I bZU``'Ua 'J UfY`Yf' < UZYb. 'Dc`]nY]'gi W\ h
NYi [Yb`i bX`HfU_hcf! < U`hYf

J UfY`. 'Dc`]nY]'gi W\ h< U`hYf`Y]bYg`HfU\_hcf`g`bUW`i bZU``a]h
D_k ""NYi [YbUi Zfi ZØf`k Y]hYfY`ϑZcfa Uh]cbYb""?cbhU_h.
\$(() %- &' ! \$"

5a`5VYbX`XYg`%, ""5i [ i gh&\$&( ž[ Y[ Yb`%- . \$ \$`i \fž`YfY][bYhY`g]W\
Y]b`a Yf\_k ØfX][ Yf`J cfZU``Ui Z`Y]bYa`DUf_d`Uhn`Ua`J UfY`Yf' < UZYb`
9]bY`?c``]g]cb`nk`]gW\Yb`Y]bYa`D_k`XYg`Hmdg`8U]a`Yf!6Ybn`i bX
Y]bYa`[ YdUf\_hYb`HfU_hcf`XYf`A Uf_Y`@Ubn`6i``Xc[`gcf[ hY`ZØf
5i ZFY[i b[`]b`XYf`FY[ ]cb""8Yf`D_k !: U\fyfž`XYf`XYb
Ni gUa`a Ybghc»`a Y`XYhYž`_cbbhY`YXcW\`bi f`gdÄf`]W\Y
ϑZcfa Uh]cbYb`ni`XYa`VYhfcZYbYb`HfU_hcf``]YZYfb"

8UVY]'V`]YV`XYf`HfU\_hcf`cZYbg]W\h`]W\`i bVYgW\ÄX][hž`k Ug`XUfUi Z
\]bXYi hYhž`XUgg`XYf`GW\UXYb`[Yf]b[`k Uf""8Ug`ϑhYfYggY`XYf
Dc`]nY]'[ Yf]W\hYhg]W\`bi b`Ui Z`XYb`HfU\_hcf`gY`Vgh`i bX`XYggYb
< U`hYf""8Ug`: U\fnYi [`k i fXY`VY]'Y]bYf`XUfUi Z`Zc`[YbXYb
, VYfd`fØZ`b[`Xi fW\`X]Y`6YUa`hYb`b]W\h`Ui Z[YZ`bXYbž`k Ug`X]Y
Gi W\Y`YfgW\k`Yfh""8]Yg`k`]fZh`: fU[ Yb`Ui Z`K`c`\_ØbbhY`XYf`HfU\_hcf`
gY]b3`i bX`k`Yf`]gh`XYf`j`YfUbhk`cfh`]W\Y`< U`hYf3

9]b`i b[ Yk`Ò\`b`]W\Yf`J`cfZU```i bX`gY]bY
: c`[Yb

8Yf`J`cfZU``\`Uh`VYfY]hg`X]Y`c`\_U`Y`Dc`]nY]'VYgW\ÄZh][hž`X]Y`g]W\`bi b
Ub`X]Y`²`ZYb`h]W\`\_Y]h`k`YbXYhž`i`a`k`Y]hYfYb`5i`ZgW\`i`gg`ØVYf`X]Y
G]hi`Uh]cb`ni`Yf\`U`hYb""9g`_ØbbhY`g]W\`i`a`Y]bYb`\`Ufa`cgYb`i`bZU``
\`UbXY`bž`XYb`bcW\`]gh`X]Y`i`b[Yk`]gg\`Y]h`ØVYf`XYb`J`YfV`Y]V`XYg
HfU_hcf`g`i`bX`gY]bY`J`YfV]bXi`b[ `ni`XYa`J`cfZU``VYa`Yf`_Ybgk`Yfh"
K`]f`V]hYb`NYi [ Ybž`X]Y`a`Ò[`]W\Yfk`Y]gY`Yhk`Ug`[ YgY\`Yb`\`UVYb

cXYf'XYb'HfU_hcf'_YbbYbž'g]W'VY]i bg'ni 'a Y'XYbž 'gU[hY'Y]b
Dc`nY]gdFYWYf"

5i ZX]Y': fU[Yž'k Ufi a 'X]YgY' bZcfa Uh]cbYb'gc'k]W'h]['g]bXž]gh'X]Y
5bhk cfh'_Uf.'G]Y'_ÖbbhYb'\Y'ZYbž'dchYbn]Y''Y'I bgh]a a]['_Y]hYb'ni
_'ÄfYb'i bX'k Y]hYfY'fYW'h]WY'GWf]hY'ni 'j Yfa Y]XYb": U\fyf'i bX
<U'hYf'g]bX'[YgYh'W'j YfdZ]W'hYhž'Ub'Y]bYa 'gc'WYb'J cfZU''ni
gY]bYf?'Äfi b['VY]ni hfU[Yb"

5i Zfi Z'ni f'i bhYfghØhni b[

8]Y'J UfY'Yf'Dc`nY]'cZhi'Ui Z'I bhYfghØhni b['Ui g'XYf'6Yj Ö'_Yfi b["
NYi [Yb'cXYf'XYf'<U'hYf'XYg'HfU_hc'fg'k YfXYb'[YVYhYbž'g]W'i bhYf
XYf'HY'YZcbbi a a Yf'\$() %- &' ! \$'ni 'a Y'XYb" 8]YgYf'5i Zfi Z]gh
b]W'h'bi f'Y]bY'J cf[Y\Yb'gk Y]gY'ni f'5i Z_'Äfi b['XYg'J cfZU''gž
gcbXYfb'Ui W'Y]b'G][bU'XYf'J YfU'bhk cfhi b[gØVYfbU\ a Y''9g
nY][hž'XUgg'YXYfž'XYf'Ub'Y]bYa 'J Yf_Y\fgi bZU''VYhY]][h']ghž'Y]bY
[Yk]ggY'J YfU'bhk cfhi b['U'hž'i a 'a Ö['WY'I bfY[Y'a Ä»]['_Y]hYb
ni 'ÄfYb"

8]YgYg'9fY][b]g'_ÖbbhY'Ui W'Y]b'6Y]gd]Y''XUZØf'gY]bž'k]Y'gW'by''
gc'WY'J cfZÄ''Y'Ui ZhYhYb'_ÖbbYb'i bX'k]Y'k]W'h]['Yg']ghž'XUgg'U''Y
6YhY]][hYb'XYb'A i hi bX'X]Y'J YfU'bhk cfhi b['Ui ZVf]b[Ybž'X]Y
; YgWY\ b]ggY'hfU'bgdUfYb'h'ni 'a UWYb" >XYf'GWf]hž'XYb'X]Y
6YhY]][hYb'i bhYfbY\ a Ybž'_Ubb'b]W'h'bi f']\fYf'Y][YbYb
FYW'hg'U[Y'\Y'ZYbž'gcbXYfb'Ui W'XYf'U''[Ya Y]bYb
J Yf_Y\fgg]WYf\Y]h'ni [i hY_ca a Yb"

Gc'WY'J cfZÄ''Y'_ÖbbYb'gW'by'']b'J Yf[YggYb\Y]h[YfU'hYbž'k Ybb
g]Y'b]W'h'U_h]j 'Ub[Y[Ub[Yb'k YfXYb" 8Yf'5i Zfi Z'ni f'A]hUfVY]h
_Ubb'XUVY]'Y'ZYbž'_ØbZh[Yb'A]ggj YfghÄbXb]ggYb'cXYf'Ä\b']WYb
I bZÄ''Yb'j cfni VYi [Ybž]bXYa 'X]Y'5i Z_'Äfi b['gc'WYf'J cfZÄ''Y
[YZØfXYfh'k]fX" 8Yf'Dc`nY]i bX'XYf'^2 ZZb'h]W_Y]h'_ca a h\Yf
Y]bY[Ya Y]bgUa Y'Fc''Y'ni ž'i a 'X]Y'J Yf_Y\fgg]WYf\Y]h'ni
j YfVYggYfb"

8Yf'5i Zfi Z'ni f'NYi [Yba Y'Xi b[

K]Y`g]W`b`X]YgYa`gdYn]Y`Yb` : U`nY][ h`g]bX`X]Y`5i [Yb`XYf`
² ZYbh]W`\_Y]h`cZh`XYf`GW`ØggY`ni`f`5i Z`\_`Åfi b[`j`cb`J`cfZ`\_`Yb`"C`Zh`
g]bX`Yg`X]Y`\_`Y]bYb`8YhU]`gž`X]Y`ni`Y]bYa` [fØ» YfYb`6]`X`ZØ`fYb`
_`ÖbbYb`"9g`]gh`b]W`h`bi`f`Y]bY`5i Z[ UVY`XYf`Dc`]nY]ž`gcbXYfb`Ui`W`
Y]bY`XYf` ; Ya`Y]bgW`UZh`ni`gUa`a`Ybni`UfVY]hYbž`i`a`G]W`Yf`Y]h`i`bX`
HfUbgdUfYbn`Ui`ZXYb`GhfU» Yb`ni` [ Yk`Å`f`Y]ghYb`"8Yf`5i`Zfi`Zni`f`
NYi [Yba`Y`Xi`b[ ž`XYb`X]Y`Dc`]nY]`Y`mhj`YfVfY]hYhž`\_`ÖbbhY`X`Uni`
VY]hfU[Ybž`X]Y`8YhU]`g`XYg`J`cfZU`g`Ubg`@]W`h`ni`Vf]b[Yb`i`bX`XUg`
J`Yf`hf`Ui`Yb`]b`X]Y`G]W`Yf`Y]h`g`a`U» bU`a`Yb`XYf`F`Y[ ]`cb`ni`gh`Å`f`\_`Yb`"

Ni`gUa`a`Yb`ZUggYbX`\_`Äggh`g]W`gU[Ybž`XUgg`X]Y`Gi`W`Y`b`UW`X`Ya`
<`U`h`Yf`XYg`HfU`_`hc`fg`i`b`X`X]Y`A`Y`Xi`b[`j`cb`NYi [ Yb`X`Uni`VY]hfU[Yb`
`ÖbbYb`ž`XUg`i`h`Yf`Y`ggY`Ub`XYf`G]W`Yf`Y]h`i`a`GhfU» Ybj`Yf``Y`f`ni`
ZØfXYfb`i`b`X`X]Y`VYfY]hg`Yfk`Å`b`hY`J`Yf`Ub`hk`cf`hi`b[`U`Yf`
J`Yf`_`Y`f`ghY]`b`Y`a`Yf`ni`VY`hc`b`Yb`"

?`cb`hYI`h`X`Yf`J`Yf`_`Y`f`gg]W`Yf`Y]h`]b` 8`Yi`hg`W`\_`Ub`X`

8]Y`J`Yf`\_`Y`f`gg]W`Yf`Y]h`]b`8Yi`hgW`_`UbX`]gh`Y]b`nYb`hfU`Yg`H`Y`a`Už`
XUg`]b`XYb`Y`mhYb`\_`Y`f`Yb`ni`b`Y`a`Yb`X`Ub`6YXYi`hi`b[` [ Yk`cb`b`Yb`
`Uh`Hf`ch`n`Y]b`Yf`U` [Ya`Y]b`Yb`G`Yb`\_i`b[`XYf`i`b`ZU`n`U`Yb`V`Y]V`h`X]Y`
5bnU`\_`XYf`J`Yf`\_`Y`f`gi`b`Z`\_`Y`ž`X]Y`Xi`f`W`i`b`_`Uf`Y`f`Y`W`h`]W`Y`
G]hi`Uh]cb`Yb`c`XYf`i`b]XYb`h]Z]n]Yf`hY`6YhY]`][hY`j`Yfi`fg`UW`h`k`Yf`XYb`ž`
Y]b`Dfc`V`Ya`"@`Ui`h`XYf`_`Å`f`]W`Yb`i`b`ZU`gh`Uh]gh]\_`XYf`Dc`]nY]`
8Yi`hgW`_`UbX`[UV`Yg`]a`\_`Y`f`&`\$`&&`]bg[ YgUa`h`Y`hk`U`&`ž`+`A`]`]cb`Yb`
J`Yf`_`Y`f`gi`b`Z`_`Y`ž`j`cb`XYb`Yb`Y`hk`U`"\$`\$`\$`\$`a`]h`DY`fg`cb`Yb`g`W`U`X`Y`b`
j`Yf`Vi`b`XYb`k`Uf`Yb`"8]Y`6i`b`XYg`f`Y[ ]Yfi`b[`U`h`n`U`f`Y]W`Y`
_`h]Uh]j`Yb`[ Ygh`Uf`hYhž`i`a`X]Y`J`Yf`\_`Y`f`gg]W`Yf`Y]h`ni`j`Yf`VY`ggYfb`ž`
XUfi`bh`Yf`?`Ua`d`U[bYb`ni`f`5i`Z`\_`Åfi`b[ `Ø`VYf`[YZ`\_`Å`f`]W`Y`
J`Yf`U`h`Y`bg`k`Y]g`Yb`]a`GhfU» Ybj`Yf`_`Y`f`"

`g`VY`gcb`XYfY`\_`Ub`Xk`]f`hg`W`UZh`]W`Y` : U`f`nYi [Yž`k`]Y`HfU``hc`fYb`ž`g]b`X`
c`Zh]b`J`Yf`_`Y`f`gi`b`Z`_`Y`j`Yfk`]W`\_`Y`hž`j`cf`U`\_`Ya`\_`]b`\_`Å`b`X`]W`Y`b`
F`Y[ ]`cb`Yb`"8`UVY]`_`ÖbbYb`X]Y`[ fc» Yb`8]a`Ybg]cb`Yb`i`b`X`X]Y`
_`Ub[ gUa`Y` ; Yg`W`k`]b`X][ \_Y]h`X]Yg`Yf` : U`f`nYi [Y`Y]b`Y`
<`Yf`Ui`g`Zc`f`XYfi`b[ `ZØ`f`Ub`XYfY`J`Yf`_`Y`f`ghY]`b`Y`a`Yf`X`Uf`ghY`\_`Yb`"8]Y`
Dc`]nY]`g`c`k`]Y`J`Yf`_`Y`f`gi`d`Yf`h`Yb`VY`hc`b`Yb`X]Y`B`c`hk`Yb`X][ \_Y]hž`

gck c\`X]Y': U\fnYi [ \U`hYf`U`g`Ui W\`X]Y`UbXYfYb
J Yf_Y\fgH]`bY\`a Yf`Ui ZX]Y'; YZU\fyb`Ui Za Yf_gUa `ni `a UWXYbž
X]Y`a ]h`XYa `J Yf\_Y\fgUi Z\_ca a Yb`i bX`XYa `J Yf\U`hYb`Ui ZX]Yb
GhfU» Yb`j YfVi bXYb`g]bX"

8]Y`F c``Y`XYf`NYi [YbUi Zfi ZY`]b`dc`nY]`]WXYb
9fa]hh`i b[Yb

NYi [YbUi Zfi ZY`gd]Y`Yb`Y]bY`YbhgWXY]XYbXY`F c``Y`VY]`XYf
5i Z_`Äfi b[ `j cb`J Yf_Y\fgi bZÄ``Ybž]bgVYgcbXYfY`k Ybb`Yg`Ub
VY`UghVUfYb`ϕZcfa Uh]cbYb`ØVYf`X]Y`6YhY]`][hYb`a Ub[ Y`h" `ϕ
j]Y`Yb`i: Ä``Yb`g]bX`Yg`X]Y`<]bk Y]gY`j cb`DUggUbhYb`cXYf`UbXYfYb
J Yf_Y\fgH]`bY\`a Yfbž`X]Y`YbhgWXY]XYbX`ni f`5i Z_`Äfi b[ `Y]bYg
J cfZU``g`VY]hfU[ Yb`_ØbbYb" `@Ui h`Y]bYa `6Yf]W`h`XYf`8Yi hgWXYb
<cW`gW`i `Y`XYf`Dc`nY]`g]bX`ZUgh" \$`DfcnYbh`XYf`J Yf_Y\fgi bZÄ``Y
Ui Zi b[YbØ[YbXY`5b[ UVYb`j cb`6YhY]`][hYb`ni fØW`ni ZØ\fybž`k Ug
X]Y`Bchk YbX]`[_Y]h`Y]bYg`YZZY`\_hj Yb`NYi [Yba UbU[Ya Ybhg
i bhYfghfY]W`h"

9]b`U`_hi Y``Yg`6Y]gd]Y``nY][hž`XUgg`Xi fW`i [ Yn]Y`hY
2 ZYbh]W`\_Y]hgUfVY]hi bX`5i Zfi ZY`ni f`A]h\`ZY`]b`gcn]U`Yb`A YX]Yb
X]Y`Dc`nY]`cZhgW`bY``ni `k ]W`h][Yb`ϕZcfa Uh]cbYb`[Y`Ub[ h" `8]Yg
k]fX`b]W`h`bi f`]b`i: Ä``Yb`j cb`l bZÄ``Yb`[ Ybi hmž`gcbXYfb`Ui W`VY]
UbXYfYb`GhfUZhUhYb" `8Yf`5i Zfi ZXYf`J UfY`Yf`Dc`nY]`ni f
?cbhU`hUi ZbU\`a Y`a ]h`NYi [Yb`cXYf`<U`hYfb`XYf`VYhY]`][hYb
: U\fnYi [Y`]gh`U`gc`Y]b`VYk Ä`fhYg`J YfZU\fybž`i a `X]Y': U\bXi b[ `ni
Yf`Y]W`hYfb`i bX`k]W`h][ Y`ϕZcfa Uh]cbYb`ni `gUa a Y`b"

8Yf`I a [ Ub[ `a]h`Ubc bma Yb`cXYf`b]W`h`XYbh]Z]n]YfVUfYb
: U\fnYi [Ybž]bgVYgcbXYfY`]b`ÄbX`]WXYb`; YV]YhYbž`V`Y]Vh`Y]bY
<YfUi gZcfXYfi b[`ZØf`X]Y`Dc`nY]UfVY]h" `ϕ`Ä`b`]WXYb`i: Ä``Ybž`k]Y
XYa `VYgW`f]YVYbYbž`k c`Yg`ni `Y]bYa `l bZU``nk]gWXYb`Y]bYa `D_k
i bX`Y]bYa `HfU`hc f`_ca a hi bX`k Y]hYfY`8YhU]`g`ZY`\`Ybž`\_Ubb`X]Y
Gi WXY`bUW`NYi [Yb`XYb`YbhgWXY]XYbXYb`l bhYfgW]YX`a UWXYb"

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