

HUm`c f`Gk ]Zh`i bX`Dcgh`A U`cbY. `9]b`8i Yhh  
nk ]gW`Yb`@cV`i bX`GdY`\_i`Uh]cbYb

HUm`c f`Gk ]Zh`cVh`Dcgh`A U`cbY`]b`]\fYf`bghU[ fUa !Ghcfmi bX  
nY][ h`XUa ]h`]\fY`I bhYfghØhni b[ `ZØf`XYggYb`bYi Yg`5`Vi a "  
K c`Yf`\_ca a h`X]Y`d`Øh`]W`Y`6Y[ Y]ghYfi b[ 3

HUm`c f`Gk ]Zh`X]Y`i bVYghf]hhYbY`Dcd!`\_cbYž`n]Y`h`b]W`h`bi`f`a ]h  
]\fYb`6Ø`bYbUi Zhf]hhYb`i bX`7`Ufhd`Uhn]Yfi b[ Yb`X]Y  
5i Za Yf\_gUa \_Y]h`Ui Z`g]W`ž`gcbXYfb`Ui W`X`i fW`]\fY`gcn]U`Yb  
A`YX]Yb`"Øb[ gh`Uh`X]Y`G`Ab[ Yf]bž`X]Y`a ]h`<]hg`k ]Y`6UX`6`ccX  
i bX`7fi Y`Gi a a Yf`X]Y`A`i`g]\_`UbXgW`UZh`d`f`A[ hž`Y]b`bYi Yg  
?Ud]hY`Ui Z[ YgW`U[ Yb`"K`À`fYbX`g]Y`g]W`]b`Y]bYf`Ui ZfY[ YbXYb  
6Yn]Y`i`b[ `a ]h`XYa`B: @GhUf`HfUj ]g`?Y`W`VYZ]bXYhž`Yb`\_h`g]Y  
d`Øh`]W`X]Y`5i Za Yf\_gUa \_Y]h`Ui Z`Y]bYb`UbXYfYb`A`Ubb` `F`UddYf  
Dcgh`A`U`cbY"

C`V`k`c`\\`]\f`<Yfn`Ub`gW`Y]bYbX`Ub`?Y`W`j`Yf`cfYb`]ghž`bi`hnh`Gk ]Zh  
]\fY`FY]W`k`Y]hYž`i`a`Dcgh`A`U`cbY`ni`i`bhYfghØh`nYb`"A`]h`XYf  
J`Yf`ØZYb`h]W`i`b[ `]\fYf`[`Ya`Y]bgUa`Yb`G]b[ `Y` :`cfhb][ `h`j`cf  
Y]b][`Yb`K`c`W`Yb`Yf`YV`hYb`X]Y`VY]XYb`?Øbgh`Yf`Y]bYb  
VYa`Yf`\_Ybgk`YfhYb`9fZc`[ ``8Yf`Gcb[ `Uh`b]W`h`bi`f`X]Y`Gd]h`nY`XYf  
6]`VcUfX` ; `cVU`&\$`Yf`\_ca`a`Ybž`gcbXYfb`Ui`W`Y]bYb`FY`\_cfX`ZØf  
GhfYUa`]b[`k`YfhY`Ui`Z`Gdch]Zm`[`YVfcW`Yb`"8]Y`Ni`gUa`a`YbUfVY]h  
gW`Y]bh`ZØf`VY]XY`A`i`g]\_`Yf`Zfi`W`hVUf`ni`gY]b`i`bX`k`]fX`bi`b`Xi`fW`  
X]Y`dcg]hj`Y`F`YgcbUbn`j`cb`Gk ]Zh`k`Y]hYf`Ub[`Y`Y]nh"

I`bhYfghØhni`b[ `ZØf`Dcgh`A`U`cbY

b`Y]bYa`VYa`Yf`\_Ybgk`YfhYb`GW`f]hh`dcghYhY`Gk ]Zh`\_Øfn`]W`Ui`Z  
bghU[ fUa`i`bX`hY]`hY`XYb`@]b`\_ni`Dcgh`A`U`cbYg`bYi`Ya`5`Vi`a  
: !%`Hf]`]cb`"G]Y`cVhY`gY]bY`J`Y`gY]h][`\_Y]h`i`bX`"Y»`\_Y]b`Nk`Y]ZY`

XUfUbžk ]Y`VYY]bXfi W\_h'g]Y`j cb`gY]bYa`\_fYUH] Yb`GWk UZZYb`]gh"  
9g`]ghi b[ `Ui V`]Wk žk ]Y`j ]Y`gY]h][ `gY]bY`\_Øbgh`Yf]gWk Y`5fVY]h`]gh ž  
gc`]\fY`VY[ Y]ghYfhY`5i ggU[ Yž`k Ug`nY][ hž`XUgg`g]Y`b]Wk h`bi f`U`g  
?Øbgh`Yf]b`YfZc`[ fY]Wk`]ghž`gc bXYfb`Ui Wk`U`g` : fYi bX]b`i bX  
I bhYfghØhYf]b"

Gk ]Zh`hY`hY`Ui Wk`Y]b`[ Ya`Y]bgUa`Yg` : chc`a`]h`A`U`cbYžk Ug`]\fYf  
5b`Åb[ YfgWk UZh`b]Wk h`Yb h` ]b[ "J]Y`Y` : Ub`gdY`\_i` ]YfhYb`XUfØVYfž  
cV`X]YgY` ; YghYb`a` Ø[ `]Wk Yfk`Y]gY`Y]bY`j YfghY`W`\_hY`6YXYi hi b[  
\UVYb`"<UhhYb`g]Y`j ]Y`Y`]Wk h`X]Y` \c`Zbi b[ gj`c`Y`A` Ø[ `]Wk`\_Y]h`Ui`Z  
Y]b`[ Ya`Y]bgUa`Yg`6Ø`bYb`!8YVØh`]a`\_@cbXcbYf`K`Ya`V`Y`mi`GhUX]cb  
\YfUi`Z/YgWk`c`fYb`3`GWk`]Y`»`]Wk`Z]bXYh`Xcfh`Gk ]Zh`g` H\Y`9fUg  
Hci f`ghUhhž`i bX`g]Y`]gh`VY`\_Ub`bh`ZØf`]\fY`[ Y\Y]a`Yb`5bXYi hi b[ Yb  
]b`A`i`g]\_j`]XYcg`i bX`Gcb[ hYI`hYb"

5a`5VYbX`]\fYf`8UfV]Yhi b[ `Ua``%+`"5i [ i`gh`k`Uf`X]Y`J`cfZfYi`XY`Ui`Z  
Y]bYb`a` Ø[ `]Wk`Yb` ; UghUi`Zh]h`h`j`cb`Dcgh`A`U`cbY`[ fY]ZVUf`"8cWk  
hfch`X`Yf`Yf`c`Z`h`Yb` , VYffUgWk`i b[ `a`i`gghY`Gk ]Zh`X]Y` : Ub`g  
Yb`hh`Å`i`gWk`Yb`" : cfhb][ \h`k`i`fXY`U`g`Gc`c`!DYfZcfa`UbW  
df`Å`gYb`h]Yf`h`"8Yb`bc`Wk`V`Y]Vh`ZØf`X]Y`7ca`a`i`b]h`mi`bX`X]Y` : Ub`g`X]Y  
<c`Zbi b[ ž`XUgg`X]Y`VY]XYb`Y]bYg`HU[ Yg`ni`gUa`a`Yb`Ui`Z`XYf`6Ø`bY  
ghY`Yb`k`YfXYb`"GWk`]Y`»`]Wk` \U`h`Gk ]Zh`V]g`ni`a` , "8YnYa`VYf`bc`Wk  
nU`fY]Wk`Y`5i`Zh]h`hY`]a`\_F`U`a`Yb`]`fYf`Hci`f`[ Yd`Ub`hi`bX`XUa`]h`j`]Y`  
F`Ui`a`\_ZØf` , VYffUgWk`i b[ Yb"

## HUm`c`f`Gk ]Zh`g`9]bZ`i`gg`Ui`Z`X]Y`A`i`g]\_gnYbY

8]Y`6YUWk`hi b[ ž`X]Y`HUm`c`f`Gk ]Zh`]\fYb`?c`Y[ .]bbYb`ni`\_ca`a`Yb  
`Å`gghž`j`YfXYi`h`]Wk`h`]\fYb`9]bZi`gg`]b`XYf`A`i`g]\_gnYbY`"5`g  
a`Y`f`ZUWk`Y` ; fUa`a`m` ; Yk ]bbYf]b`i`bX`Y]bY`XYf`i`a`gU`h`gh`Å`f`\_ghYb  
?Øbgh`Yf]bbYb`XYf`K`Y`h` \U`h`g]Y`XUg`DchYbn]U`ž`X]Y`?Uff]YfYb  
UbXYfYf`?Øbgh`Yf`Yf`YV`]Wk`ni`VYY]bZi`ggYb`" Æ`fY`I`bhYfghØhni`b[  
ZØf`Dcgh`A`U`cbY`\_Ø`b`hY`g]Wk`b]Wk`h`bi`f`d`c`g]h]j`\_Ui`Z`XYggYb  
5`Vi`a`j`Yf`\_Åi`Z`Y`Ui`gk ]f`\_Yb`ž`gc`bXYfb`Ui`Wk`X`U`ni`VY]h`fU[ Yb`ž`gY]bY  
Dcg]h]cb`]b`XYf`6fUbWk`Y`ni`Z`Y`gh][ Yb"

æ`\_NY]hU`hYf`j`cb`GcW]U`A`YX]U`]gh`Yg`ZØf`?Øbgh`Yf`j`cb`[ fc`»`Yf  
6YXYi hi b[ ž`]\fY`Gh]a`a`Y`ZØf`UbXYfY`ni`Yf`YVYb`"K`Å`fYbX`Gk ]Zh

]b'fca Ubh]gWYb': fU[ Yb']\f'; `ØW\_]b'XYf'6Yn]Y\i b[ 'a ]h'HfUj ]g  
?Y`W`Z]bXYhž'nY][ h'g]Y'a ]h]\fYf'ÒZZYbh]WYb'l bhYfghØhni b[ 'ZØf  
Dcgh'A U`cbY`Ui W`Y]bY`UbXYfY': UW`hY`]\fYf'DYfgØb`]W`\_Y]h`X]Y  
XYf'?c`Y[ ]U]h`h'i bX`K YfhgW`Åhni b[ 'a `A i g]\_[ YgW`ÅZ"

8]Y`DUfhbYfgW`UZh'ink ]gWYb`Gk ]Zhi bX`A U`cbYž`X]Y`g]W`\_Y]b`XYf  
A i g]\_`Ui gXfØW`hž`Àggh'i: fU[ Yb`cZZYb`"K YfXYb`g]Y`]b`bU\Yf  
Ni \_i bZi[ Ya Y]bgUa Y`a i g]\_U]`gWY`Dfc`Y`\_hY`Ubghc»Yb3`8]Y': Ubg  
\_ØbbYb`bi f'gdY\_i`]YfYb`i bX`cZZYbž`i bX`gc`Ub[ Y`X]Y`A i g]\_X]Y  
A YbgWYb`j YfY]bhž`V`Y]Vh`Yg`gdUbbYbXž`k Ug`X]Y`Ni \_i bZiZØf`X]YgY  
VY]XYb`HU`YbhY`VYfY]h`Å`h"

## 9]b`6`]W`\_`Ui Z`X]Y`ni \_ØbZh][ Yb`A Ò[ `]W`\_Y]hYb

≠`Y]bYf'6fUbWYž]b`XYf'9fZc`[ `i bX`Ni gUa`a YbUfVY]h`< UbX`]b  
< UbX`[ Y\Ybž'nY][ h`HUm`c`fg`l bhYfghØhni b[ 'ZØf`UbXYfY`?Øbgh`Yf`Y]b  
A i ghYf`j cb`; Ya Y]bgW`UZh`i bX`d`cg]h]j Yf'6YY]bZi ggi b[ "9g`V`Y]Vh  
UVni k UfhYbž`k Y`W`Y` , VYffUgW`i b[ Yb`g]W`\_Y]h`ZXYf` H`Y`9fUg  
Hci f`bcW`Yf[ YVYb`i bX`c`V`k ]f`j ]Y`Y]W`h`VU`X`a Y\`f`j cb`X]YgYf  
Ui ZfY[ YbXYb`8i c!DUfhbYfgW`UZh`\_ØfYb`k YfXYb`"8]Y`A Ò[ `]W`\_Y]hYb  
g]bX`YbX`cgž`i bX`X]Y`A i g]\_]bXi ghf]Y`XUfZ`g]W`\_Y]h`Zk Y]hYfY`\_fYUh]j Y  
K YgYb`ZfYi Ybž`X]Y`]bgd]f]Yfh`Xi fW`\_HUm`c`f`Gk ]Zhg`[ fc»Yg`< Yfn`XYb  
K Y[ `[ Y\Yb`k YfXYb"

## HUm`c`f`Gk ]Zhg`9]bZ`i gg`Ui Z`X]Y A i g]\_]bXi ghf]Y

HUm`c`f`Gk ]Zh`\Uh`g]W`\_Y]h`b]W`h`bi f`U`g`Y]bY`XYf`YfZc`[ fY]W`ghYb  
?Øbgh`Yf]bbYb`YhUV`]Yfhž`gc`bXYfb`Ui W`\_U`g`Y]bY`Y]bZi ggy]W`Y  
; YghU`h]b`XYf`A i g]\_]bXi ghf]Y"≠f` , VYf[ Ub[ `j cb`7ci bhfm`ini `Dcd  
k Uf`b]W`h`bi f`\_Øbgh`Yf]gW`\_VYa Yf`\_Ybgk Yfhž`gc`bXYfb`\_Uh`Ui W`  
HfYbXg`[ YgYhnh`"A ]h]\fYa`5`Vi a`-%- , - `f&\$%( `É`VfUW`\_g]Y`a ]h  
XYf`hfUX]h]cbY`Yb`J Yfa Uf`\_hi b[ `j cb`A i g]\_]i bX`gYhnhY`ghUhhXYggYb  
Ui Zgc`n]U`Y`A YX]Yb`i bX`X]fY`\_hY`?ca`a`i`b]\_Uh]cb`a ]h]\fYb`; Ubg"  
8]YgY`GhfU`hY [ ]Y`k Uf`VU`bVfYW`YbX`i bX`]bgd]f]Yfh`Y`j ]Y`Y`?Øbgh`Yfž  
Å`b`]W`Y`5bg`ÅhY`ni `j YfZc`[ Yb"

9]b`k Y]hYfYf`5gdY\_h]\fYg`9]bZi`ggYg`]gh`\f`a`i`h][Yf`l`a`[Ub[`a`]h  
: fU[ Yb`XYg`l`f\YVYffYWX`hg" `a` `x\`f`&`\$`%` `gc`f[ hY`Gk` ]Zh`ZØf  
5i`ZgY\Yb`ž`U`g`g]Y`X]Y`GhfYUa` ]b[ !D`UhhZc`fa` `Gdch]Zm`ÒZY`bh`]WX  
\_f]h]g]YfhY`i`bX`XUfUi`Z` ]b`b]WX`h`Ui`Z`XYf`D`UhhZc`fa` `j`YfZØ[ VUf`k`Uf"  
8]YgY`<`UbX`i`b[ `ZØ`fhY`ni` `Y]bYf`k`Y]hfY]WX`YbXYb`8]g\_i`gg]cb`ØVYf  
?Øbgh`Yf\`cbc`fUfY`i`bX`GhfYUa` ]b[ !8]YbghY`ž`k`Ug`gWX` `Y»` `]WX`ni  
Y]bYf`5bdUggi`b[ `XYf`J`Yf[ Øhi`b[ ga`cXY`Y` `]b`XYf`6fUbWX`Y`VY]hfi`[ "  
`A`fY`F`ØW`\_`Y`f`ni` `Gdch]Zm]a` `x\`f`&`\$`%+` `\_ca`a`h`Ui`WX`U`g`9f[ YVb]g  
X]YgYf` ;`Ygdf`Å`WX`Y`ž`i`bX`g]Y` \`Uh`gY]h\`Yf`k`Y]hYf\`]b[ `fc»`Yb`9]bZi`gg  
Ui`ZX]Y`6fUbWX`Y`bdfUI`]g"

## Ni`gUa`a`YbUfVY]h`a` ]h`UbXYfYb`?`Øbgh`Yfb`

8]Y`Ni`gUa`a`YbUfVY]h`a` ]h`UbXYfYb`A`i`g]\_Yfb`]gh`Y]b`k`Y]hYfYg  
VYa`Yf`\_`Ybgk`YfhYg`A`Yf`\_`a`U`j`cb`Gk` ]Zh`g`?`Uff]YfY" `A`fY` :` Å`\`][`\_`Y]hž  
a` ]hj`YfgWX`]YXYbYb`?`Øbgh`Yfb`ni` `UfVY]hYb`ž`fY]WX`h`ØVYf  
;`Yb`fY[ fYbnYb`\`]bUi`g" `A`]h`?`c``UVcfUh]cbYb`i`bX`FYa` ]l`Yb`ž`k`]Y`XYb  
VYfØ`a`hYb`Ni`gUa`a`YbUfVY]hYb`a` ]h`9X`G\`YYfUb`i`bX`6cb`j`Yfž  
nY][`h`g]Y`]\`fY`J`]Y`gY]h][`\_`Y]h`i`bX`\_`fYUh]j`Y` :`fY]\`Y]h" `8]YgY  
: `Yl`]V`]h`Å`h`\`Uh`Yg`\`f`Yfa` Ø[ `]WX`hž`gck`c`\` `]b`XYf`Dcd!`U`g`Ui`WX` `]b  
XYf`7ci`bh`fma`i`g]\_`\_`cbh]bi`]Yf`]WX`fY`Yj`Ubh`ni` `V`Y]VYb"

6YgcbXYfg`]\`fY`Øb[ ghY`Ni`gUa`a`YbUfVY]h`a` ]h`Dcgh`A`U`cbY`]gh`Y]b  
6Y]gd]Y`ZØf`X]Y`gWX`]YfY`5bn]Y\`i`b[ g\_fUZh`VY]XYf`?`Øbgh`Yf`i`bX`\`fY  
F`YgcbUb`n`VY]`Y]bYa` `VfY]hYb`Di`V`]i`a` " :`c`f`h`b][` \`h` \`Uh`b]WX`h`bi`f  
X]Y`7\`Ufhg`Xca` ]b]Yf`hž`gcbXYfb`Ui`WX`X]Y`J`YfV]bXi`b[ `nk`]gWX`Yb  
XYb`VY]XYb`?`Øbgh`Yfb`j`Yfgh`Å`\_`h" `Gc`WX`Y`?`c`cd`YfUh]cbYb`ž`X]Y  
;`Yb`fY[ fYbnYb`ØVYfgWX`fY]hYb`ž`g]bX`Y]b`k`YgYb`h`]WX`Yf`6YghUbX`hY`]  
]\`fYf`GhfUhY[ ]Yž`i`a` `]b`XYf`g]WX`gh`Å`bX][`j`Yf`Å`bXYfbXYb  
A`i`g]\_`UbX`gWX`UZh`fY`Yj`Ubh`ni` `V`Y]VYb`i`bX`]`fYb`9]bZi`gg`Ui`ZX]Y  
GnYbY`VY]ni`VY`U`hYb"

## GhUh]gh]\_Yb`i`bX`9fZc`[`Y`

9]b`6`]W`\_`Ui`ZX]Y`GhUh]gh]\_Yb`nY][`hž`XUgg`HU`m`c`f`Gk` ]Zh`Y]b  
D\`Å`bca`Yb`XYf`A`i`g]\_]bXi`ghf]Y`]gh" `@Ui`h`U`\_`hi`Y``Yb`NU`\`Yb`\`Uh  
Gk` ]Zh`k`Y`hk`Y]h`ØVYf`) `\$`A` ]``]cbYb`5`VYb`j`Yf`\_`Ui`Zhi`bX`\_`Ubb`ØVYf  
%) `\$`A` ]``]cbYb`G]b[ `Yg!8ck`b`cUX`g`j`c`fk`Y]gYb`ž`k`Ug`g]Y`ni` `Y]bYf`XYf`

a Y]ghj Yf\_Ui ZhYb`?Øbgh`Yf]b`U`Yf`NY]hYb`a UW`h" ÆfY`5`VYb  
YffY]W`Yb`fY[ Y`a`À»][ ; c`X!`i bX`D`Uh]bUi gnY]W`bi b[ Yb`i bX`]`fYf  
Hci fbYYb`g]bX`Y]b][ Y`XYf`YfZc`[ fY]W`ghYb`i]b`XYf`A i g]\_[ YgW`]W`hY"

8 UfØVYf`\\]bUi g`\\Uh`g]Y`nU`\\fY]W`Y`DfY]gY`i bX`5i gnY]W`bi b[ Yb  
Yf\\U`hYbžXUfi bhYf`%&; fUa`a`m5k UfXgž`X]Y`]`fY`A i g]\_U`]h`hi bX  
]`fYb`9]bZi gg`Ui Z`X]Y`6fUbW`Y`VYgh`h][ Yb``8]YgY`9fZc`[ Y`ghY`Yb  
b]W`h`]gc`Yfhž`gcbXYfb`g]bX`XUg`9f[ YVb]g`\\UfhYf`5fVY]hž`HU`Ybh  
i bX`Y]bYf`h]YZYb`JYfV]bXi b[ `ni``]`fYa`Di`V`\_i a ž`k`Y`W`Yg`Xi fW`  
]`fY`gcn]U`Yb`A YX]Yb`i bX`@j Y!5i Zhf]hY`j Yfgh`f`h`k`]fX"

8YhU]`g

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