

5__i !F Y hhi b[`ZØf`9`Y_hfcUi hc g. `Gc
gdUfYb `G]Y `HUi gYbXY`9i fc `]b `NU[fYV`

8]Y`9J`7`b]W]b`NU[fYV`V]YhYh`_cghYb[Øbgh][Y`F`YdUfUhi fYb
ZØf`XYZY`_hY`9`Y_hfcUi hc!5__i g`Ub`i bX`gdUfh`?`i bXYb`V]g`ni
&\$"\$\$\$`9i fc"

GW`cW`_ZØf`9!5i hcZU`fYf.`6UhhYf]YdfcV`Ya Y`_ØbbYb`X]Y`i fYi XY
Ua`9`Y_hfcUi hc`gW`bY`hfØVYb"gh`X]Y`5__i`XYZY`_h`ghY`h`g]W`X]Y
: fU[Y`5i ghUi gW`cXYf`F`YdUfUhi f3`8]Y`5bhk`cfh`]YZYfh`X]Y`9J
7`b]W]a`a`U`Yf]gW`Yb`NU[fYV`<]Yf`k`fX`X]Y`J`cfghY`i b[`]`cb
hYi fYb`9fgUhnU__i g`Ui Z`XYb`?`cdZ[YghY`h`

⊕`9i fcdU`À`h`X]Y`9`Y_hfca`cV]`h`h`9]bni [ži`bX`]a`a`Yf`a`Y`f
: U`fYf`gYhnYb`Ui Zi`a`k`Y`h`zFYi`bX`]W`Y`i: U`fnYi [Y`8`cW`k`c`@]W`h
]ghž`]gh`Ui`W`GW`UhhYb`8]Y`5W`]`Y`gZYfgY`3`8]Y`6UhhYf]Y`?`Y]bghY
8YZY`_hY`_ØbbYb`Y]bYb`Z]bUbn]Y`Yb`<`Ua`a`Yf`_cghYb`8`cW`X]Y`9J
7`b]W`U`h`g]W`Ui`Z`X]Y`i: U`bYb`[Y`gW`f]YVYbž`X]Y`gYb`c`Yb`?`cghYb
a`h`WYj`YfYb`F`YdUfUhi`fa`Yh`cXYb`X]Y`Gh]fb`ni`V]YhYb"

9]b`A`U[bYh`ZØf`9`Y_hfcUi hcZU`fYf`Ui`g`XYf
[`UbnYb`F`Y[`]cb

8]Y`B`UW`f]W`h`U`h`g]W`k`]Y`Y]b`@Ui`ZZYi`Yf`j`YfVfY]hYh`J`cb
8Yi`hgW`UbX`V]g`]b`X]Y`GW`k`Y]n`9`Y_hfcUi hcZU`fYf`d]`[`Yfb`ni`f
9J`7`b]W`⊕`UVYf`J`Ub`U`?`Uh]W]gh`XYf`F`YhYf`]b`XYf`B`chž`i`bX`gY]bY
F`YdUfUhi`fa`Yh`cXYb`ghc»`Yb`Ui`Z[`fc»`Yg`⊕`hYfYggY"K`À`fYbX
UbXYfY`K`Yf`_gh`h`hYb`c`Z`h`Y]b`J`Yfa`Ò[`Yb`ZØf`Y]bYb`bYi`Yb`5__i
j`Yf`Ub[`Ybž`V]YhYh`X]Y`9J`7`b]WYfgW`k`]b[`]W`Y`DfY]gc`dh]cbYb"9]b
Yk`][`Yg`i`Y`Y]a`b]g3`?`Y]bYgk`Y[`g`

9]b`_cb`fYhYg`6Y]gd]Y`gh`XYf`i:]Uh`i`\$\$Y.`B`UW`Y]bYa

≈gc`Uh]cbgZY\`Yf`ghUbX`X]Y`?i bXY`a]h`Y]bYa `bYi Yb`5__i `j cb
gUhhYb`&) "\$\$\$`9i fc`j cf`XYf`<YfUi gZcfXYfi b[``8cW\`X]Y`9J`7`b]W
fYhhYhY`X]Y`G]hi Uh]cb` `ZØf`[YfUXY`Y]ba U`%`&\$\$`9i fc`k i fXY`XYf
5__i `fYdUf]Yfh`8]YgY`DfY]gY`gdfYW\Yb`g]W\`Yfi a`i bX`n]Y\`Yb
a Y\`f`?i bXYb`Ub`

8]Y`fYj c`i h]cb`ÅfY`F YdUfUhi fhYW\ b]_.`9]b
W\]fi f[]gW\ Yf`9]b [f]ZZ`

?Uh]Wg`A Yh\cXYž`5__i !F YdUfUhi fYb`Xi fW\ ni ZØ\ fYbž`]gh`b]W\ hg
k Yb][Yf`U`g`ZUgn]b]YfYbX`°A UbW\ a U`ZØ\`h`a Ub`g]W\`k]Y`VY]a
NU\`bUfnh`8]Y`XYZY`_hY`NY`Y`k]fX`Yfgha U`Ui ZgdØfh`i bX`XUbb
k]fX`g]Y`Ui g`XYa`5__i ` \YfUi gcdYf]Yfh ``8UVY]`]ghidfÅn]gYg
5fVY]hYb`[YZfU[h`9]bY`ZU`gW\Y`NY`Y`i bX`gW\cb`Xfc\h
6fUbX[YZU\`f`9g`k]fX`a]h`Y]bYa`ZY]bYb`K Yf_nYi [`Ui Z[YVc\`fh ž
X]Y`_Udi hhY`NY`Y`Yb`hZYfb`hi bX`Xi fW\`Y]bY`bYi Y`YfgYhnh`Gc
`UggYb`g]W\`VY]Y]bYa`HYg`U`A cXY` ``gW\cb`a U` ("\$\$\$`9i fc
gdUfYb`

8]Y`NY]hYbž`]b`XYbYb`5i hcVYg]hnYf`Y]bZUW\`Y]bYb`bYi Yb`5__i
_Ui ZYb`a i gghYbž`bY][Yb`g]W\`XYa`9bXY`ni ``A]h`XYf`9J`7`b]Wk]fX
b]W\`h`bi f`; Y`X`[YgdUfhž`gcbXYfb`Ui W\`Y]bY`k]W\h][Y
BUW\`U`h][_Y]hgVYXYi hi b[` [YZØfXYfh`?Uh]WVf]b[h`Zf]gW\Yb`K]bX
]b`X]Y`K Y`h`XYf`9!5i hcg`i bX`V`Y]Vh`XUVY]`XYf`7\`Ua`d]cbg`@YU[i Y
XYf`6UhhYf]Y!F YdUfUhi f`

9]bY`F YdUf]YfVUf`_Y]h`XYf`5__i g`a i gg`i bgYf`N]Y`gY]b ž`VYhcbh
5i hcA`cV]!A cXYfUhc`f`5`Yi UbXYf`6`cW``8Yf`5i ghUi gW\`]gh`b]W\ h
bi f`hYi Yfž`gcbXYfb`[YZÅ\`fXYh`Ui W\`XYb`7C`&!J`cfhY]`Y]bYg
9`Y`_hfcUi hcg``?Uh]W[]h`U`g` _fcUh]gW\Yf`5__i !; ch`i bX`gdUfh
j]Y`Yb`9!5i hc!: U\`fYfb`Y`XY`A Yb[Y`; Y`X`ž`k`Å\`fYbX`Yf`[`Y]W\`nY]h][
i bgYfY`l`a`k`Y`h`gW\`cbh`

8]Y`9fZc`[gghc`fm`XYf`9J`7`b]W]gh`Y]b`J`cfnY][Ya`cXY` ``ZØf`X]Y
Ni _i bZi`XYf`9`Y`_hfc`a`cV]`]hÅh`K`c`ZfØ\`Yf`X]Y`HUgW\Yb`Y`Yf`V`]YVYbž
_ØbbhYb`VU`X`GdUfgW\`k`Y]bY`Ui ZV`Ø\`Yb`°9`Y`_hfcUi hcZU\`fYfž
Ui Z[YdUggh` `b`NU[fYV`[]Vh`Yg`X]Y`@Øgi b[`ZØf`U` ``9i fY`5__i !
DfcV`Ya`Y`°5i W\`k`Ybb`a`Ub`X]Y`9J`7`b]Wj]Y`Y]W\`h`b]W\`h`[`Y]W\`

i a `X]Y'9W_Y`\Uh' `XUg'5VYbhYi Yf'bUW\`NU[fYV' _ÒbbhY'g]W\`a Y\ f
U`g`c\`bYb`

8YhU]`g

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