9]bVfi Wk `]b `@]bXYbZY`g. `Dc`]nY]`gi Wk h
NYi [Yb `XYg`J c fZU``g`Ub `XYf`?]fWk Ybgd]hn

9]bVfi Wk `]b `@]bXYbZY`g!GWk`]YfVUWk. `? f]a]bY``Y`VfYWkYb`]b
K c`b`Ui g`Y]b``<]bk Y]gY`ni f`5i Z_`Äfi b[ `YfVYhYb"

9]bVfi Wk `]b `@]bXYbZY`g. `? f]a]bY``Y`i bhYfk Y[g

⇒`XYf`VYgWk Ui `]WkYb`C fhgWk UZh`@]bXYbZY`g!GWk`]YfVUWk`_Ua `Yg
Ua `gdÄhYb`8]YbghU[UVYbX`ni `Y]bYa `i bYfk UfhYhYb`J c fZU````I a
Yhk U`&` "\$\$`I `f`VY[ UVYb`g]Wk`I bVY`_UbbhY`ni `Y]bYa `K c`b`Ui g
]b`XYf`GhfU»Y` 5b`XYf`? ]fWk Ybgd]hn `i bX`[ Y`Ub[hYb`[ Yk U`hgUa `]b
XUg; YVÄi XY"8]Y`I a ghÄbXY`X]YgYg`9]bVfi Wk`g`k YfZYb`: fU[Yb
Ui Z`]bgVYgcbXYfY`k Ug`X]Y`5Vg]Wk hYb`XYf`HÄhYf`VYhf]Zhi`bX`cV`g]Y
hUhgÄWk`]Wk`Yhk Ug`Ybkh YbXYh`UVYb"

8 YhU]`g`ni a `J c fZU``

8]Y`Dc`nY]`U`h`VYfY]hg`9fa]hhi b[Yb`Y]b[ Y`Y]hYhzi a `a Y`f
⇒Zcfa Uh]cbYb`ØVYf`XYb`J c fZU``ni `gUa a Y`b``6]g`Ub[ `]ghi b`_Ufž
cV`Yhk Ug[ Yghc`Yb`k i fXY`cXYf`cV`X]Y`HÄhYf`YX][`]Wk`]b`XUg
<Ui g`Y]bXf]b[ Yb`k c``hYb"8]Y`? f]a ]bU`dc`nY]`]b`<YddYb`Y]a ž
gdYn]Y``XUg`?ca a ]ggUf]Uh`&%#&`ž`U`h`X]Y`@]hi b[ `XYf
9fa]hhi b[Yb`ØVYfbca a Yb`i bX`c`Zhi`Ui Z`<]bk Y]gY`Ui g`XYf
6Yj Ò`_Yfi b["

8Yf`9]bVfi Wk `]b`Y]b`K c`b`Ui g`]gh`b]Wk`h`bi f`Y]b`? f]a]bU`XY`]_hž
gcbXYfb`Ui Wk`Y]b`J c fZU``ž`XYf`XUg`G]Wk`Yf`Y]hg[ YZØ`X`XYf
6Yk c`b`Yf`Yf`YV`]Wk`VY]b`hfÄWk]h[ Yb`_Ubb"5i Z`gc`Wk`Y`HUhYb`g]bX
j]Y`Y`A YbgWk`Yb`b]Wk`hj`c fVYfY]hYhzi bX`c`Zhi]gh`Yg`XUg; YZØ`X`XYf
J Yf`Yh`]Wk`\_Y]hž`XUg`V`Y]Vh"8]Y`9fa ]hhi`Yf`g]bX`Ui ZX]Y`A ]h`]ZY`j`cb
NYi [Yb`Ub[ Yk ]YgYbž`X]Y`a Ò[ `]Wk`Yfk Y]gY`j YfXÄWk]h[Y`DYfgcbYb

cXYf'5i hcg]b'XYf'BA\Y'[YgY\Yb'\UVYb"

5i Zfi Z'ni f'A]h\]`ZY

8]Y'Dc`nY]V]hhYhi a '5i Za Yf\_gUa \_Y]hi bX'ZcfXYfh'U`Yž'X]Y
 ðZcfa Uh]cbYb'ni 'X]YgYa 'JcfZU``\UVYbž'Ui Ž'g]W'ni 'a Y'XYb"
 <]bk Y]gY'_ÖbbYb'ni bhYf'XYf'HY`YZcbbi a a Yf'\$*&) &#+\$*\$
 [Y[YVYb'k YfXYb"'5i W'k Ybb'a UbW'Y'A YbgW'Yb'XYb_Ybž'XUgg
]\fY'6YcVUW'hi b[Yb'hf]j]U`gY]b'_ÖbbhYbž']gh'YXY' ðZcfa Uh]cb
 dchYbn]Y``\]'ZFY]W'ni bX'_Ubb'ni f'5i Z_`Äfi b['XYg'J YfVfYW'Ybg
 VY]hfU[Yb"

9]bVfØW'Y'ghY`Yb'b]W'h'bi f'Y]bYb'a UhYf]Y`Yb'J Yf'i gh'XUfž
 gcbXYfb'Ui W'Y]bY'Ya ch]cbU'Y'6Y`Ughi b['ZØf'X]Y'6YhfcZZYbYb"'8]Y
 i bg]W'hVUfYb'B UfVYbž'X]Y'gc`W'Y'HUHyb'\]bhYf'UggYbž'nY][Yb'g]W'
 cZi]b'Y]bYa '[YgW'ÄX][hYb'J YfhfUi Ybgj Yf\Ä`hb]g'ni f'Y][YbYb
 l a [YVi b["'8]Y'9fa]h'i b[gVY\ÖfXYb'g]bX'g]W'X]YgYg'l a ghUbXg
 VYk i ggh'i bX'UfVY]hYb']bhYbg]j 'XUfUbž'X]Y'HÄhYf'ni 'Yfa]hhY'b'ni bX
 k Y]hYfY'Ä\b`]W'Y'J cfZÄ`Y'ni 'j Yf\]bXYfb"

8]Y'6Yk c\bYf'j cb'@]bXYbZY`g!GW`]YfVUW'g]bX'Y]b[Y'UXYbž
 k UW'gUa 'ni 'gY]b'ni bX'G]W'Yf\Y]hgj cf_Y\fi b[Yb'ZØf'\fY
 K c\b'ni b[Yb'ni 'hfYZZYb"'A YW'Ub]gW'Y'GW'ÖggYfž'5`Ufa Ub`U[Yb
 i bX'B UW'VUfgW'UZh\]'ZY'_ÖbbYb'XUni 'VY]hfU[Ybž'X]Y'G]W'Yf\Y]h
 ni 'Yf\Ö\Yb'ni bX'9]bVfØW'Y'ni 'YfgW'k YfYb"

8]Y'J cfZÄ`Y' ]b'XYf'FY[ ]cb'ghY\Yb'b]W'h']gc`]Yfh'XU"
 ?]fa]bU']hÄhgfUHyb']b'ÄbX`]W'Yb'; YV]YhYb'nY][Yb'Y]bYb'HfYbXž'VY]
 XYa '9]bVfØW'Y'ni bY\`a Yb"'9g']gh'XU\Yf'fUhgUa ž'X]Y'5i [Yb'cZZYb
 ni '\U'hYb'ni bX']b'XYf'; Ya Y]bgW'UZh'ØVYf'G]W'Yf\Y]hgh\Ya Yb'ni
 gdfYW'Yb"'8]Y'DfÄj Ybh]cb'k]fX'ni bY\`a YbX'k ]W'h][ Yfž'i a 'gc`W'Y
 HUHyb'ni 'j Yfa Y]XYb'ni bX'XUg'J YfhfUi Yb']b'X]Y'Y][YbY
 BUW'VUfgW'UZh'ni 'ghÄf_Yb"

C ZZYbY': fU[Yb'ni bX'Ni _i bZhgUi gV`]W_

8]Y'9fa]h'i b[Yb'g]bX'bcW'ja'; Ub[Yž'i bX'Yg'V'Y]Vh'UVni k UfhYbž
 k Y`W'Y'k Y]hYfYb' ðZcfa Uh]cbYb'Ubg'@]W'h'_ca a Yb'k YfXYb"'CV

X]Y`HÀhYf`[YZUggh`k YfXYb`i bX`k Ug`]\fY`A ch]j Uh]cbYb`k UfYbž`]gh
XYfnY]h`b]W`h`VY`_Ubbh`"9g`k]fX`YXcW`Yfk UfhYhž`XUgg`X]Y`Dc`]nY]
U`Y`YfXYb`\_]W`Yb`A ]hY`Y]bgYhnYb`k ]fXž`i a`XYb`: U``Ui Zni`\_`ÀfYb`"

9]b`9]bVfi W`_`Ubb`ZØf`X]Y`6YhfcZZYbYb`Yf\YV`]W`Y`: c`[ Yb`\UVYbž`
i bX`X]Y`5bhk cfh`XYf`Øfh]W`Yb`6Y\ØfXYb`gd]Y`h`Y]bY
YbhgW`Y]XYbXY`F c``Y``8]Y`J Yf\UZh`i b[`XYf`HÀhYf`\_ØbbhY`b]W`h`bi f
ni f`G]W`Yf\Y]h`XYf`6Yk c`bYf`VY]hfU[Ybž`gcbXYfb`Ui W`Y]b`ghUf`_Yg
NY]W`Yb`[Y[Yb`?f]a`]bU`]hÀh`gYbXYbž`XUgg`gc`W`Y`HUhYb`b]W`h
hc`Yf]Yfh`k YfXYb`"

? f]a`]bU`]hÀhgghUh]gh]_`]b`< YggYb`

@Y]XYf`g]bX`9]bVfØW`Y`Y]b`k ]YXYf`_Y`fYbXYg`DfcV`Ya`]b`j ]Y`Yb
FY[]cbYb`8Yi hgW`_UbXgž`Y]bgW`Y]Y»`]W`< YggYb`"@Ui`h`XYa
GhUh]gh]_VYf]W`h`XYg`\_Ygg]gW`Yb`b`bYba`]b]ghYf]i a`g`[ UV`Yg`]a`]`U\`f
&`\$`&`]bg[ YgUa`h`%`\$`\$) &`K`c`b`i`b[gY]bVfØW`Y`]b`[ Ubni`< YggYb`"
8]Yg`ghY`h`Y]bYb`Y]W`hYb`F`ØW`_`Ub[`]a`]`J Yf[`Y]W`ni`XYb
J`cf`U`fYb`XUf`"8]Yg`nY][`hž`XUgg`hf`chn`d`f`Àj`Ybh]j`Yf`A`U»`b`U`a`Ybž`
k]Y`XYf`j`Yfgh`Àf`\_hYb`Dc`]nY][`df`ÀgYbn`i`bX`5i`Z`_`Àfi`b[gUfVY]hž`X]Y
?f]a`]bU`]hÀh`b`UW`k ]Y`j`cf`Y]b`Xf`Àb[YbXYg`H`Y`a`U`]gh`"

8]Y`Dc`]nY]`\Uh`i`bhYfgW`]YX`]W`Y`GhfUhY`[]Yb`ni`f`6Y`_`Àa`d`Z`i`b[ `j`cb
9]bVfi W`g`_f]a`]bU`]hÀh`]a`d`Ya`Ybh]Yfhž`XUfi`bhYf
5i`Z`_`Àfi`b[g`\_Ua`dU[`bYb`ZØf`<Ui`g`U`hY`i`bX`X]Y`Ni`gUa`a`YbUfVY]h
a`]h`6Øf[Yf]b]h]Uh]j`Yb`"8]Y`5i`Z`\_`Àfi`b[ gei`chY`VY]`9]bVfØW`Yb`Y`Y[h
]b`< YggYb`VY]`Yhk`U`%)`i`ž`k`Ug`VYXYi`hYhž`XUgg`Y]bY`g][`b]Z`_`UbhY
5bnU`\_`XYf`: `À`Y`b]W`h`Ui`Z[ Y`_`Àfh`k`YfXYb`_`Ubb`"

G]W`Yf`_Y]hga`U»`b`U`a`Yb`ZØf`Df]j`Uh`Ui`g`U`hY`

I`a`g]W`j`cf`9]bVfØW`Yb`ni`gW`ØhnYbž`[]VhYg`nU`fY]W`Y
G]W`Yf`_Y]hga`U»`b`U`a`Ybž`X]Y`<Ui`g`U`hY`]b`6YhfUW`h`n]Y`Yb
_ØbbYb`"8Uni`n`À`Yb`.

- b`ghU``Uh]cb`j`cb`G]W`Yf`\_Y]hggW`_ØggYfb`i`bX`!gmghYa`Ybž`X]Y`
gW`k`YfYf`ni`_`b`UW`\_Yb`g]bX`"
- 9]bgUhn`j`cb`G]W`Yf`\_Y]hg`_Ua`YfUg`i`bX`5`Ufa`Ub`U[ Ybž`X]Y`

9]bXf]b[`]b[ Y`UVgWfYW_Yb`gc`Yb"

- 6Y`Yi W`hi b[`j`cb`5i »YbVYfY]W`Ybž`XU`[i`h`VY`Yi W`hYhY
9]b[Ub[gVYfY]W`Y`dchYbn]Y``Y`9]bVfYW`Yf`UVgWfYW_Yb
_ÖbbYb"
- BUW`VUfgW`UZh`gk`UW`Ybž`X]Y`Y]bY
; Ya`Y]bgW`UZh`gØVYfk`UW`i`b[`ZØfXYfb`i`bX`Y`ZYbž
j`YfX`ÅW`h][ Y`5`\_h]j`]h`ÅhYb`ni`Yf`_YbbYb"

8]YgY`A`U»bU`a`Yb`\_ÖbbYb`b]W`h`bi`f`XUg`F`]g]_c`Y]bYg`9]bVfi`W`g
j`Yff]b[ Yfbž`gcbXYfb`Ui`W`Y]b`; YZØ`Y`j`cb`G]W`Yf`Y]h`i`bX
K`c`Y`VY]bXYb`gW`UZZYb``8`Ug`8Yi`hgW`Y`b`gh]h`i`ZØf`B`cfa`i`b[`fB`B`Ł
Ya`d]Y`hž`XUgg`G]W`Yf`Y]hga`U»bU`a`Yb`fY[Y`a`Å`][ `ØVYfd`fØZh
i`bX`U`\_hi`U`]g]Yfh`k`YfXYbž`i`a`X`Yb`bYi`YghYb`GhUbXUfXg`ni
Ybhgd`fYW`Yb"

F`Y`U`\_`h]c`b`X`Y`f`D`c`nY]`i`b`X`9`fa`]h`h`i`b[`Y`b

8]Y`Dc`nY]`]b`<YddYb`Y]a`Y`U`h`b`UW`X`Y`a`9]bVfi`W`]b`XUg
K`c`b`U`i`g`]b`@]bXYbZY`g`Y]bY`i`a`ZUggYbXY`i`bhYf`gi`W`i`b[
Y]b[Y`Y]hYh`?`f]a`]bU`VYUa`hY`U`VYb`XYb`HUhc`fh`i`bhYf`gi`W`h`i`bX
6Yk`Y]ga`]hY`[ Yg]W`Yf`hž`k`Å`fYbX`ni`[`Y]W`X]Y`BUW`VUfgW`UZh
VYZ`fU[ h`k`]fX`G]Y`Yfa`i`h][ Yb`5`bk`c`b`Yfž`j`YfX`ÅW`h][Y
6Yc`VUW`hi`b[ Yb`i`a`[Y`Y`bX`ni`a`Y`X`Ybž`i`a`dchYbn]Y``Y`H`ÅhYf
gW`bY`Yf`ni`]X`Y`b`h]Z]n]YfYb"

8]Y`Ni`gUa`a`YbUfVY]h`X`Y`f`6Øf[Yf`a`]h`X`Y`f`Dc`nY]`U`h`g]W`U`g
YZZ`\_`h]j`Yf`k`]YgYb``b`j`]Y`Yb`i`Å`Y`b`_`c`b`b`h`Y`b`X`i`f`W`Y`b`h`g`d`f`Y`W`Y`b`X`Y
<]b`k`Y]gY`5i`Z`\_`Åfi`b[ gei`chYb`[ YghY][ Yfh`k`YfXYb``6Øf[Yfž`X]Y`]b
X`Y`f`J`Y`f[ Ub[ Yb`Y]h`b`Z`c`f`a`U]h]c`b`Y`b`U`V`Y`b`ž`k`Y`f`X`Y`b`[ Y`V`Y`h`Y`b`ž`X]Y`g`Y
a`]h`X`Y`f`Dc`nY]`ni`h`Y]Y`b`ž`i`a`X]Y`9`fa`]h`i`b[ Yb`ni`i`bhYf`gh`Ø`h`n`Y`b"

;`Y`g`Y```g`W`U`Z`h`]W`Y`5`i`g`k`]f`_`i`b[`Y`b`j`c`b 9]bVfØW`Y`b

8]Y`5i`gk`]f`_`i`b[Yb`Y]bYg`9]bVfi`W`g`Ui`Z`X]Y`V`Y`h`f`c`Z`Y`b`Y`b`D`Y`f`g`c`b`Y`b
_ÖbbYb`Yf`Y`V`Y]W`g`Y]b``B`Y`V`Y`b`X`Y`a`Z]b`U`b`n]Y``Y`b`J`Y`f`i`g`h`j`c`b
d`Y`f`g`Ø`b`]W`Y`b`K`Y`f`h`Y`b`Ya`d]bXYb`j`]Y`Y`C`d`Z`Y`f`d`g`m`W`]g`W`Y`b`G`h`f`Y`g`g

i bX`Y]bY`Y]b[YgWÅfÅb_hY`@YVYbgei U`]hÅh"8Yf`J Yf`i ghj cb
G]WÅYf\Y]h`a `Y][YbYb`Ni \Ui gY`_Ubb`ni `Ub\U`hYbXYb`ÿb[ghYb
ZØ\ fYb`i bX`XUg`K c\b[ YZØ\`VYY]bhfÅWÅh][Yb"

I a `X]YgYb`bY[Uh]j Yb`c`[Yb`Ybh[ Y[ Ybni k ]f\_Ybž`V]YhYb
j YfgWÅ]YXYbY`C f[ Ub]gUh]cbYb`l bhYfghØhni b[`Ubž`XUfi bhYf
dgmWÅc`c[ ]gWÅY`6YfUhi b[`ZØf`CdZYf`j cb`?`f]a ]bU`]hÅh"8]Y
GYbg]V`][g]Yfi b[ `ZØf`gc`WÅY`H\Ya Yb`]gh`bchk YbX][ ž`i a `XUg
6Yk i gghgY]b`ni `gWÅÅfZYb`i bX`UbXYfYb`dchYbn]Y``Yb`CdZYfb`ni
\Y`ZYbž`Xi fWÅ`dfÅj Ybh]j Y`A U» bU\`a Yb`VYggYf`[ YgWÅØhnhini `gY]b"

8YhU]`g

6Ygi WÅYb`G]Y`i bg`Ui Z.`b!U["XY