

I bX`G]Y`XUW\ hYbž`=bj Ygh]YfYb`gY]`bi f`Y]b I !6U\b!>À[Yf3

9]bY`K`Y`Y`↑ b[Yf`=bj YghcfYb`Ui`g`B]W\h!A`Yhfc!GhÀXhYb`
`UbXY`h`ni`bY\`a`YbX`a`]h`5`_h]Yb`i`bX`_Ui`Zh`?`fmdhc`k`À\`fi`b[`Yb`
`cb`]bYž`gU[`hYb`:`Ø\`fi`b[`g_f`ÀZhY`XYf`6fUbW\Y`[`Y[`YbØVYf`9Hž`
Y]bY`9bhk`]W_`i`b[`ž`X]Y`a`]h`XYa`5i`gVfi`W\`j`cb`7cj`]X!`%-`i`bX`
XYf`UbgW\`]Y»`YbXYb`bUh]cbU`Yb`GdYffi`b[`]a`j`Yf[`Ub[`YbYb`
`>\`f`ni`gUa`a`YbZ]Y`""?`fmdhc!J`Yf`_Ui`Zgd`UhhZcfa`Yb`i`bX`
`J`Yfa`Ò[`Ybgj`Yfk`U`hi`b[`gi`bhYfbY\`a`Yb`\`UVYb`X]YgY`
9fgh]bj`YghcfYb`Ui`Z[`fi`bX`Y]bYg`Yf\`Ò\`hYb`6Yk`i`gghgY]bg`ZØf`
:`]bUbndfcXi`_hYž`Y]bYg`6cca`g`Ub`XYb`5_h]Yba`Àf`hYbž`
Bch]Yfi`b[`Yb`j`cb`BYk`!5[`Y!GhUfhi`dg`i`bX`[`Yn]Y`hYf`K`YfVi`b[`
ZØf`X]YgY`:`fi`ddY`Ub[`Ync[`Ybž`gU[`hYb`X]Y`:`Ø\`fi`b[`g_f`ÀZhY`"
@Ui`h`Vi`bXYgghUUh`]W\Yb`6Ybi`hnYffY[`]ghf]Yfi`b[`gXUhYb`XYf`
6G9`g]bX`X]Y`6Ybi`hnYffY[`]ghf]Yfi`b[`Yb`]b`l`hhUf`DfUXYg\`ni`a`
&`""5i`[`i`gh]a`j`Yf[`Y]W\`ni`a`j`cf`U\`f`i`a`ZUgh`*`\$`i`
[`Ygh]Y[`Yb`"G]Y`]gh]a`i`[`Y]W\Yb`NY]hfUi`a`i`a`+`\$`i`i`]b`CX]g\`Už`
/`Ua`d`^`Y`d/`

9]bY`K`Y`Y`↑ b[Yf`=bj YghcfYb`Ui`g`B]W\h!A`Yhfc!GhÀXhYb`
`UbXY`h`h`ni`bY\`a`YbX`a`]h`5`_h]Yb`i`bX`_Ui`Zh`?`fmdhc`k`À\`fi`b[`Yb`
`cb`]bYž`gU[`hYb`:`Ø\`fi`b[`g_f`ÀZhY`XYf`6fUbW\Y`[`Y[`YbØVYf`9Hž`Y]bY`
9bhk`]W_`i`b[`ž`X]Y`a`]h`XYa`5i`gVfi`W\`j`cb`7cj`]X!`%-`i`bX`XYf`
UbgW\`]Y»`YbXYb`bUh]cbU`Yb`GdYffi`b[`]a`j`Yf[`Ub[`YbYb`>\`f`
ni`gUa`a`YbZ]Y`""

?`fmdhc!J`Yf`_Ui`Zgd`UhhZcfa`Yb`i`bX`
`J`Yfa`Ò[`Ybgj`Yfk`U`hi`b[`gi`bhYfbY\`a`Yb`\`UVYb`X]YgY`9fgh]bj`YghcfYb`
Ui`Z[`fi`bX`Y]bYg`Yf\`Ò\`hYb`6Yk`i`gghgY]bg`ZØf`:`]bUbndfcXi`_hYž`Y]bYg`
6cca`g`Ub`XYb`5_h]Yba`Àf`hYbž`Bch]Yfi`b[`Yb`j`cb`BYk`!5[`Y!`
GhUfhi`dg`i`bX`[`Yn]Y`hYf`K`YfVi`b[`ZØf`X]YgY`:`fi`ddY`Ub[`Ync[`Ybž`
gU[`hYb`X]Y`:`Ø\`fi`b[`g_f`ÀZhY`"

@Ui`h`Vi`bXYgghUUh`]W\Yb`6Ybi`hnYffY[`]ghf]Yfi`b[`gXUhYb`XYf`6G9`

g]bX`X]Y`6Ybi hnYffY[]ghf]Yfi b[Yb`]b`l hUf`DfUXYg\`ni a`' &' "
5i [i gh]a`J Yf[`Y]W\`ni a`J cf`U\`f`i a`ZUgh`*\$`i`' [Ygh]Y[Yb"

G]Y`]gh]a`' [`Y]W\Yb`NY]hfUi a`i a`'+\$`i`']b`C X]g\Už`%-`%i`']b
5ggUa ž,)`i`']b`6]\Uf`i bX`, \$`i`']b`A UX\mU`DfUXYg\` [Yk UW\gYb"

⊕g[YgUa h`]gh`X]Y`NU\`X`Yf`fY[]ghf]YfhYb`5b`Y[Yf`]a`J Yf[`Y]W\`
ni a`J cf`U\`f`i a`' ()`i`' U`i Z`ØVYf`+\$`A`]`]cbYb`' [Ygh]Y[Yb"

8Yf`HfYbX`]gh`Y]bY` [i hY`B UW\ f]W\h`ZØf`C b`]bY!:]bUbn]bj Yghc`fYbž
X]Y`⊕\U`hY`]b`fY[]cbU`Yb`GdfUW\Ybž`c`_U`Y`DUf`hbYfgW\Už`hYb`i bX
fY[]cbU`Y`⊕Zi YbW`f`j YfXcddY`b"

@Ui h`DUmha`A cbYm`k`i W\gYb`X]Y`5ba Y`Xi b[Yb`j cb`⊕j Yghc`fYb
Ui g`XYb`Hcd!' \$!Gh`X`hYb`Ui »Yf`U`V`X`Yf`A Yhfc`dc`Yb`k`]Y`J`Uf`Ub`Ug]
i bX`K`Uf`Ub[U`i a`' \$`i`' \`Ø\Yf`U`g`X`Ug`j Yf[`Y]W\VUfY`K`UW\gh`i a`ž
X`Ug`]b`X]YgYa`'⊕\`f`ZØf`l`!6U\`bYb`j YfnY]W\`bYh`k`i fXY`"6Ybi hnYf
j cb`B]W\h`A Yhfc`g`g]bX`Y\`Yf`j cb`⊕j Ygh]h]cbYb`]b`9][Yb`_Ud]hU`U`g
j cb`X]fY`_hYb`⊕j Ygha`Yb`h`Z`c`b`X`g`Ub[Ync[Yb`ž`gU[hY`Y]b
l bhYfbY\`a`Yb`ggdfYW\Yf"

8]Y`C b`]bY!K`YU`h\!A`UbU[Ya`Yb`h`D`U`h`Z`c`fa`'⊕8A`cbYm
j YfnY]W\`bYhY`]b`X]YgYa`'⊕\`f`*\$`i`' X`Yf` [YgUa`hYb
BYi`Uba`Y`Xi`b[Yb`j`cb`B`i`hnYfb`Ui`g`H]Yf!⊕`i`bX`H]Yf!⊕Gh`X`hYbž
j Yf[`]W\Yb`a`]h` \$`i`']`cf`UW\h`A`cbU`hYb"

9HhYW\`

⊖`À\b`]WXYf`K Y]gY`a Y`XYhY`X]Y`? fmdhc!J Yf`Ui Zgd`UhhZc fa
7c]bGk]hW`?i VYf`gY]h`⊘ b]`YhnhYb`⊘\fYg`Y]b`a cbUh`]WYg
K UW`ghi a `j cb`%`) i `VY]`XYb`5ba Y`Xi b[Yb`Ui g`B]W`h!A Yhfc!
GhÅXhYbž`k cVY]`DUhbU`Ui h`8 UhYbž`X]Y`a]h`9H`[YhY]`h`k i fXYbž`Ub
XYf`Gd]hnY`ghUbX"

DUgg]j Yf`9]b_ca a Ybgghfca

HfUX]b[`]gh`dUgg]j Yg`9]b_ca a Yb`ZØf`↑ b[Y`⊖XYf`

5V[YgY`Yb`j cb`fYXi n]YfhYb`Ni [Ub[gVUff]YfYb`ni `XYb
?Ud]hU`a Åf`hYb`V]YhYb`X]Y`B]W`h!A Yhfc!F Y[]cbYb`X]YgYb
I bhYfbY`a Yb`Y]b`↑ b[Ygž`Ui ZghfYVYbXYg`⊖X]Ybž`]b`XYa
Z]bUbn]Y`Y` : fY]\Y]h`Y]b`[fc» Yg`H`Ya U`]ghž`gU[hYb
6fUbW`YbYI dYfhYb`"

9]bY`Y]bn][Y`9]bbU`a Ye i Y`Y`fY]W`h`b]W`h`Ui gž`k Ybb`a Ub`fY]W`
k YfXYb`k]`"G]Y`gc`hYb`Y]b`dUgg]j Yg`9]b_ca a Yb`UVYbž`XUg
\Ø`Yf`]gh`U`g`⊘f`U`h]j Yg`9]b_ca a Ybž`XUg`⊘fY`5i g[UVYb`XYW`Yb
_Ubb ž`gU[hY`XYf`&) !`Å`f][Y`⊖eg`Ubh`5[[Ufk U`Ui g`F U]di fž`XYf
<Ui dhghUXh`j cb`7`\`Uhh]g[Uf`" 8]Yg`]gh`X]Y` : fY]\Y]hž`X]Y`XUg
⊖j Ygh]YfYb`i bX`< UbXY`b`V]YhYh`"

5[[Ufk U`ž`XYf`Y]bY`J c`nY]hghY`Y`VY]`Y]bYa `d`Ufa UnYi h]gW`Yb
6YfUhi b[gi bhYfbY`a Yb`U`hž`\UbXY`h`h`Å[`]W`i bX`j YfZØ[h`ØVYf`Y]b
X]j Yfg]Z]n]YfhYg`Dc`fhZc`c`j cb`X]fY`_hYb`⊖j Ygha YbhZcbXg`i bX
5_h]Yb`"9]b`_Y]bYf`HY]`gY]bYf`⊖j Ygh]h]cb`]gh`]b`? fmdhc k Å`fi b["

9HhYW`

8Yf<UbXY`V]YhYhX]Y':`YI]V]`hÅhi bX`X]Y`A Ò[`]W_X]hž; Y`X`ni
j YfX]YbYbž`X]Y`Y]b`- !hc!) !æV`b]W_Xh`V]YhYhž`gU[hY`5""5UbW_XU`ž`XYf
Y]bYb`6UW_XY`c!5VgW_X`i gg]b`6Yhf]YVgk]fhgW_XUZh`\Uh"

B UW_XYf`7cj]X!%- !DUbXYa]Y`]gh`XfUi » Yb`U`Yg`W_XUch]gW_X
[Yk cfXYbž`i bX`Yg`]gh`b]W_Xh`Y]bZUW_Xž`Y]bYb`æV`ni`VY`_ca a Yb"": Øf
9fghgYa YghYf`VY`_ca a h`a Ub`Yhk U`&) "\$\$\$`Fi d]Yb`]a`A cbUh ž
gU[hY`XYf`&&!Å\ f][Y`Ui g`A mgi fi`]b`? UfbUHU`U"

5UbW_XU`VY[Ub`b`a]h`XYa` < UbXY`ž`bUW_XY`a`Yf`Y]bYb
:]bUb`nV]`Xi b[g`_i fg`VY]`< Uj Yb`gd]fYž`Y]bYf`C b`]bY!@Yf`b`d`UhhZc`fa
ZØf`XYb`6ØfgYb`UbXY`ž`UVgc`j]Yf`h`\UhhY"

æW_X`V]b`b]W_Xh`XUa]h`Y]bj Yf`ghU`bXYbž`UW_Xh`Ghi bXYb`Ua`HU[`i b`hYf
Y`a UbX`UbXYf`Ya`ni`UfVY]hYb""æW_X`k ÅfY`"]YVYf`Z]bUb`n]Y`
i bUV`Åb[][ž`VUg]YfYbX`Ui Z`a`Y]bYa`@Yf`b`Yb`i bX`a`Y]bYb
: Å\][`_Y]hYb`ž`gU[hY`g]Y"

F]hj]_`J]d]bž`J c`fg]h`nYbXYf`j cb`< Uj Yb`gd]fYž`gU[hY.`_`J]Y`Y`↑ b[Y
@Yi hY`Ui g`GhÅXhYb`XYf`nk Y]hYb`i bX`Xf]hYb`? UhY[cf]Y`\UVYb`]a
@Ui ZY`Y]bYg`š\`fYg`]\`fYb`5fVY]hgd`Uhn`j Yf`cfYb""8]Y`a`Y]ghYb
X]YgYf`↑ b[Yb`@Yi hYž`X]Y`Yhnh`bYi Y`K`Y[Y`ZØf`Y]bY`ghUV]`Y
? Uff]YfY`Ui g`d`fcV]YfYbž`g]bX`Yhnh`XYf`A`Y]bi b[ž`XUgg`XYf
5_]Yb`\UbXY`i b`hYf`UbXYf`Ya`Y]bY`ni j Yf`Ågg][YfY`C`dh]cb`]gh`8Yf
9]bZi`gg`Y]bYf`f]Yg][Yb`A`Yb[Y`cb`]bY`j YfZØ[VUfYf`šZc`fa`Uh]cbYb
]gh`Y]bYf`XYf`< Ui d`hhfY]VYf`ZØf`X]YgYb`HfYbX""æ` ; Y[Yb`gUhn`ni
XYbYb`Ui g`H]Yf!%GhÅXhYb`g]bX`X]Y': Ua`_]Yb`i bX': fYi bXY`X]YgYf
š [YbX`]W_XYb`b]W_Xh`gUW_X`i bX][`_][Ybi [ž`i`a`g]Y`ØVYf`XYb
5_]Yb`\UbXY`ni`]bZc`fa`jYfYb"

: f]gW_XYf': Ub[

B Yi Y`C b`]bY!šj Ygh]h]cbgd`UhhZc`fa`Yb`g]bX`VYghfYVhž`6Ybi`hnYf`k]Y
5[[Ufk`U`i bX`5UbW_XU`Ub`6cfX`ni`bY`a`Yb"

7c]b8`7L`ž`Y]b`Zf]gW_X`[Yd`fÅ[hYg`? fmd`hc!9]b`\`cfbž`j YfnY]W_X`bYhY`]b

XYb`YhnhYb`gYWXg`A cbUHYb`Y]b` (, ž+!ZUWX Yg`K UWX ghi a`XYf
6Ybi hnYfUba Y`Xi b[Yb`Ui g`H]Yf! ⇨ i bX`H]Yf! ⇨ Gh`XhYb`"8Yf": c_i g
XYg`l bhYfbY`a Ybg`Y[h`Ui Z`b`U`hYb`]b`c`U`Yf`GdfUWX Yž`i a`XUg
k UWX gYbXY`b`hYfYggY`X]YgYf`? i bXYb[fi ddY`ni`k YW_Yb`"

: Øf`Gh`XhY`Ui » Yf`U`V`XYf`A Yhfc dc`Yb`d`UbYb`k]f`a Y`f`b`U`hY`]b
c`U`Yf`GdfUWX Y`ni`X][]hU`Yb`5ggYhg`i bX`YffY]WX Yb`fY[]cbU`Y
b`Zi Yb`Wf`c`b`]bY`i bX`c`ZZ]bY`"HY"]`Yf`c`U`Yb`ZYgh`]WX Yb
5_hj]]h`hYb`ni`gY]bž`]gh`Ui WX`Y]bY`XYf`A Ø[`]WX`_Y]hYbž`k]Y`k]f`XUg
Di V`_]i a`Ui Z`_`ÄfYb`i bX`Ubn]Y`Yb`a`ØWX`hYb`ž`gU[hY`F`Ua`U`]b[Ua
Gi VfUa`Ub]Ubž`A Uf`_Yh]b[WX`YZ`VY]`7c]b8`7L`"

8 Ug`l bhYfbY`a Yb`U`h`ØVYf`%\$`A fX`"Fi d]Yb`ZØf
6]Xi b[g]b]h]Uh]j Yb`VYfY]h[YghY`hž`i a`a Y`f`6Ybi hnYf`Ub`6cfX`ni
Vf]b[Yb`"

8 Ug`GcW]U!`7ca`a YfW`!GhUfhi d`HfY`ž`XUg`Y]bY`Xca`]b]YfYbXY
Bi hnYfVUg]g]b`H]Yf! ⇨ i bX`H]Yf! ⇨ Gh`XhYb`U`hž`gU[hYž`XUgg
:]bUbnX]Ybgh`Y]ghi b[gi bhYfbY`a Yb`g`ck`c`h`fUX]h]cbY`Y`U`g
Ui WX`bYi Y`NY]hU`hYf`]b`XYb`YhnhYb`UWX`h`A`cbUHYb`ni`bY`a`YbX
a`h`b`Zi Yb`Wf`b`Ui Z`]`Yb`D`UhhZcfa`Yb`ni`gUa`a`Yb[YUfVY]hYh
UVYbž`i a`↑ b[Y`9fk UWX`gYbY`ni`YffY]WX`Yb`"

Di`_]h`5[fUk`U`ž`79C`i bX`A`]hVY[fØbXYf`j`cb`HfY`ž`gU[hYž`XUgg
HY`i [i`ž`9b[`]gWX`ž`<]bX]ž`HUa`]`i bX`A`UfU`h`X]Y`ZØb`Z`k`]WX`h][ghYb
GdfUWX`Yb`g]bXž`X]Y`A`Uf`_Yb`ZØf`? Ua`dU[bYb`j`Yfk`YbXYb`"

8]Y`D`UhhZcfa`U`h`a`]h`A`Uf`_Yb`k`]Y`A`i`h`c`c`h`i`:]bUbW`ž`XYf`? fmdhc!
< UbXY`gd`UhhZcfa`7c]bGk`]hWX`?i`VYf`i`bX`XYa`C`b`]bY!6fc`_Yf
l`dghcl`ni`gUa`a`Yb[YUfVY]hYh`"

8]Y`b`Zcfa`Uh]cbgei`Y`Ybž`Ui`Z`X]Y`dchYbn]Y`Y`b`j`Yg`hc`fYb
ni`[fY]ZYb`_`c`bbhYbž`k`UfYb`bi`f`Ui`Z`9b[`]gWX`"8 Ug`k`Uf`ZfØ`Yf`U`gc
Y]bY`5VgWX`fYW`i`b[ž`gU[hY`DfUb`U`? Ua`fUž`79C`j`cb`i`:]bc`c[mž
Y]bYa`i`:]bUbnVYfUhi`b[gi`bhYfbY`a`Yb`"

×hnh]gh`Y]bY`_f]h]gWX`Y`A`UggY`Ub`c`U`gd`fUWX][Yb`b`U`hYb
YffY]WX`h`K`Yb`b`Y`a`UbXž`XYf`_Y]b`9b[`]gWX`j`YfghY`hž`Ui`Z`b`U`hY

ni [fY]ZYb`i bX`X]Y`6ÖfgY`j YfghY`Yb`a ÖW hYž`[UV`Yg`]b`XYb`YhnhYb`
%, `A cbUhYb`[Ybi [`XUZØf` žZØ[hY`Yf`\]bni ""

⇒\hUUFh\`8U`a]Už`Y]b`Y]hYbXYf`5b[YghY`hYf`VY]`8Ybhgi
K YVW`i hbYmž`XYf`?i bXYb`k]Y`; cc[`Yž`l VYf`i bX`l bXYf`5fa ci f
VYhfYi h`\Uhž`gU[hYž`X]Y`A Uf`_Yh]b[Ui g[UVYb`ZØf`:]bUbndfcXi _hY
gY]Yb`]b`XYb`YhnhYb`%, `A cbUhYb`[Ygh]Y[Yb``8]Yg`\UVY
5i gk]f`_i b[Yb`Ui Z`X]Y`5fh`i bX`K Y]gYž`k]Y`:]bUbndfcXi _hY
_ca a i b]n]Yfh`k YfXYb""

:]bUbn]Y`Y`6]`Xi b[`i bX`6]`Xi b[`g]bX`X]Y`k]W`h][ghYb
G`W`k Yfdi b_hVYfY]W`Y`ZØf`X]YgY`_Ud]hU`fY]W`Yb`C`b`]bY!
D`Uhž`cfa Ybž`X]Y`Y]bY`bYi Y`; YbYfUh]cb`j cb`:]bUbn]bZi YbW`fb
\Yfj cf[YVfUW`h`\UVYbž`VYf]W`hYhY`9H`ni j cf""

8]Y`Ni _i bZh`XYf`:]bUbnV]`Xi b[``]Y[h]b`fY[]cbU`Yb`GdfUW`Ybž
gU[hY`DfUhY`_G]b[\ž; fØbXYf`i bX`79C`j cb`@YUfb5dd"W`ca ž`XUg
Y`XYb`A cbUh`Y]bYb`5bgh]Y[`XYf`bYi Yb`6Ybi hYf`Ui g`H]Yf!⇒i bX
!⇒Gh`XhYb`j cb`ZUgh`+!, `i`j YfnY]W`bYh""

?Ua fU`j cb`:]bc`c[migU[hYž`X]Y`J]Y`ZU`h`gd]Y[Y`Y`g]W` `]b`XYb
5bZfU[Yb`j cb`B]W`h`A Yhfc!⇒j YghcfYb`Ui Z`gY]bYf`D`Uhž`cfa `k]XYfž
X]Y`j cb`6ÖfgYb[`Ab[Yb`V]g`\]b`ni `5b`U[YdfcXi _hYb`fY]W`Yb`i bX
X]Y`j cb`A Yhfcg`cZh`ØVYfhfYZZYb""

9]bY`j]Y`Z`h`h][YfY`6YhY]]][i b[`Ub`XYf`A Uf`_hh]YZY`XYf`UbU`mg]YfhYb
l bhYfbY`a Yb`\Uh`ni [Ybca a Ybž`XYb`b`k Ybb`a Ub`a Y`\f`@Yi hY
\Uhž`Vf]b[Yb`g]Y`UbXYfY`5fhYb`j cb`9fZU`\fi b[Yb`i bX`9fZU`\fi b[Yb
a]h`i bX`g]Y`k c`Yb`:]fU[Yb`ni `l bhYfbY`a Yb`ghY`Ybž`X]Y`]b`]fYb
Gh`XhYb`i bX`; Ya Y]bXYb`h`h][`g]bXž`i bX`8ÖfZYf`ž`gU[hY`Yf"

6Ygi W\Yb`G]Y`i bg`Ui Z.`_fmdhc!bYk g"Uh