

&' "\$\$\$'K c\bi b[Yb']b'A ØbWYb.
@YYfghUbX'hfc hn'XfÀb[YbXYf
K c\bfUi a bch

⊕'A ØbWYb'ghY\Yb'&&"\$\$\$\$'K c\bi b[Yb''YYfž'k À\fybX
%\$") \$\$'ZY\Yb"<c\Y'A]YhdFY]gY'i bX'FYbcj]Yfi b[gÀb[ghY
ZØfXYfb'X]Y'?f]gY"

⊕'XYf'VUmYf]gWYb'@UbXYg\Ui dhghUXh'A ØbWYb'ghY\Yb'XYfnY]h
fi bX'&&"\$\$\$\$'K c\bi b[Yb''YYfž'k Ug'X]Y'K c\bfUi a g]hi Uh]cb']b'XYf
GhUXh'ni gÀhn']W'j Yf_ca d']n]Yfh''Hfchn'XYf'\c\Yb'A]YhdFY]gY'i bX
XYf'XfÀb[YbXYb'BUWZfU[Y'bUW'K c\bfUi a 'V'Y]Vh'Y]bY
Yf\YV']WY'5bnU\''Ub'⊕ a a cV]]Yb'i b[Ybi hnh''@Ui h'Y]bYf'5bU'mgY
XYg'6i bXYgj YfVUbXYg'6Ui ghcZZ: UW\UbXY''VYghY\Yb']b
A ØbWYb'k YgYbh']W'a Y\f'K c\bi b[gUb[YVchYž'U'g'X]Y'U_hi Y''Y
BUWZfU[Y'Yg'ni 'Àgghž'i bX'X]Yg'k]fZh': fU[Yb'ni f'bYi Yb
K c\bi b[gdc'h]_'Ui Z'

8]Y'Ghi X]Y'XYg'DYghY'!⊕gh]hi hg'nY][hž'XUgg'V]g'ni a '⊕\f'&\$&,
a cbUh']W'Yhk U%'\$\$\$\$'bYi Y'K c\bi b[Yb'VYb'Øh][h'k YfXYbž'i a
XYb'6YXUfZ'ZØf'X]Y'k UW'gYbXY'6Yj Ò_Yfi b['ni 'XYW_Yb''5_hi Y''
ZY\Yb'[YbUi '%\$") \$\$'K c\bi b[Yb']b'XYf'A Yhfc'c'Yž'k Ug'X]Y
8f]b['W_Y]h'XYg'DfcV'Ya gi bhYfghfY]W'h''⊕hYfYggUbhYfk Y]gY
g]bX'XYbbcW'a Y\f'U'g'&&"\$\$\$'9]b\Y]hYb'b]W'h'j Yfa]YhYhž'k Ug
fi bX'&ž+'DfcnYbh'XYg'[YgUa hYb'K c\bi b[gVYghUbXYg'Ui ga UW'h'

K]XYfgdfØWY'Ui Z'XYa 'A ØbWYbYf
K c\bi b[ga Uf_h

8]Y'G]hi Uh]cb'Ui Z'XYa 'A ØbWYbYf'⊕ a a cV]]Yba Uf_highY''h'Y]bYb
K]XYfgdfi W'XUf.'<c\Y'A]YhdFY]gY'i bX'⊕ a a cV]]Yb'YYfghUbX
gWY]bYb'Ui Z'XYb'YfghYb'6']W_'b]W'h'ni gUa a Ybni dUggYb''8Yf

6i bXYgj YfVUbX`k Y]gh`XUfUi Z`\]bž`XUgg`Y]b`[Yk]ggYf`@YYfghUbX
U`g`Di ZZYf`b`Òh][`]ghž`i a`l a nØ[Y`i bX`FYbcj]Yfi b[Yb`ni
Yfa Ò[`]WXYb``8]YgY``!DfcnYbh!A Uf_Y`k]fX`YXcW`Ui Z
i bhYfgW`]YX`]WXY`K Y]gY`]bhYfdFYh]Yfh`K Å\`fYbX`j]Y`Y`6Yg]hnYf
nØ[Yfbž`]fY`a a cV`]Yb`ni`j Yfa]YhYb``gY]`Yg`Ui`g`Z]bUbn]Y``Yf
l bg]WXYf\Y]h`cXYf`k Y[Yb`fYW`h]WXYf`fU[Yb``V`Y]Vh`Y]b`HY]`XYg
6YghUbXg`i b[Ybi`hnh`

9]b`8f]hY`XYf`i b[Ybi`hnhYb`K c\bi b[Yb`]b`A ØbWXYb`ghY\h
VYfY]hg`gY]h`a Y\`f`U`g`Y]bYa``X\`f`Yf``5i W`]b`:`A`Yb`j`cb
9fVgW`UZhggfY]h][`_Y]hYb`_ca`a`h`Yg`j`c`fž`XUgg`a`a`cV`]Yb`b]W`h
j`Yfa`]Yh`Y`k`YfXYbž`k`Ug`ni`f`k`Y]hYfYb`j`Yf`_bUddi`b[`Ui`Z`XYa
A`Uf`_h`VY]hfÅ[`h`,`VYffUgW`YbXYfk`Y]gY`k`]fX`A`ØbWXYb`U`g`Y]bY`XYf
GhÅXhY`a`]h`XYa``[`Yf]b[`ghYb`@YYfghUbX`]b`8Yi`hgW`UbX
ZYgh[`YghY`hž`ni`gUa`a`Yb`a`]h`fUb`_Z`fh`Ua``A`U]b`"

8]Y`DfÅg]XYbh]b`XYg`6Ui`ghc`Z\`UbXY`gj`YfVUbXYgž`?`Uh\`Uf]bU
A`Yhn[`Yfž`Åi`»`Yfh`g]W`_f]h]gW`ni`XYb`U`hi`Y`Yb`GhUbXUfXg`]a
K`c\bi`b[`gVUi```G]Y`ZcfXYfhY]bY`GYb`_i`b[`X]YgYf`GhUbXUfXgž`i`a
XYb`gcn]U`Yb`K`c\bi`b[`gVUi`k`]YXYf`]bg`@Ui`ZYb`ni`Vf]b[`Yb``8Yf
gcn]U`Y`K`c\bi`b[`gVUi`k`]fX`VY]`X]YgYf`6i`bXYgfY[`]Yfi`b[`Ui`W`
k`Y]hYf`Ui`Z`XYf`GhfYW`_Y`V`Y]VYb`ž`a`Y]bh`g]Y``A`f`l`bj`Yfgh`AbXb]g
ØVYf`X]Y`j`Yfgd`ÅhYhYb`dc`h]gW`Yb`A`U`»`bU`a`Yb`]gh`i`bØVYfgY`VUf`
A`Yhn[`Yf`Yf]bbYfh`XUfUbž`XUgg`(`\$\$`\$\$\$`BYi`VUi`k`c\bi`b[`Ybž`
XUfi`bhYf`%\$\$\$`\$\$\$`gcn]U`[`YZØfXYfhY`9]b\Y]hYbž`]b`XYb
K`U`\`_Ua`dZ]`YfgdfYW`Yb`XYf`F`Y[`]Yfi`b[`ghUbXYb`i`bX`ZFU[`h`g]W`ž
k`Ufi`a`X]YgY`bi`b`b]W`h`gW`bY`Yf`i`a`[`YgYhnh`k`YfXYb`"

Dc`h]gW`Y`F`Y`Yj`Ub`n`i`b`X a`a`cV`]Yb`ghf`UhY[`]Yb`

8]Y`<`YfUi`gZcfXYfi`b[`Ybž`X]Y`g]W`Ui`g`X]YgYf`@U[`Y`Yf[`VYb`ž`g]b`X
J]Y`nU`\``8]Y`GhUXh`a`i`gg`Xf]b[`YbX`Ghf`UhY[`]Yb`Yb`hk`]W`_Y`bž`i`a`XYb
@YYfghUbX`ni`fYXi`n]YfYb`i`bX`[`Y]W`nY]h][`XYa`K`c\bfUi`a`a`Ub[`Y`
ni`VY[`Y[`bYb``9l`dYfhYb`VYhcbYbž`XUgg`X]Y`j`YfVYggYfi`b[`]cb
FYbcj`]Yfi`b[`gVYX]b[`]i`b[`Yb`cXYf`X]Y`5bdUggi`b[`]cb`j`c`fgW`f]ZhYb
ZØf`X]Y`A`]Yhd`fY]gdc`h]_`Yb`hgW`Y]XYbX`gY]b`_ØbbhYb``9]b`ZYI`jV`YfYf
l`a`[`Ub[`]a`]h`XYb`GhUbXUfXg`_ØbbhY`b]W`h`bi`f`XYb`gcn]U`Yb`

K c\bi b[gVUi 'Ub_i fVY`bž'gcbXYfb`Ui W`XUni`VY]hfU[Ybž`X]Y
VYghY\YbXY`K c\bi b[g_bUdd\Y]h`bUW\U`h][`ni`']bXYfb"

8]Y`6YXYi hi b[`X]YgYf`DfcV`Ya Uh]_`[Y\h`ØVYf`X]Y`NU\`Yb`i bX
GhUh]gh]_Yb`\]bUi`g" `G]Y`VYhf]Zh`XUg`@VYb`j`cb`A`j`]cbYb`]b
A`ØbWYbž`X]Y`Ui`ZXYf`Gi`WY`bUW`VYnU\`VUfYa`K`c\bfUi`a`g]bX"
8Yf`GdU[Uh`nk`]gWYb`5b[YVchi`bX`BUW`ZfU[Y`V`Y]Vh`Y]bY
nYbhfU`Y`<YfUi`gZcfXYfi`b[`]b`XYf`GhUXhž`X]Y`k`Y]hYf\`]b`]a`]:`c_i`g
XYf`dc`h]gWYb`8]g_i`gg]cb`ghY\h`8Yf`NY]hXfi`W`]gh[Y[YVYbž`i`bX
X]Y`5bnY]WYb`XYi`hYb`XUfUi`Z`\]bž`XUgg`X]Y`@Øgi`b[`X]YgYf
ca`d`YI`Yb`H\Ya`Uh]`Y]bY`YbhgWY]XYbXY`Fc`Y`]b`XYb`_ØbZh][`Yb
dc`h]gWYb`9bhgWY]Xi`b[Yb`gd]Y`Yb`k`]fX"

9]b`6`]W`_]b`X]Y`ni`_ØbZh][`Y`K`c\bi`b[`gdc`]h]_

K`]Y`X]Y`dc`]h]gWY`@UbXgW`UZh]g]W`Yb`hk`]W`Y`b`k`]fXž`V`Y]Vh
UVni`k`UfhYb" `G]WYf`]gh`YXcW`ž`XUgg`XYf`8fi`W`_Ui`Z
9bhgWY]Xi`b[ghfÅ[Yf`k`UW`gYb`k`]fXž`i`a`X]Y`A`]ggghÅbXY
Ubni`[Y\Yb" `8]Y`I`b[Yk`]gg\Y]hYb`]a`6Ui`k`YgYb`i`bX`X]Y
j`YfÅbXYfhYb`5bZcfXYfi`b[Yb`Ub`?`]a`UgW`i`hn`j`YfgW`ÅfZYb`X]Y
DfcV`Ya`Y`k`Y]hYfž`bi`f`Y]bY`dfcU`_hj`Y`i`bX`ZYI`]V`Y`GhfUhY[`]Y`_Ubb
\]Yf`Y]bYb`K`UbXY`\`YfVY]ZØ\`fYb" `9g`k`]fX`gdUbbYbX`gY]b`ni
VYcVUW`hYbž`k`]Y`g]W`X]Y`G]hi`Uh]cb`]b`XYb`_ca`a`YbXYb`A`cbUhYb
Yb`hk`]W`Y`b`k`]fX`i`bX`k`Y`W`Y`5i`gk`]f_i`b[Yb`X]Yg`Ui`Z`XYb
A`ØbWYbYf`K`c\bi`b[ga`Uf`_h`\UVYb`k`]fX"

8Yf`U`hi`Y`Y`K`c\bi`b[ga`Uf`_h`]b`A`ØbWYb`]gh]j`cb`_ca`d`YI`Yb
<YfUi`gZcfXYfi`b[Yb`[YdfÅ[h`8]Y`?`i`Zh`nk`]gWYb`XYa`@YYfghUbX
j`cb`K`c\bi`b[Yb`i`bX`XYa`_U`i`hYb`K`c\bfUi`a`a`Ub[Y`]b`XYf`GhUXh
]gh`ZØf`j`]Y`Y`6Øf[Yf`i`bX`9I`dYfhYb`i`bj`YfghÅbX`]W`" `æ`XYb`Y`hnhYb
>\fYb`\UVYb`g]W`X]Y`A`]YhdFY]gY`]b`A`ØbWYb`XfUgh]gW`Yf\`Ø\`hž
k`Ug`X]Y`G]hi`Uh]cb`ZØf`j`]Y`Y`A`]Yh]bhYfYggYbhYb`ni`gÅ`hn`]W
j`YfgW`ÅfZh" `@Ui`h`XYa`_æ`a`cV]Y]bdcfhU`_`æ`a`ck`Y`h`U[`X]Y
Xi`fW`gW`b]h`]W`Y`?`U`hæ`]YhY`]b`A`ØbWYb`]a`_>\f`&\$&(`VY]`Yhk`U
%+`9i`fc`dfc`E`i`UXfUha`YhYfž`Y]bY`GhY][`Yfi`b[`]j`cb`)`ž`*`i`]a
J`Yf[`Y]W`ni`a`_J`cf`U`f" `A`]YhdFY]gYf\`Ø\`i`b[Yb`]b`X]YgYa`5i`ga`U»
a`UWYb`Yg`ZØf`j`]Y`Y`A`ØbW`bYf`ni`bY\`a`YbX`gW`k`Yfž
Ub[Ya`YggYbYb`K`c\bfUi`a`ni`Z]bXYb"

9]b`k Y]hYfYf`5gdY_hžXYf`ni f`J Yfk]ffi b[`]b`XYf`8YVUhY`i a`XYb
K c`bi b[ga Uf_h`VY]hfÀ[hž]gh`X]Y`HUhgUWXYžXUgg`[fc»Y`HY]`Y`XYg
K c`bfUi a`g`]b`XYf`GHUXh`Yfk cfVYb`k i fXYbž`i a`U`g`?Ud]hU`Ub`U[Y
ni `X]YbYb``8Ua`]h`k]fX`X]Y`BUW`ZfU[Y`]b`Y]bYa`ni j cf`gW`cb
Ub[YgdUbbhYb`A]Yh`a Uf_h`ni g`Àhn`]W`Ub[Y`Y]nh``8]YgY`g]hi Uh]cb
hfÀ[h`XUni `VY]žXUgg`j]Y`Y`K c`bi b[Yb`Y`Yf`ghY`Ybž`k À`fYbX`X]Y
Gi W`Y`bUW`bYi Yb`A]YhYfb`ZØf`J Yfa]YhYf`cZi`Ub[k]Yf][`i bX
i bg]W`Yf`]gh`

I bhYfgW]YX`]W`Y`5bg`ÀhnY`ni f`@Øgi b[`XYg
K c`bfUi a`a Ub[Y`g

I a`XYb`?cbZ]_h`nk]gW`Yb`Y`YfghY`YbXYb`K c`bi b[Yb`i bX`XYf
`c`Yb`BUW`ZfU[Y`bUW`K c`bfUi a`Ubni [Y`Ybž`UVYb
j YfgW]YXYbY`5_hYi fY`i bhYfgW]YX`]W`Y`J cf`gW`À[Y`i bX`5bg`ÀhnY
Yb`k]W`Y`h``9]b][Y`ZcfXYfb`Y]bY`9bhVØfc`fUh]g]Yfi b[`]a
6Ui k YgYbž`i a`X]Y`9fghY``i b[`bYi Yf`K c`bi b[Yb`ni
VYgW`Yi b][Yb``5bXYfY`VYhcbYb`X]Y`6YXYi hi b[`j cb`HYa dc`]a]hg
ZØf`XYb`K c`bi b[gVUi `i bX`gW`U[Yb`j cf`ž`X]Y`[YgYhn`]W`Yb
5bZcfXYfi b[Yb`ZØf`B`Yi VUi hYb`ni `dfØZYb``J]Y`Y`9I dYfhYb`g]bX
g]W`Y`b][ž`XUgg`Y]bY`Dc`]h]_`b`Øh][`]ghž`X]Y`gck c`X`XYb`gcn]U`Yb
K c`bi b[gVUi `ZØf`XYfh`U`g`Ui W`X]Y`9Z]n]Ybn`j cb`6Ui dfc`Y`_hYb
ghY][Yfh`

Ni g`Àhn`]W`g]bX`c`_U`Y``b]h]Uh]j Yb`Yb`hghUbXYbž`X]Y`g]W`ZØf`X]Y
FYU_h]j]Yfi b[`Y`YfghY`YbXYf`K c`bi b[Yb`Y]bgYhnYb`
6Y]gd]Y`gk Y]gY`[]Vh`Yg`Dfc[fUa`a`Yž`X]Y`æ`a`cV`]YbVYg]hnYf`XUni
Yfa`i`h][Ybž`i b[Ybi`hnhYb`K c`bfUi a`ni`j`Yfa`]YhYbž`]bXYa
Z]bUbn]Y`Y`5bfY]nY`[YgW`UZZYb`k`YfXYb``8]YgY`5bg`ÀhnY`_ØbbhYb
XUni `VY]hfU[Ybž`X]Y`?`i`Zhink]gW`Yb`5b[YVch`i bX`BUW`ZfU[Y`ni
j`Yff]b[Yfb`i bX`gca`]h`XYb`A]Yh`a Uf_h]b`A`ØbW`Yb`ni`ghUV`]g]YfYb`

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