

; Y`XUi hca UhYbgdfYb[ i b[ Yb`]b`6Yf`]b.  
Dc`]nY]`k Ufbh`j cf`ghY][ YbXYf`; YZU\ f

6Yf`]b`\_Äa dZi`[ Y[ Yb`Y]bY`U`Ufa ]YfYbXY`K Y`Y`j cb  
; Y`XUi hca UhYbgdfYb[ i b[ Yb`"Dc`]nY]`i bX`6Ub`\_Yb`ghY\Yb  
i bhYf`8fi W\_ž`k ]f\_gUa Y`@Øgi b[ Yb`ni`Z]bXYb`"9fZU\ fYb`G]Y  
a Y\ f`

6Yf`]b`nÄ`h`ni`XYb`GhÄXhYb`a ]h`Y]bYf`\c\Yb`?f]a ]bU`]hÄhgfUhY`  
@Ui h`XYf`?f]a ]bU`ghUh]gh]\_`ZØf`&\$&`' j YfnY]Wk bYhY`X]Y`Dc`]nY]`fi bX  
)`\*"\$\$\$`GhfUZhUhYb`"9]bY`VYgcbXYfg`VYgcf[ b]gYffY[ YbXY  
9bhk ]W\_`i b[ `]gh`XYf`5bgh]Y[ `j cb`; Y`XUi hca UhYbgdfYb[ i b[ Ybž  
Y]bY`A`Yh`cXYž`X]Y`g]Wk`ni bY\`a`YbX`U`g`[ YZÄ`f`]Wk`i bX`i`\_fUh]j`ZØf  
?f]a ]bY`Y`Yfk`Y]gh`"8]YgY`:`cfa`XYf`?f]a ]bU`]hÄh`]gh`b]Wk`h`bi`f`Y]b  
Z]bUb]n]Y`Y`g`f`]g]\_c`ZØf`6Ub`\_Yb`ž`gcbXYfb`Ui`Wk`Y]bY`Yfbgh\UZhY  
6YXfc\i b[ `ZØf`X]Y`ØZYbh]Wk`Y`G]Wk`Yf\Y]h`

8]Y`6Yf`]bYf`Dc`]nY]`]gh`U`Ufa ]Yfh`ØVYf`X]Y`ghY][ YbXY`NU\`gc`Wk`Yf  
JcfZÄ`Y`"; Yk Yf\_gWk`UZhggdfYWk`Yf`6Yb`Ua ]b`Y`bXfc`Äi »YfhY`g]Wk  
VYgcf[ h`i bX`Yf`\_ÄfhY`"9g]gh`i bX`V`Y]Vh`Y]b`i`\_fUh]j`Yg`; YgWk`ÄZh  
ZØf`X]Y`Yb][ Ybž`X]Y`VYfY]h`g]bXž`A`YbgWk`Yb`YVYb`ni`[ YZÄ`f`X`Yb`i bX  
ØVYf`XUg`b`Øh][ Y`9ei ]da`Ybh`j`YfZØ[ Yb`"8]YgY`Y`i »Yfi b[ Yb  
a`UWk`Yb`XY`i`h]Wk`ž`k ]Y`Yfbgh`X]Y`@U[ Y`a ]h`h`Yfk`Y]Y`]gh`"6YfY]hg`]a  
Y\ f`&\$&`' [ UV`Yg`&( `YfZc`[ fY]Wk`Y`; Y`XUi hca UhYbgdfYb[ i b[ Ybž  
i bX`ZØf`&\$&( `k`i`fXYb`V]g`Yhnh`VYfY]hg`%+`JcfZÄ`Y`fY[ ]ghf]Yfhž`j`cb  
XYbYb`g]YVYb`YfZc`[ fY]Wk`k`UfYb`"

GhY][ YbXY`:`Ä`Y`j`cb

; Y`XUi hca UhYbgdfYb[ i b[ Yb

⇒ JYf[ `Y]Wk`ni`XYb`YhnhYb`Y\`fYb`]gh`Y]b`\_`UfYf`HfYbX  
Yf`\_YbbVUf`"8]Y`NU\`XYf`; Y`XUi hca UhYbgdfYb[ i b[ Yb`b]a`a`h

U`Ufa ]YfYbX`ni " `b`Y]bYa `NY]hfUi a `j cb`Z0bZ`J\`fYbž] cb`&\$\$, `V]g  
&\$\$' ž`k i fXYb`]b`6Yf`]b`]bg[ YgUa hi- &`; Y`XUi hca UhYb`Xi fW  
GdfYb[ i b[ Yb`nYfgh0fh`8]YgY`\_f]a ]bU`hYWX b]gWY`A UgWY`k ]fX  
j cb`XYb`HÅhYf[ fi ddYb`]a a Yf`fUZZ]b]YfhYf`Y]b[ YgYhnh`8 UVY]  
VYhfÅ[ h`XYf`NY]hUi Zk UbX`j ca `HUhd`Ub`V]g`ni f`5i gZ0\`fi b[ `Ài Z][  
bi f`k Yb][ Y`A ]bi hYbž`k Ug`X]Y`9fa ]hhi b[ Yb`ni gÅhm`]WX`YfgW`k Yfh`

9]b`6Y]gd]Y`Ui g`XYf`YhnhYb`K cWY`ž`U`g`]b`Y]bYa  
9]b`\_Ui ZgnYbhfi a `]b`?0dYb]W`\_Y]b`; Y`XUi hca Uh[ YgdfYb[ h`k i fXYž  
j YfXYi h]WX`h`X]Y`8f]b[ `]WX`\_Y]h`X]YgYf`DfcV`Ya Uh]\_`"i a`&") \$`i `f`]b  
XYf`B UW`h`k i fXY`X]Y`Dc`]nY]`U`Ufa ]Yfhž`i bX`VY]a `9]bhfYZZYb`XYf`  
6YUa hYb`k UfYb`X]Y`GW`ÅXYb`gck c`\`Ua `5i hca UhYb`U`g`Ui W`Ub  
i a`]Y[ YbXYb`; YgW`ÅZhb`VYfY]hg`g]W`hVUf`9g`k ]fX`XYi h]WX`ž`XUgg  
gc`WY`HUhYb`Xi fW`XUg`H]a ]b[ `i bX`X]Y`D`Ubi b[ `fY`Uh]  
i b`\_ca`d`]n]Yfh`Xi fW`Z0`fVUf`g]bXž`k Å`fYbX`X]Y`5i gk ]f`\_i b[ Yb`Z0f  
X]Y`2 ZZYbh]WX`\_Y]h`Ybcfa`g]bX`"

## 8]Y`F c`Y`XYf`6Ub`\_Yb`i bX`a 0[ `]WX`Y ; Y[ Yba U» bU\`a Yb

9]b`k YgYbh]WX`Yf`Di b`\_hž`XYb`X]Y`6YUa hYb`Yfj cf`YVYbž]gh`X]Y  
J YfUbhk cfhi b[ `XYf`6Ub`\_Yb`@Ui hi`ž`bXfc`À`hYb`X]Y`6Ub`\_Yb`]b`XYf`  
J Yf[ Ub[ Yb`Y]h`i bni fY]WX`YbXY`G]WX`Yf`Y]hga U» bU\`a Yb`Yf[ f]ZZYbž  
i a`gc`WY`J cfZÀ`Y`ni `j Yf`]bXYfb`8]Y` : cfXYfi b[ `bUW`VYggYfYb  
DfÅj Ybh]cbga U» bU\`a Yb`]gh`Y]b`nYbhfU`Yf`5gdY`\_h]b`XYf`  
8]g`\_i gg]cb`8Uni `0b`bhYb`VYggYfY`J]XY`chYWX`b]\_Ybž  
Y]bVfi W`Y`a a YbXY`B UW`hj YfgW`0ggYž`5`Ufa gmghYa Yž  
J YfbYVY`i b[ gUb`U[ Yb`gck ]Y`dUgg] Y`H]bhYb`gmghYa Y`[ Y`0fYb`  
8]YgY`HYW`bc`c[ ]Yb`\_0b`bhYb`XUni `VY]hfU[ Ybž`X]Y`5hfhU`\_hj ]hÅ  
gc`WYf`GhfUZhUhYb`ni `j Yff]b[ Yfb`"

C V[ `Y]WX`X]Y`HÅhYf`]b`?0dYb]W`\_bcW`b]WX`h[ YZUggh`g]bX`i bX`X]Y  
9fa ]hhi b[ Yb`k Y]hYf`Ui ZYbž]gh`\_Ufž`XUgg`X]Y`6Ub`\_Yb`\`UbXY`b  
a 0ggYbž`i a`X]Y`G]WX`Yf`Y]h`ni `Yf`\`0`Yb`9i dYfhYb`g]bX`g]WX`Y]b][ ž  
XUgg`a Y`f`b]j Ygh]h]cbYb`]b`G]WX`Yf`Y]h]bZfUghfi `\_hi f`bchk YbX][  
g]bXž`i a`ni`\_0bZ]h[ Y`GdfYb[ i b[ Yb`ni `j Yf`]bXYfb`8]Y`U`\_hi`Y`Y  
G]hi Uh]cb`]gh`Y]b`k Yb][ `cdh]a ]gh]gW`ž`XU`X]Y`; YZÀ`f`]WX`\_Y]h`X]YgYf`  
A UgWY`Z0f`X]Y`[ YgUa hY`; YgY`gW`UZh`b]WX`h][ bcf]Yfh`k YfXYb`

\_Ubb"

9]bV`]W\_`]b`X]Y`Ni`\_i`bZh`XYf`?`f]a`]bU`]hÅh`]b  
6Yf`]b

8]Y`ghY][`YbXY`Ni`bU\`a`Y`j`cb` ;`Y`XUi`hca`UhYbgdfYb[`i`b[`Yb`nY][`h  
b]W\`h`bi`f`Y]b`k`UW\`gYbXYg`\_f]a`]bY`Y`g`DchYbn]U`ž`gcbXYfb`Ui`W\`  
X]Y`B`chk`YbX][`\_Y]h`YZZY`\_h]j`Yf` ;`Y[`Yba`U»`bU\`a`Yb`"9g`V`Y]Vh  
UVni`k`UfhYbž`k`]Y`X]Y`6Ub`\_Yb`Ui`Z`X]Y`ni`bY\`a`YbXYb`6YXfc`\`i`b[`Yb  
fYU[`]YfYb`k`YfXYb`"H\`Ya`Yb`k`]Y`G]W\`Yf\`Y]h`i`bX`DfÅ]j`Ybh]cb  
k`YfXYb`]a`a`Yf`k`]W\`h][`Yfž`b]W\`h`bi`f`ZØf`X]Y`6Ub`\_Yb`gY`Vghž  
gcbXYfb`Ui`W\`ZØf`X]Y`[`YgUa`hY`6Yj`Ò`\_Yfi`b[`]b`6Yf`]b`"8]Y` :`fU[`Y  
V`Y]Vhž`k`]Y`gW\`bY`"i`bX`YZZY`\_h]j`i`G]W\`Yf\`Y]hga`U»`bU\`a`Yb  
]a`d`Ya`Ybh]Yfh`k`YfXYbž`i`a`A`YbgW\`Yb`i`bX`6Yg]hn`ni`gW\`Øh`Yb`"

9g`[`]Vh`Y]bYb`\_`UfYb`<`UbX`i`b[`gVYXUfZž`XYf`gck`c`\`j`cb`XYf`Dc`nY]  
U`g`Ui`W\`j`cb`XYb`6Ub`\_Yb`Yf`\_Ubb`h`k`i`fXY`"8]Y`bÅW\`ghYb`GW\`f]hhYž  
X]Y`i`bhYfbca`a`Yb`k`YfXYbž`\_Øbb`hYb`YbhgW\`Y]XYbX`XUZØf`gY]bž`k`]Y  
g]W\`X]Y`?`f]a`]bU`]hÅhg`U[`Y]b`6Yf`]b`k`Y]hYf`Yb`hk`]W`\_Y`h`i`bX`c`V`g]W\`  
X]Y`G]h`i`Uh]cb`]b`bU\`Yf`Ni`\_i`bZh`j`YfVYggYfh`"

<]bhYf[`fi`bX]bZcfa`Uh]cbYb`ni`f`?`f]a`]bU`]hÅh  
]b`6Yf`]b

8]Y`?`f]a`]bU`]hÅh`]b`6Yf`]b`\`Uh`Y]bY`"Ub[`Y`i`bX`\_`ca`d`YI`Y  
 ;`YgW\`]W\`hY`"8]Y`XmbUa`]gW\`Y`k`]fhgW\`UZh`]W\`Y`i`bX`gcn]U`Y  
9bhk`]W`\_i`b[`]XYf`<`Ui`dghgUXhž`]bgVYgcbXYfY`bUW\`XYf  
K`]YXYfj`YfY]b][`i`b[`]%-`-`\$ž`ZØ\`fhY`ni`Y]bYf`J`]Y`nU\`j`cb  
J`YfÅbXYfi`b[`]Ybž`X]Y`XUg`?`f]a`]bU`]hÅhg[`]YgW\`Y\`Yb`VYY]bZi`gghYb`"  
9]bY`Ni`bU\`a`Y`j`cb`gcn]U`Yf`i`b[`]Y]W\`Y]h`i`bX`k`]fhgW\`UZh`]W\`Yf  
I`bg]W\`Yf\`Y]h`\`Uh`X`Uni`VY][`YhfU[`]Ybž`XUgg`VYgh]a`a`hY`\_f]a`]bY`Y  
5`\_h]j`]hÅhYbž`k`]Y` ;`Y`XUi`hca`UhYbgdfYb[`]i`b[`]Ybž`ni`[`Ybca`a`Yb  
\`UVYb`"

≠`XYf`J`Yf[`]Ub[`]Yb\`Y]h`k`Uf`6Yf`]b`]b]W\`h`bi`f`ZØf`\`c`\Y  
?`f]a`]bU`]hÅhg`f`UhYb`VY`\_Ubb`hž`gcbXYfb`Ui`W\`ZØf`X]Y`G`h`fi`\_`h`i`f]Yfi`b[`  
j`cb`\_f]a`]bY`Y`b`C`f[`]Ub]gUh]cbYb`i`bX`7`Ubg`"8]YgY`D\`Åbca`YbY

g]bX'cZha ]h'A ][ fUh]cbž'5fa i h'i bX'XYa 'Ni [ Ub[ 'ni ']'Y[ U'Yb  
A Äf\_hYb'j YfVi bXYb"'8]Y' ðhY[ fUh]cb'X]YgYf'6Yj Ò\_Yfi b[ g[ fi ddYb  
]gh'k Y]hYf\]b'Y]bY'<YfUi gZcfXYfi b[ 'Z0f'X]Y'6Y\ÖfXYb'i bX'X]Y  
' YgY`gWUZh"

## GhUh]gh]\_Yb'ni f'? f]a ]bU`]hÄh']b'6Yf`]b

5\_hi Y`Y'GhUh]gh]\_Yb'niY][ Ybž'XUgg'X]Y'? f]a ]bU`]hÄh']b'6Yf`]b ]b'XYb  
'YhnhYb' ð\ fYb'Y]b'5bgh]Y[ 'XYf': Ä`Y'j'cb  
' Y`XUi hca UhYbgdfYb[ i b[ Yb'j'YfnY]W\ bYh'\Uh"@Ui h'XYb  
dc`]nY]]W\Yb'? f]a ]bU`ghUh]gh]\_Yb'k i fXYb'ja 'ð\ f'&\$&' ]bg[ YgUa h  
)' \*"\$\$\$'GhfUZhUhYb'YfZUggh"'8]Yg'ghY`h'Y]bYb'5bgh]Y[ 'ja 'jYf[ 'Y]W  
ni 'XYb'j'cf'U\ fYb'XUf'i bX'i bhYfghfY]W\h'X]Y'k UW\gYbXY'Gcf[ Y'i a  
X]Y'ÖZYbh]W\Y'G]W\Yf\Y]h"

æ'6Yni [ 'Ui ZX]Y'NU\`XYf'; Y`XUi hca UhYbgdfYb[ i b[ Yb']gh'XYf  
5bgh]Y[ 'U'Ufa ]YfYbX"'Nk ]gW\Yb'&\$%, 'i bX'&\$&' 'k i fXYb  
]bg[ YgUa h'- &'GdfYb[ i b[ Yb'Xc\_i a Ybh]Yfhž'k Ug'gY]bY'Y][ YbY  
5bnU\`Ub': Ä`Yb'XUfghY`h"'8]Y'&( 'j'cfZÄ`Y'ja 'ð\ f'&\$&' 'g]bX'Y]b  
ðX]n'Z0f'X]Y'ghY][ YbXY'K U\fgW\Y]b`]W\ \_Y]hž'XUgg'gc`W\Y'HUhYb']b  
i fVUbYb'; YV]YhYb'k Y]hYf\]b'ghUhhZ]bXYb"'8]YgY'ghY][ YbXYb  
NU\`Yb'gc`hYb'ni 'Y]bYa 'l a XYb\_Yb'VY]XYb'6Ub\_Yb'Z0\ fYbž'i a  
dfÄj Ybh]j Y'A U»bU\ a Yb'ni 'Yf[ fY]ZYb'i bX'X]Y'ÖZYbh]W\Y  
G]W\Yf\Y]h'ni 'Yf\Ö\Yb"

8YhU]`g

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