U`hYb`cXYf`XUgg`X]Y`H]YfY`Ybhk`]gW\Ybž`k`Ug`ni  
gc`W\Yb`i`À`Yb`Z`fhž`k`]Y`XYa`VYgW\f]YVYbYb`i`bX`]b  
A`ØbXYfgVUW`"

GhUh]gh]\_Yb`ni`f`<`U`hYf`!`i`b`X`

DZY`[`Yj`YfUbhk`cfhi`b`[`j`cb`F`Ydh`]Yb`

@Ui`h`Y]bYa`6Yf]W\h`XYg`6i`bXYga`]b]ghYf]i`a`g`Z`Øf`9fb`À`fi`b`[  
i`bX`@UbXk`]fhgW\UZh`Ui`g`XYa`f`&`\$`&`&`Yf`[`]Vh`Yg`]b`8Yi`hgW`UbX  
gW`Àhni`b`[`gk`Y]gY`ØVYf`&`A`]]cbYb`fYdh`]Yb`]YVYbXY`<`Ui`g`U`hYž  
k`cVY]`GW`]X\_f`ÒhYb`Y]bY`XYf`VY`]YVhYghYb`5fhYb`g]bX`8]Y  
`Ài`Z][`ghYb`DfcV`Ya`Yž`a`]h`XYbYb`GW`]X\_f`ÒhYb`U`hYf`\_cbZfcbh]Yfh  
g]bXž`g]bX`ZU`gW\Y`<`U`hi`b`[`gVYX]b`[`i`b`[`Yb`i`bX`ZY`YbXYg`K`]ggYb  
ØVYf`X]Y`6YXØfZb]ggY`XYf`H]YfY`"

9]bY`i`bhYfgi`W\i`b`[`Ui`g`XYa`f`&`\$`&`&`Yf`[`UVž`XUgg`bU`Yni`(``\$`i`  
XYf`GW`]X\_f`ÒhYb`U`hYf`]\fY`H]YfY`]b`b]W\h`Ufh[`YfYW\hYb  
I`a`[`YVi`b`[`Yb`U`hYb`8]YgY`GhUh]gh]\_Yb`YVYb`X]Y  
<`YfUi`gZcFXYfi`b`[`Yfj`cfž`X]Y`H]YfgW\i`hncf`[`Ub]gUh]cbYb`i`bX  
J`YhYf]b`ÀfY`VY]`XYf`5i`Z`Àfi`b`[`XYf`6Yj`Ò`\_Yfi`b`[`ØVYf`Ufh[`YfYW\hY  
H]Yf`U`hi`b`[`UVYb`8Yf`i`U`XYf`[`YZ]`bXYbYb`GW`]X\_f`ÒhY`]b  
A`ØbXYfgVUW`\_`ØbbhY`XU`Yf`Ui`W\`Y]b`k`Y]hYg`[`YgY`gW\UZh]W\Yg  
DfcV`Ya`fYZY\_h]YfYb`i`X]Y`J`YfUbhk`cfhi`b`[`XYf`<`U`hYf`"

8]Y`F`c`Y`j`cb`H]YfgW\i`hncf`[`Ub]gUh]cbYb`

H]YfgW\i`hncf`[`Ub]gUh]cbYb`gd]Y`Yb`Y]bY`YggYbn]Y`Y`F`c`Y`VY]`XYf`  
5i`Z]bXi`b`[`i`bX`XYf`F`ØW`Z`Ø`fi`b`[`j`cb`j`Yf`cfYbYb`cXYf`  
[`YghfUbXYhYb`H]YfYb`f`8Yi`hgW`UbX`g]bX`nU`fY]W\Y  
Cf`[`Ub]gUh]cbYb`U\_h]j`ž`X]Y`g]W\`Ui`Z`XYb`GW\i`hni`bX`X]Y`DZY`[`Y`j`cb  
F`Ydh`]Yb`gdYn]U`g]Yfh`UVYbž`XUfi`bhYf`J`YfV]bXi`b`[`Yb`k`]Y`X]Y  
H]YfgW\i`hni`bX`8Yi`hgW`UbX`Y`J`i`bX`X]Y`8Yi`hgW\Y`YgY`gW\UZh  
Z`Øf`<`YfdYhc`c`[`]Y`i`bX`HYffUf]Yb`\_i`bXY`fB`;<`HŁ`8]YgY  
Cf`[`Ub]gUh]cbYb`V]YhYb`5i`Z`Àfi`b`[`ž`l`bhYfgh`Øhni`b`[`i`bX  
Bchi`bhYf`\_ØbZhY`Z`Øf`F`Ydh`]Ybž`i`a`g]W\Yfni`ghY`Ybž`XUgg`X]Y`H]YfY`"

X]Y`VYbÖh][ hY`J Yfgcf[ i b[ `Yf\U`hYb"

G]Y`UfVY]hYb`Yb[ `a ]h`Dc`nY]VY\ÖfXYb`ni gUa a Ybž`k Ybb`Yg`XUfi a  
[ Y\hž[ YŽ bXYbY`H]YfY`ni `\_YbbnY]W\ bYb`i bX`XYb`6Yg]hnYfb  
ni fØW\_ni ZØ\ fYb`"8]Y`I bhYfghØhni b[ `X]YgYf`C f[ Ub]gUh]cbYb`]gh`ZØf  
<U`hYf`j cb`[ fc»Yf`6YXYi hi b[ žb]W\h`bi f`a `<]bV`]W\_`Ui ZX]Y  
FØW\_ZØ\fi b[ `Yb`h`Ui ZYbYf`H]YfYž`gcbXYfb`Ui W\`ni f`: ÖfXYfi b[ `XYg  
K ]ggYbg`ØVYf`X]Y`Ufh[ YfYW\hY`<U`hi b[ "

8YhU]`g

6Ygi W\Yb`G]Y`i bg`Ui Z. `X]Y!bUW\ f]W\ hYb`"bYh