HfU[]gWk Yf`J Yf`i gh. `E i ]W\_VcfbYf`: Ua]`Y
bUWk `I bZU``]b`#U`]Yb`Ui Z`<]`ZY
Ub[Yk]YgYb

9]b`9\YdUUF`gh]fVh`bUWk`Y]bYa`5i hci bZU``]b`#U`]Yb`"Nk Y]
G0\ bYž%, `i bX`%(`J\ fY`U`hž`V`Y]VYb`ni f0W_": Ua]`Y`V]hYh
i a`GdYbXYb"

9]b`gWk YfYf`5i hci bZU``]b`#U`]Yb` \Uh`XUg`@YVYb`Y]bYg`9\YdUUFg
hfU[]gWk`VYybXYhi bX`]\fY`VY]XYb`G0\ bY`ni f0W\_[ Y`UggYb"
K`À\ fYbX`U`Y`]a`Gca`a`Yf`Y]bYb`Yb`hgdUb`b`hYb`I`f`Ui`V`]b`#U`]Yb
[Yb]Y» Yb`a`0W`hYbž`Yb`XYhY`Z0f`A`Uf`\_i`g`i`bX`F`Ua`cb`U`Ui`g
E`i`]W_Vcfb`X]Y`F`Y]gY`]b`Y]bYa`5`V`hf`Ui`a`"8]Y`VY]XYb`9`hYfb
j`Yf`c`f`Yb`]b`Y]bYa`gWk`fYW`]Wk`Yb`Nk`]gWk`Yb`ZU``Ui`Z`XYf`F`0W_ZU`fh
Ui`g`XYa`I`f`Ui`V`]\f`@YVYb`"8`Ug`I`b`[`0W_`YfY][`b`Y`hY`g]Wk`Ui`Z`XYf
5i`hc`VU`b`5%]b`XYf`B`À`Y`j`cb`A`U]`Ub`X`ž`k`c`X`Ug`5i`hc`nk`]gWk`Yb
nk`Y]`@_k`Y]b[ Y`_`Ya`a`h`k`i`f`XY"

8`Ug`X`f`Ua`Uh]gWk`Y`9`fY][`b]g`Y`fY][`b`Y`hY`g]Wk`5`b`ZU`b[`5i`[`i`gh`"8]Y
B`UWk`f]Wk`hYb`0VYf`XYb`J`cf`ZU``j`Y`fV`fY]hYhYb`g]Wk`gWk`bY``ž`i`b`X`X]Y
:`Ua`]`Y`V`Uh`]b`Y]bYa`Ya`ch]cb`U`Yb`5i`Zfi`Zi`a`Z]b`Ubn]Y``Y
I`bhY`fgh0`hni`b[``6Y]XY`\_`À`a`d`ZhYb`]a`?`f`Ub`_`Yb`\`Ui`g`]b`#U`]Yb`i`a
]\f`@YVYb`ž`UVYf`VY]XY`\`UVYb`Yg`b]Wk`h[`Y`g`Wk`U`Zh`ž`VYf]Wk`hYhYb`X]Y
5b[`Y`\`0f][`Yb`]b`]\f`Ya`GdYbXYbUi`Zfi`Z`Ui`Z;`c`Z`b`Xa`Y`"8]Y
G`Wk`Y`fY`X`Yf`J`Yf`Y`hni`b[`Yb`ž`X]Y`g]Wk`Xi`f`Wk`X`Ug`:`Yi`Yf`]a
Y]b[Y`\_`Ya`a`hYb`:`U`fn`Yi`[`Y`f[`UVYb`ž`k`Uf`Yb`Z0f`X]Y`VY]XYb`gWk`Yf
ni`VYk`À`h][`Yb"

H0X`]Wk`Yf`I`b`ZU``. `9]b`@YVYb`j`c``Yf`Hf`À`i`a`Y

8]Y`HfU[`0X]Y`ž`X]Y`X]Y`:`Ua`]`Y`Yf`]hYb`\`Uh`ž`V`Y]Vh`b]Wk`h`bi`f`Ui`Z
Ya`ch]cb`U`Yf`9VYbY`gWk`a`Yfn`\`U`Zh`"8]Y`VY]XYb`G0\`bYž%,`i`bX`%(

Δ\fY`U`hž`ghY\Yb`bi`b`j`cf`XYf`<`YfUi`gZcfXYfi`b[`ž`c`b`Y`]\fY`9`hYfb`
Ui`gni`_ca`a`Yb`i`bX`g]bX`Ya`ch]cbY`i`bX`Z]bUbn]Y`ghUf`_VY`UghYh`
8Yf`À`hYghY`Gc`b`VY`ZUbX`g]W`a`]hYb`]b`gY]bYf`5i`gV]`Xi`b[`i`bX`
hf`À`a`hY`XUj`cb`ž`Y]bYg`HU[`Yg`XUg`n]a`a`YfY]Y][`YbY`;`YgW`À`Zh`
gY]bYg`J`UhYfg`ni`ØVYfbY`a`Yb`ž`Y]b`HfUi`a`ž`XYf`bi`bi`bYffY]W`VUf`
gW`Y]bh`"GY]bY`5i`gV]`Xi`b[`\_`ØbbhY`g]W`bi`b`U`g`gW`k`]Yf][`
Yfk`Y]gYb`ž`XU`Yf`c`b`Y`X]Y`Yb`hgW`Y]XYbXY`i`bhYfghØhni`b[`gY]bYf`
9`hYfb`Ui`g`_ca`a`Yb`a`i`gg"

9fgh`a`i`gghYb`k`]f`A`Uf`_i`g`[`Y`Yb`i`UggYb`i`bX`XfY]`HU[`Y`gd`À`hYf`
Ui`W`F`Ua`cb`U`"9g`]gh`i`b`ZUggVUf`i`bX`ZØf`X]Y`?`]bXYf`b]W`h`ni`
VY[`fY]ZYb`ž`\fY`A`Ua`U`i`bX`]`fYb`DUd`U`gc`d`Øh`]W`ni`j`Yf`]YfYb`ž`
gU[`hY`Y]b`J`Yfk`UbX`hYf`XYf`:`Ua`]Y]ž`XYf`X]Y`Ya`ch]cb`U`Y`@Ugh`XYf`
G]hi`Uh]cb`VYgW`f]YV`"8]YgY`K`cfhY`j`YfXY`i`h]W`Yb`X]Y`h]YZ`Y`HfUi`Yf`ž`
X]Y`X]Y`<`]bhYfV`]YVYbYb`Yf`YVYb`"8]Y`?`]bXYf`\`UVYb`g]W`]b`X]YgYf`
gW`k`]Yf][`Yb`NY]h`VY]`]fYb`;`fc`»`Y`hYfb`Y]b[`Yf]W`hYhž`gc`XUgg`X]Y`
:`Ua`]Y]ni`a`]bXYgh`d`mg]gW`b`À`Yf`ni`gUa`a`Yb`fØW`Yb`_`Ubb`ž`i`a`
g]W`[`Y[`YbgY]h][`ni`i`bhYfghØhnyb`"

I`bhYfghØhni`b[`Xi`fW`X]Y`;`Ya`Y]bgW`UZh` GdYbXYbUi`Zfi`Z`

≠`XYf`<`c`Zbi`b[`ž`Yhk`Ug`Z]bUbn]Y`Y`9bh`Ughi`b[`ni`Z]bXYb`ž`ghUf`hYhY`
X]Y`:`Ua`]Y]Y]bYb`GdYbXYbUi`Zfi`Z`i`a`X]Y`\`c`Yb`?`cghYb`ZØf`
6YfX][`i`b[`gUb[`Y`Y[`Yb`Y]hYb`ni`XYW`Yb`i`bX`XYb`5`hU[`ZØf`X]Y`
?`]bXYf`ni`Yf`Y]W`hYfb`"@Ui`h`XYa`5i`Zfi`Z`g]bX`VYfY]hg`ØVYf`,`"\$\$\$`
9i`fc`j`cb`XYa`Ub[`YghfYVhYb`N]Y`j`cb`%\$\$"\$\$\$`9i`fc`
ni`gUa`a`Yb[`Y`\_ca`a`Yb`"I`bhYfghØhnyf`\`UVYb`]b`X]YgYf`hfU[`]gW`Yb`
NY]h`b]W`h`bi`f`Z]bUbn]Y`Y`<`]ZY`ž`gcbXYfb`Ui`W`Ya`ch]cb`U`Y`
I`bhYfghØhni`b[`Ub[`YV`chYb`ž`]bXYa`g]Y`]fY`h]YZ`ghY`5bhY]`b`U`a`Y`
Ui`ggdf`UW`Yb.`9g`[`]Vh`\_Y]bY`K`cfhY`ž`X]Y`XYb`GW`a`Yfn`ØVYf`XYb`
J`Yf`i`gh]\`fYf`9`hYfb`]bXYfb`_`ØbbhYb`"

K`À`fYbX`X]Y`G]hi`Uh]cb`ZØf`X]Y`GØ`b`Y`\`YfUi`gZcfXYfbX`V`Y]Vhž`[`]Vh`
Yg`XYb`bcW`<`c`Zbi`b[`]b`XYf`:`cfa`j`cb`ghUf`_Yf`ZJa`]`À`fYf`
I`bhYfghØhni`b[`]b`X`Y]bYf`;`Ya`Y]bgW`UZh`X]Y`VYfY]h]ghž`]b`X]YgYf`
gW`k`]Yf][`Yb`NY]h`ni`Y`ZYb`"8]Y`5b`ghfYb[`i`b[`Yb`ž`X]Y`?`cghYb`ZØf`
X]Y`,`VYfZØ`fi`b[`]b`X`6YfX][`i`b[`XYf`9`hYfb`ni`XYW`Yb`ž`g]bX`Y]b`

k]W h[Y f'GW f]h h'ZØf'X]Y' <]bhYfV`]YVYbYb"

A Y\ fYfY'Bi hnYf'Ui Z'XYf'D`UhhZcfa ž'X]Y'X]Y' < ]`ZgU_h]cb`]bg`@YVYb
[Yfi ZYb` \Uhž'Yf'Ài hYfbž'XUgg'gc`W`hfU[]gW Y'9fY][b]ggY'b]W h'bi f
gW cW_]YfYbX'g]bXž'gcbXYfb'Ui W`nY][Ybž'k]Y'k]W h[
Ni gUa a Yb\U'h]b'gW k YfYb'NY]hYb`]gh" A YbgW Ybž'X]Y'g]W `b]W h
Y]ba U`dYfgØb`]W`\_Ybbhž'XfØW\_Yb`] \fY'Gc`]XUf]hÀhiUi g" `#`Y]bYf
K Y'hj c`Yf' l bg]W Yf\Y]hYb`_Ubb'X]YgY'5fh'XYf' l bhYfghØhni b[`Y]b
Y]bYf`@]W hV`]W]b`Xi b`_Yb'NY]hYb`gY]b`i bX'XYb'Yb][Ybž'X]Y'a]h
Y]bYf'XYfUfh][Yb'HfU[ØX]Y'i a [Y\Yb'a ØggYbž'\Y'ZYb" `9g'nY][hž
XUgg`]b'gW k YfYb'NY]hYb'Gc`]XUf]hÀhi bX'; Ya Y]bgW UZh'ghUf_Yb
< U'h'V]YhYb`_ØbbYb"

8]Y'\YfnnYffY]» YbXY`@U[Y'XYf'VY]XYb'GØ\ bY'Yf]bbYfhi bg'XUfUbž
k]Y'ZFU[]`XUg`@YVYb'gY]b`\_Ubb`i bX'k]Y'k]W h[`Yg`]ghž'g]W
[Y[YbgY]h][`]b'gW k YfYb'NY]hYb'VY]ni ghY\Yb"

8]Y'Ya ch]cbU`Yb`i bX'd\mg]gW Yb'5i gk]f_i b[Yb`Y]bYg'gc`W Yb
hfU[]gW Yb'9fY][b]ggYg`[ Y\Yb'ØVYf'XYb`i ba]hY`VUfYb`J Yf'i gh
\]bUi g" `C Zha U'g'ghY\Yb'X]Y' < ]bhYfV`]YVYbYb`b]W h'bi f`j cf'XYf
< YfUi gZcfXYfi b[`XYf'HfUi YfVYk À'h][ i b[ ž'gcbXYfb'Ui W`j cf
Z]bUbn]Y`Ybž'fYW h]W Yb`i bX'gcn]U`Yb`Y`bXYfi b[ Yb`]b`]\fYa
@YVYb" `8Yf`J Yf'i gh'VY]XYf'9`hYfbhY`Y`]gh'VYgcbXYfg'ZØf`↑ b[Y
9fk UW gYbY`i bX'?]bXYf`j Yf\YfYbXž'XU`g]Y`b]W h'bi f`Ya ch]cbU`Y
l bhYfghØhni b[ž'gcbXYfb'Ui W`Z]bUbn]Y`Y'5Vg]W Yfi b[`VfUi W Ybž
i a `XYb'5`hU[`ni `VYk À'h][Yb"

<]bhYf[fØbXY'ni `J Yf\_Y\ fgi bZÀ`Yb`]b`#hU`]Yb

8]Y'GhfU» Ybj Yf_Y\fgcfXbi b[`]b`#hU`]Yb`]gh`j Yf[ `Y]W VUf'a]h'XYf`]b
j]Y'Yb`Yi fcdÀ]gW Yb`@ÀbXYfbž'XYbbcW`]gh'X]Y`l bZU`fUHY`Ui Z
]hU`]Yb]gW Yb`GhfU» Yb`fY`Uh]j ` \cW`" `@Ui h'GhUh]gh]\_Yb`XYg
]hU`]Yb]gW Yb`J Yf_Y\fga]b]ghYf]i a g`[ UV`Yg`]a `# \f`&\$&' `ØVYf
) \$"\$\$\$ J Yf_Y\ fgi bZÀ`Yž'VY]`XYbYb`a Y`f`U`g`" "\$\$\$`A YbgW Yb
i a g`@YVYb`_Ua Yb" `9]b`; fc» hY]`X]YgYf' l bZÀ`Y`YfY][ bYh'g]W `Ui Z
5i hcVU\ bYbž`]bgVYgcbXYfY`]b`XYb`Gca a Yfa cbUhYbž'k Ybb`XYf
J Yf_Y\ f`Ui Z[ fi bX`j cb`l f`Ui VYfb`ni b]a a h" `9g`]gh`k]W h[`ni
VYUW hYbž'XUgg`]hU`]Yb]gW Y`5i hcVU\ bYb`[i h'Ui g[YVUi h'g]bXž

YXcW`Ui W` \Ai Z[`j cb`ØVYfa ØXYhYf`cXYf`i bUi Za Yf_gUa Yf
: U\fyfb`[ Ybi hnh`k YfXYb"

8]Y`dchYbh]Y`Y` ; YZU\ f`Ui Z`ghUf\_`ZfYei Ybh]YfhYb`5i hcVU\ bYb`k]fX
Xi fW` : U\_hcFYb`k]Y`i bni fY]WXYbXY` : U\ fVU\ b]bZfUghfi _hi fž
: U\ fgh]`XYf`J Yf_Y\ fghY]`bY\ a Yf`i bX`i bj cf\YfgY\ VUfY
K YhhYfVYX]b[i b[Yb`VYY]bhfÅW`h][h" <]YfVY]`gd]Y`h`Ui W`X]Y
dfÅj Ybh]j Y`J Yf\_Y\ fgYfn]Y\ i b[ ž]bgVYgcbXYfY`ZØf`† b[ Y` : U\ fyfž
Y]bY`YbhgW`Y]XYbXY`F c`Y`]b`XYf`F YXi n]Yfi b[ `gc`W`Yf`hfU[ ]gW`Yb
I bZÅ`Y"

I bhYfghØhni b[gUb[YVchY`ZØf`HfUi YfbXY

⇒`8Yi hgW`UbX`[ ]Vh`Yg`nU\`fY]WXY`C f[ Ub]gUh]cbYb`i bX`5b[YVchY
ni f`HfUi YfVYk Å`h][i b[ž`X]Y`<]bhYfV`]YVYbYb`]b`gc`W`gW`k YfYb
NY]hYb`i bhYfghØhni b[ `V]YhYb`\_ØbbYb"8]Y`HY`YZcbgY`gc f[Y
VY]gd]Y`gk Y]gY`V]YhYh`\_cghYb`cgY`i bX`Ubc bma Y` ; Ygd fÅW`Y`ZØf
A YbgW`Yb`]b`? f]gYbg]hi Uh]cbYb`Ub"5i » YfXYa` [ ]Vh`Yg
gdYn]U`]g]YfhY`6YfUhi b[gghY`Ybž`X]Y`g]W` [Yn]Y`h`a]h`XYa`H\Ya U
HfUi Yf`i bX`J Yf`i gh`Ui gY]bUbXYfgYhnYb"Ni XYa`g]bX
GY`Vgh\`ZY[fi ddYb`Y]bY`k Yfhj c`Y`5b`Ui ZghY`Yž`i a`9fZU\ fi b[Yb
Ui gni hUi gW`Yb`i bX`[ Ya Y]bgUa Yb`Hfcghini`Z]bXYb"

: Øf`X]Y`VY]XYb`GØ\ bY`XYg`j Yfghc fVYbYb`9\YdUUfg`]gh`Yg`k ]W`h][ž
XUgg`g]Y`b]W`h`U`Y]bY`Xi fW`X]YgYb`Dfc nYgg`[ Y\Yb"9]bY`Yb[Y
6]bXi b[`ni`XYb` ; fc» Y`hYfb`i bX`UbXYfYb` : Ua`]Yba`]h[ `]YXYfb
_Ubb`\Y`ZYbž`Y]bYb`G]W`Yf\Y]hg fUi a`ni`gW`UZYb`i bX`X]Y
Ya ch]cbU`Y`I bhYfghØhni b[`ni`V]YhYbž`X]Y`j cf`U`Ya`]b`gc`W`
VY`UghYbXYb`NY]hYb`YbhgW`Y]XYbX`]gh"

8YhU]`g

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