

G]bbYf`j YfhY]X][h. `8cd]b[j cfk ØfZY `U`g A]ggj YfghÀbXb]g`Ybh`Ufj h

HYbb]g!7cUW`8UffYb`7U\`j`j YfhY]X][h`jbb]_`G]bbYf`bUW
d cg]hj Yb`8cd]b[hYghg.`?Y]b`J cfgUhnž[`Ui V k ØfX][Y
9f_`Àfi b["

⇒Y]bYf`Ui ZFY[YbXYb`K YbXi b[`]b`XYf`K Y`h`XYg`dfcZYgg]cbY`Yb
HYbb]g`ghY`h`XYf`↑ b[Y`]hU`]Yb]gW`Y`Gd]Y`Yf`jbb]_`G]bbYf`ja
A]hhY`di b`h`Y]bYg`]bhYbg]j Yb`8cd]b[ZU`g`Hfch`XYf
VYgcf[b]gYffY[YbXYb`G]hi Uh]cbž`X]Y`g]W`i a`d cg]hj Y
HYghYf[YVb]ggY`XfY`hž[]Vh`Yg`@]W`hV`]W`_Y`ZØf`XYb`&`!`À\`f][Ybž`XYf
ni`Ymh`U`g`Y]bYf`XYf`j]Y`j YfgdfYW`YbXghYb`Gd]Y`Yf`gY]bYf
; YbYfUh]cb`[]`h`

8Yf`HYbb]g!7cUW`8UffYb`7U\`j`h`Uhg]W`_Øfn`]W`]b`Y]bYa
⇒hYfj]Yk`a]h`9GDB`ni a`GW`i hn`gY]bYg`GW`Øhn`]b[g[YÀi » Yfh`9f
a UW`hY`XYi h]W`ž`XUgg`G]bbYf`]b`Y]bY`i b[`ØW`_`W`Y`@U[Y`[YfUhYb
gY]`i bX`XUgg`Y[`]W`Yf`J cfgUhn`]b`6Yni [`Ui ZX]Y`d cg]hj Yb
8cd]b[hYghg`Ui g[YgW`c`cgYb`gY]"~9f`k ØfXY`b]Y`Yhk Ug`UVg]W`h]W`
hi b`9f`k Uf`]b`Y]bYf`i b[`ØW`_`W`Yb`G]hi Uh]cb` ž`gU[hY`7U\`j`i bX
VYhc`bhY`ž`XUgg`Yg`_Y]b`J YfgW`i`XYb`c`XYf`ZU`f`Àgg][Yg`J Yf`U`hYb
gY]bYfgY]hg`[Y[YVYb`UVY"

8]Y`I a ghÀbXY`XYf`d cg]hj Yb`HYghg

⇒A`Àfn`X]YgYg`j`U`fYg`k Uf`G]bbYf`d cg]hj `Ui ZXUg`UbUVc`Y`GhYfc]X
7`cghYVc`[YhYghYh`k cfXYb`Hfch`X]YgYf`gW`k Yfk]Y[YbXYb
5bgW`i`X][i b[Yb`[Y`Ub[`Yg`]`a`Y`XcW`ž`Y]bYf`nk Y]`À\`f][Yb
GdYffY`ni`Ybh[Y`Yb`@Ui h`XYf`HYbb]g!5[Ybhi`f`⇒]U`Yb`hgW`]YX`Y]b
i bUV`Àb[]][Yg; Yf]W`hž`XUgg`XYf`5h`Yhž`XYf`]b`X]YgYa`j`U`f`X]Y
5i ghfU`]Ub`C`dYb`[Yk`cbbYb`U`hY`ž`b]W`h`j`c`fg`Àhn`]W`XUg

j YfVchYbY 'A]hY`j Yfk YbXYh`UhhY" 9l dYfhYb`ghY`hYb`ZYghžXUgg
G]bbYfg`9f_`Äfi b[`Ui V k ØfX][`k Ufž`k cbUW`XUg`GhYfc]X
i bVYUVg]W h][h`ØVYf`gY]bYb`D\mg]ch\YfUdYi hYb`]b`gY]bYb`? ØfdYf
[YfUhYb`k Uf"

8]Y`?cbhUa]bUh]cb`gc`k`Ä`fYbX`XYggYb`6Y\UbX`i b[`a]hY]bYa
fYnYdhžfY]Yb`7`cghYVc`!\U`h][Yb`GdfUm`YfZc`[h`gY]bžXUg`ni f
6Y\UbX`i b[`Y]bYg`GW`b]hhYg`Ub`G]bbYfg`:]b[Yf`j Yfk YbXYh`k i fXY"
8Yf`D\mg]ch\YfUdYi h`UhhY`XUg`GdfUm`nk]gW`Yb`XYa`) "i bX`%` "
A Äfn`Ub[Yk YbXYhž`k Ug`ni f`i bUVg]W h]W`Yb`9l d`cg]h]cb`j`cb
G]bbYf`ZØ`fhY" 8]Y`d`cg]h]j Yb`DfcVYb`k i fXYb`gck c`\`VY]a` 5HD!
A UghYfg!%\$\$!9j Ybh`]b`bX]Ub`K Y`gž`k c`G]bbYf`XUg`<U`VZ]bU`Y
YffY]W h`\UhhYž`U`g`Ui W`VY]Y]bYf`k Y]hYfYb`C b!h\Y!Gdch!DfØZ b[
[Ybca a Yb"

8]YgYf`J cfZU`UhhY`[fUj]YfYbXY`:]c`[Yb`ZØf`G]bbYf.`BUW`XYf
J cf`U[Y`XYf`d`cg]h]j Yb`HYghg`k i fXY`Yf`ni bÄW`gh]j cf`Äi Z][
gi`gdYbX]Yfh" 8cW`bUW`Y]bYf`YfZc`[fY]W`Yb`6Yfi Z b[`_cbbhY`Yf
gW`bY`k]YXYf`]bg`Gd]Y`ni fØW`_Y`fYb" 7U\]`Yf`Äi hYfhYž`XUgg`X]
; fØbXY`ZØf`X]Y`K]YXYf`YfghY`i b[`gW`bY`c`_U`g]Yfh`k YfXYb
cbbhYb`i bX`X]Y`9f`Äfi b[`ZØf`X]Y`?cbhUa]bUh]cb`d`Ui g]VY`k Uf"

5i gk]f_ i b[Yb`Ui Z`G]bbYfg`? Uff]YfY

: Øf`G]bbYf`k Uf`X]Y`[YgUa hY`G]hi Uh]cb`b]W`h`bi f`fYW`h]W`
VY`UghYbXž`gc`bXYfb`Ui W`_ØfdYf`]W`i bX`gYY`]gW`gY`f
\YfUi`gZc`fXYfbX" 7U\]`VYf]W`hYhYž`XUgg`G]bbYf`Xi fW`XYb`GhfYggž
XYf`a]h`XYb`d`cg]h]j Yb`HYghg`Y]b\Yf[]b[ž`[Ygi`bX`Y]h]W`Y
DfcV`Ya Y`Yb`k]W`_Y`hYž`XUfi bhYf`Y]bY`A UbXY`Yb`hnØbXi b[ž`k Ug`]\b
gW`]Y»`]W`XUni`nk Ub[ž`Ub`XYb`C`ma`d]gW`Yb`Gd]Y`Yb`b]W`h
hY]`ni bY`a Yb" ~K]f`g]bX`b]W`h`Ui ZXYf`Gi W`Y`bUW`?i a a Yf" K]f
g]bX`bi f`XUb`_VUfž`XUgg`Yg`_Y]bY`GdYffY`[]Vh`ž`Z`\f`7U\]`Zc`fhž
i bX`gY]bY`9f`Y]W`hYfi b[`]gh]j Yfgh`ÄbX`]W`ž`XYb`b`X]Y`G]hi Uh]cb`Ä`hY
`Y]W`h]b`Y]bY`bc`W`[fØ» YfY`?f]gY`ZØf`XYb`↑ b[Yb`Gd]Y`Yf`a ØbXYb
_ØbbYb"

»bb]_`G]bbYf`V`Y]Vh`Y]b`ZUgn]b]YfYbXYf`5h`Y`hž`XYf`hf`ch`X]YgYg
F ØW`gW`U[g`k Y]hYf`\b`X]Y`A Ø[`]W`_Y]h`\Uhž`gY]bY`? Uff]YfY

j cfUbni hfY]VYb" `GY]b`HU`Yb`hi bX`gY]bY`9bhgW`cggYb`Y]hž`g]W`]b
Y]bYf`gc`W`YfUi gZcfXYfbXYb`D`UgY`ni fØW`ni `Aa dZYbž`_ØbbhYb
]`b`ni `Y]bYa `bcW`gh`f`YfYb`Gd]Y`Yf`a UW`Yb"

9]bV`]W`]b`X]Y`Ni `i bZh`XYg`5h`YhYb

8]Y`9fY][b]ggY`fi bX`i a `X]Y`8cd]b[hYghg`k YfZYb`Y]b`@]W`h`Ui Z`X]Y
<YfUi gZcfXYfi b[Ybž`a]h`XYbYb`dfcZYgg]cbY`Y`5h`YhYb
_cbZfcbh]Yfh]g]bX`"9g`ghY`h`g]W`X]Y` : fU[Yž`k]Y`gc`W`Y`G]hi Uh]cbYb
ghfYggVYX]b[h`X]Y`@Y]ghi b[`i bX` ; Ygi bX`Y]h`XYf`Gd]Y`Yf
VYY]bZi ggYb`_ØbbYb" `G]bbYf`U`h`VYfY]hg`VYk]YgYbž`XUgg`Yf`XUg
DchYbn]U`U`hž`Y]b`Gd]hnYbUh`Y`h`ni `k YfXYbž`i bX`gY]b`i a [Ub[`a]h
X]YgYf`?f]gY`_ØbbhY`gY]bYb`7`UfU`hYf`i bX`gY]bY
K]XYfghUbXgZ`A`][_Y]h`i bhYf`6Yk`Y]g`ghY`Yb`"9g`V`Y]Vh`gdUbbYbXž
k]Y`g]W`gY]bY`?Uff]YfY`]b`XYb`_ca a YbXYb`X`fYb`Ybhk]W`Y`b
k]fX"

8]Y`?cbhfcj YfgYb`fi bX`i a `8cd]b[`]a `Gdcfh]g]bX`b]W`h`bYi `i bX
`UVYb`]a a Yf`k]YXYf`ZØf`5i ZgY`Yb`[Ygcf[h` `X`Yf
HYbb]g[YgW]W`hY`[UV`Yg`VYfY]hg`a Y`fYfY`dfca]bYbhY` : A`Yž`X]Y
X]Y`?Uff]YfY`j cb`5h`YhYb`VY`UghYh`UVYb`"9]b`VY`UbbhYg`6Y]gd]Y`
]gh`XYf` : U`j cb`A Uf]U`G`UfUdcj Už`X]Y`&\$%* `dcg]hj` `Ui Z`X]Y
j YfVchYbY`Gi VghUbn`A`Y`Xcb]i a ` [YhYghYh`k`i fXY`"8]Yg`ZØ`fhY`ni
Y]bYf`j cfØVYf[Y`YbXYb`GdYffY`j cb`%) `A`cbUhYb`"a ` ; Y[YbgUhn
ni `G]bbYfg` : U`ž`]b`XYa `X]Y`?cbhUa]bUh]cb`U`g`i bVYUVg]W`h][h
Y]b[Yghi Zh`k`i fXYž`U`bXY`hY`Yg`g]W`VY]`G`UfUdcj U`i a `Y]bYb
VYk`i ggYb`J`Yfg`c`»`"8]YgY`8]ZYfYbn]Yfi b[`nk]gW`Yb
UVg]W`h]W`Ya `i bX`i bUVg]W`h]W`Ya `8cd]b[`]gh`YbhgW`Y]XYbXž`XU
g]Y`X]Y`?cbgYei`YbnYb`ZØf`X]Y`Gdcfh`Yf`Yf`YV`]W`VYY]bZi`ggYb
_Ubb"

<]bhYf[fi bX`XYf`8cd]b[dfcV`Ya Uh]_`]a HYbb]g

8]Y`8]g`_i`gg]cb`ØVYf`8cd]b[`]a `HYbb]g`]gh`Yb[`j`YfVi`bXYb`a`]h`XYf
ØVYf[fY]ZYbXYb`8YVUhhY`i a `X]Y` ; Ygi bX`Y]h`j`cb`5h`YhYb`i bX
XYb`8fi`W`ž`XYa `g]Y`Ui`g[YgYhnh]g]bX`"8]Y`k`YhhVYk`YfVgVYhcbhY

B Uhi f`XYg`Gdcfhg`ZØ\fh`Ài Z[`XUni ž`XUgg`Gd]Y`Yf`i bhYf
]a a YbgYa `8fi W_`ghY`Ybž`]\fY`@Y]ghi b[`ni `a Ul]a]YfYb`"8]YgY
G]hi Uh]cb`_Ubb`Y]bY`J Yfgi W`i b[`XUfghY`Ybž`i bYf`Ui VhY`A]hhY`ni
j Yfk YbXYb`": Øf`XYb`HYbb]gj YfVUbX`i bX`X]Y`j YfUbhk cfh`]W`Yb
6Y\`ØfXYb`]gh`Yg`j cb`Ybcfa Yf`6YXYi hi b[ž`ghf]_hY`?cbhfc`Yb
Xi fW`ni ZØ\`fYbž`i a `X]Y` ðhY[f]h`h`X`Yg`GdcfhYg`ni `[Yk`À`f`Y]ghYb`"
8]Y`B`chk YbX][_Y]hž`hfUbgdUfYbhY`i bX`ZU]fY`F`Y[Y`b`ni `YhUV`]YfYb
i bX`Xi fW`ni gYhnYbž`]gh`ZØf`X]Y`5_nYdhUbn`XYg`Gdcfhg`VY]: Ubg
i bX`GdcbgcfYb`j cb`nYbhfU`Yf`6YXYi hi b["

F YW`hg`U[Y`i bX`Gdcfhdc`]h]_

8]Y`VYj cfni [hY`J`cf[Y`Yb`gk`Y]gY`XYf`HYbb]gVY\`ØfXYb`]b`6Yni [
Ui Z`8cd]b[Z`À`Y`U`h]g]W`]a `@Ui Z`XYf`J`Y`k`Y]hYfYb`hk]W`_Y`h`"8]Y
ðhYfbUh]cbU`HYbb]g`ðhY[f]hm`5[YbW`mfH`-5E`_ccfX]b]Yfh`X]Y`5bh]!
8cd]b[!A U»bU`a`Yb`]a `HYbb]g`"A]h`XYf`9]bZØ\`fi b[`nY]hbU`Yf`i bX
hfUbgdUfYbhYf`Dfc`nYggY`k`]fX`j`Yfgi W`hž`A]ggVfUi W`ni `j`Yf\]bXYfb
i bX`XUg`J`YfhfUi Yb`]b`XYb`Gdcfh`ni `gh`Àf`_Yb`" ð`G]bbYfg`: U`Y`U`h
X]Y`9bhgW`Y]Xi b[`Y]bYg`i bUV`Àb [] [Yb`; Yf]W`hgž`]b
ZfY]ni gdYfW`Ybž`i bhYfghf]W`Ybž`XUgg`X]Y`l`a`gh`Àb`XY`]a
8cd]b[fYW`h`b]W`h`]a`a`Yf`_`Uf`g]bXž`i bX`XUgg`Y`XYf`: U`Y`]bX]j]Xi Y`
VYi fhY]`h`k`YfXYb`a`i`gg"

DgmW`]gW`Y`6Y`Ughi b[Yb`VY]`5h`Y`hYb

8UffYb`7U\]`Y`U`h]b`gY]bYa `ðhYfj]Yk`Ui W`Ui Z`X]Y`dgmW`]gW`Yb
5i`gk`]f`_i`b[Yb`XYg`8cd]b[j`cfZU`g`Ui Z`G]bbYf`\]b[Yk`]YgYb`"
5V[YgY`Yb`j`cb`d`l`mg]gW`Yb`9f`fUb`_i`b[Ybž`k`]Y`XYf`Yfk`À`b`hYb
A`UbXY`Yb`hn`ØbXi b[ž`]gh`XYf`dgmW`]gW`Y`8fi W`_Ui Z`5h`Y`hYb`b]W`h
ni`i`bhYfgW`À`hnYb`"GhfYgg`i`bX`5b[gh`_ØbbYb`Xi`fW`_ØZYbh`]W`Y
GdY`_i`Uh]cbYb`i`bX`bY[Uh]j`Y`DfYggYVYf]W`hYfghU`hi`b[`Yf`YV`]W`
j`Yfgh`Àf`_h`k`YfXYb`" ð`XYf`\`Yi`h][Yb`NY]hž`k`c`gcn]U`Y`A`YX]Yb`Y]bYb
[fc»Yb`9]bZi`gg`Ui Z`X]Y`K`U`fbY`a`i`b[`j`cb`5h`Y`hYb`\`UVYbž
a`ØggYb`Gdcfh`Yf`b]W`h`bi`f[Y[Yb`XYb`8fi W`_]a`K`Yhh`_Ua`dZž
gcbXYfb`Ui`W`[Y[Yb`A`Y]bi`b[Yb`Ui`»Yf`U`V`XYg`D`UhnYg
Ub`_Àa`dZYb`"

K`YhhVYk`YfV`i`bX`l`bhYfghØhni`b[`ggmghYa`Y`

I a `XYb`dgmWk]gWkYb`8 fi W`ni `fYXi n]YfYbž`]gh`Yg`Z0f`↑ b[Y
5h\`YhYbž`k]Y`G]bbYfž`k]Wk h][ž`l bhYfgh0hni b[ggmghYa Y
Ui Zni VUi Ybž`X]Y`]\bYb`\Y`ZYbž`X]YgY`< YfUi gZcfXYfi b[Yb`ni
VYk Å`h][Yb``8Uni `[Y\0fYb`dgmWk`c`c[]gWkY`6YhfYi i b[ž`Ni [Ub[`ni
dfcZYgg]cbY`Yb`6YfUhYfb`i bX`Y]b`i bhYfgh0hniYbXYg`I a Z`X`j cb
HfU]bYfb`i bX`Ua]`Y``8]Y`HYb]ggY`hc fYb`g]bX`ni bY`a YbX
[YZcfXYfhž`X]YgY`i bhYfgh0hni b[`ni `V]YhYbž`i a `X]Y`5h\`YhYb
[Ubn\Y]h`]Wk`ni `VYhfYi Yb`i bX`gck c`\``\fY`gdcfh`]WkYb`U`g`Ui Wk
dYfg0b`]WkYb`6Y`Ughi b[Yb`ni `VYUfVY]hYb`"

8YhU]`g

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