

9]bV`]W_Y` \]bhYf`X]Y`? i `]ggYb. `8]UbUg
Ui ZfY[YbXY`K cW\Y`VY]/ ` \$' - /G\cdd]b[
E i YYb/ ` \$' - /

8]UbUž? UbX]XUh]b`j cb` G\cdd]b[`E i YYb `]b`6Yf`]bžj YffÀhž
k]Y` ; i]Xc`A Uf]U`? fYhgW\ a Yf`k]f`_]W\`]gh"9I _i gjj Y`9]bV`]W_Y
i bX`gdUbbYbXY`6Y[Y[bi b[Yb`k UfhYb`



⊕`XYf`YmhYb`5i [i ghk cW\Y`Z]Y`XYf`GhUfhgW\ i gg`Z0f`X]Y`VY`]YVhY
: YfbgY\gYbXi b[` G\cdd]b[`E i YYb `]b`6Yf`]b" : ØbZ`6Yf`]bYf]bbYbž
XUfi bhYf`ž `mž8]UbUž`æ\UbbUž`GUV]bY`i bX`5f]UbYž`hfUhYb
[Y[YbY]bUbXYf`Ubž`i a `XYb`H]hY`XYf`VYghYb` G\cdd]b[`E i YYb
ni `Yff]b[Yb`i bX`X]Y`Ni gW\Ui Yf`a]h`]\fYb`_fYUh]j Yb`Ci hZ]hg`ni
VY[Y]ghYfb"

8 Yf`nk Y]hY`8 fY\hU[`k Uf`Z0f`X]Y`) \$!`Å\`f][Y`8]UbU`VYgcbXYfg
Ui ZfY[YbXžXU`g]Y`]\f`a cX]gW\Yg`HU`Ybhi bhYf`6Yk Y]g`ghY`Yb
Xi fZhY" :⊕`Y]bYa `YI _i gjj Yb`⊕bhYfj]Yk `a]h`69F`@B`@⊕`9`[UV`g]Y
9]bV`]W_Y`]b`XUg ; YgW\Y\Yb` \]bhYf`XYb`? i `]ggYbž`]bgVYgcbXYfY`]b

6Yni ['Ui ZXYb'8Yg][bYf'i bX'ž fcf; i]Xc'A Uf]U'?fYhgWka Yfž'XYf
VY]'XYf'GYbXi b['Y]bY'nYbhU'Y'F c''Y'gd]Y'h"

9]b 'YWk hYf'Di V`_]i a g`]YV`]b[

Jcf'XYb'?Ua YfUg]gh'U''Yg'dYfZY_h]bgnYb]Yfh' 'XUg'@]Wk hž'X]Y
Gh]a a i b[ž'X]Y' [i hY '@Ui bY''8cWk'X]Y'FYU'hAh'\]bhYf'XYb'?i`]ggYb
_Ubb'g]Wk'a UbWka U`j cb'X]YgYf' ['ÀbnYbXYb': UggUXY
i bhYfgWkY]XYb''A YX]YbVYf]Wk hY'\UVYb']a a Yf'k]YXYf' [YnY][hž
XUgg'Y]b][Y'GhUfg'Y]b'Y\Yf'gWk]Yf][Yg'J Yf\U'hYb'Ub'XYb'HU[
'Y[Yb''K À\fybX'A Uf]U\ '7UfYm'VY]gd]Y'gk Y]gY'XUfUi Z'VYghY'hž
XUgg']\f'HYUa 'g]Y'X]Y'HfYddY'\cWk hfÀ [hž'cXYf'žbb]ZYf'@cdYn'Y]bY
gdYn]Z]gWkY'?`]a Uh]g]Yfi b['i bX'?`Y]XYfcfXbi b['j Yf'Ub[hž
VYgWk fY]Vh'8]UbU'?fYhgWka Yf' [Ubn'UbXYfg.' 8Yb'_Ubb'a Ub'bi f
_bi XXY'b"

8]Y': fÒ\`]Wk_Y]hž'X]Y'; i]Xc'A Uf]U'?fYhgWka Yf'Ui gghfU\`hž
VYa Yf_hY'Ui Wk'8]UbU''G]Y'VYf]Wk hY'hYž'XUgg'Yf'g]Wk'hfchn'gY]bYg
j c''Yb'HYfa]b_U'YbXYfg'ZØf'YXY'?UbX]XUh]b'NY]h'bU\ a 'i bX'g]Y
\Yfn']Wk'Ya dZ]b["' 9f']gh'gi dYf'gma dUh\]gWk ž'gWk'Àfa h'g]Y'i bX
ZØ[h'\]bni ž'XUgg'X]Y'A Ò[`]Wk_Y]hž'a]h']\a 'ni 'd'Ui XYfb'i bX': chc
ni 'a UWkYbž'ZØf'U''Y'Y]b' [fc» Yg'<][\'] [\h'k Uf"

8]Y'8fY\hU[Y'k UfYb''Ub[ž'UVYf'Ub[YbY\ a ''8]UbU'YfnÀ\`hYž'XUgg
X]Y'5i ZbU\ a Yb'a Y]gh'a cf[Ybg'i a '%\$'I \f'VY[UbBYb'i bX'UVYbXg
[Y[Yb'&\$'cXYf'&% 'I \f'YbXYhYb''8cWk'X]Y'Ni gUa a YbgYhni b['XYg
HYUa g'gck]Y'XYf'5i ghUi gWk'a]h'XYb'UbXYfYb'?UbX]XUh]bbYb
gc f[hYb'XUZØfž'XUgg'X]Y'K cWkY'b]Wk'h'bi f'UbghfYb[YbXž'gcbXYfb
Ui Wk'Y]b' [fc» Yf'GdU» 'k Uf"

9g'k Uf'k]f_]Wk'Y]bY'hc''Y'K cWkY''K]f'\UhhYb'Y]bY' [fc» Ufh][Y
; fi ddY ž'gU[h'8]UbU'ghc`n''8]Y'7\Ya]Y'nk]gWkYb'XYb
HY]'bY\ a Yf]bbYb'k Uf'VYgcbXYfg''Hfchn'XYf'?cb_i ffYbn'k c''Yb'g]Y
Ui Wk'bUWk'XYf'G\ck']b'?cbhU_h'V'Y]VYb''9]bY'K \Uhg5dd!; fi ddY
k i fXY'VYfY]hg' [Y[fØbXYhž'i a 'J YfUVfYXi b[Yb'ni 'hfYZZYb'i bX'X]Y
5i gghfU\`i b['XYf'9d]gcXY' [Ya Y]bgUa 'ni 'j YfZc` [Yb"

ž'XYb'A cbhU['V]g': fY]hU['i a '%) 'I \f'_ØbbYb'Ni gWkUi Yf'X]Y

bYi Yb'9d]gcXYb'j cb' G\cdd]b['Ei YYb 'Ui ZJ cl 'gY\Yb'cXYf'g]Y
]a 'J cfUi g'Ui ZFH@Ž 'ghfYUa Yb"

8]Y'; YgW]W\hY'j cb'8]UbU'i bX'XYb'UbXYfYb': fUi Yb']gh'b]W\h'bi f
Y]b'6'W_\]bhYf'X]Y'?i '\]ggYb'Y]bYf'VY']YVhYb': YfbgY\gYbXi b["'G]Y
V]YhYh'Ui W'Y]bYb'9]bV'\W_\]b'XUgžk Ug'X]Y'G\ck'Y]bn][Ufh][
a UW\h'X]Y'J YfV]bXi b['nk]gWYb'XYb'HY]'bY\ a Yf]bbYb'i bX'XYa
HYUa 'gck]Y'X]Y'dcg]hj Y'5i gghfU\i b['j cb'; i]Xc'A Uf]U
?fYhgW\ a Yfž'X]Y'gck c\ 'X]Y'? UbX]XUh]bbYb'U'g'Ui W'XUg'Di V']_i a
VY[Y]ghYfh"'9g'nY][hž'XUgg'XYf'; 'Ua ci f'XYf': YfbgY\k Y'h'cZh'Xi fW
YW\hY'nk]gWYba YbgW'W\Y'6Yn]Y\i b[Yb'Yf['Abnh'k]fXž'X]Y'j b
9f]bbYfi b[Yb'a ØbXYbž'X]Y'k Y]h'ØVYf'X]Y'6]'XgW]fa nY]h
\]bUi g[Y\Yb"

G\cdd]b['Ei YYb ž'dfcXi n]Yfhj cb'XYf'A A 7'Ghi X]cg'; a V<ž']gh']b
XYf'XYi hgWYb': YfbgY\ _i 'hi f'gY]hj]Y'Yb'X\ fYb'Y]b'ZYghYf
6YghUbXhY]"8]Y'GYbXi b[ž'X]Y'i fgdfØb['\W'j]b'; fc» Vf]hUbb]Yb
Ybhk]W_Y'h'k i fXYž'\Uh'g]W'j]b'8Yi hgW'UbX'ni 'Y]bYa 'XYf
VY']YVhYghYb': cfa UhY'ja '6YfY]W'XYg'F YU']hml HJ 'Ybhk]W_Y'h"'8]Y
i bhYf\U'hgUa Y'A]gW'i b['Ui g'A cXYž'DYfgØb'\W_Y]h'i bX
K YhhVYk YfV'n]Y\h'k ØWYb'h]W'NY\bhUi gYbXY'j cb'Ni gWUi Yfb'Ub
i bX'gcf[h'ZØf'; YgdfÅW\gghcZ]b'gcn]U'Yb'A YX]Yb"

9]bY'XYf'ghÅf_ghYb'7\UfU_hYf]gh]_Yb'XYf'G\ck']gh'X]Y' ðhYfU_h]cb
nk]gWYb'XYb'? UbX]XUh]bbYb'i bX'XYf'A cXYfUhc f]b'gck]Y'XYa
8Yg][bYf'; i]Xc'A Uf]U'? fYhgW\ a Yf"'8]Y'Ni gWUi Yf'Yf'YVYb' b]W\h
bi f'X]Y'A cXYbgWUi ž'gcbXYfb'Ui W'X]Y'DYfgØb'\W_Y]hYb'XYf
HY]'bY\ a Yf]bbYbž'k Ug'XYf'GYbXi b['Y]bYb'\c\Yb
l bhYf\U'hi b[gk Yfhj Yf'Y]\h"'8]Y'? ca V]bUh]cb'Ui g'j]bX]j]Xi Y''Yb
; YgW]W\hYb'i bX'XYa '7fYk ! ðhYfYggY'j Yf'Y]\h'XYa ' : cfa UhY]bYb
Y]bn][Ufh][Yb'7\Ufa Y"

6YgcbXYf\Y]hYb'XYf'GYbXi b[

9]bYg'XYf'\YfUi gghYWYbXYb'A Yf_a U'Y'j cb' G\cdd]b['Ei YYb
]gh'XYf': c_i g'Ui Z'X]Y'j]bX]j]Xi Y''Y'5i gXfi W_gk Y]gY'Xi fW'A cXY"
X'XY'K cWY'ghY\h'Y]b'bYi Yg'A chhc'ja 'A]hhY'di b_hž'XUg'X]Y
? UbX]XUh]bbYb'_fYUh]j 'j]bhYfdYh]YfYb'a ØggYb"'8]YgY'A chhcg

_ÖbbYb`j`cb`gU]gcbU`Yb`HfYbXg`V]g`\\]b`ni`gdYn]Y`Yb`5b`ÄggYb
fY]WYbžk Ug`XYb`K`YhVYk`YfV`b]W`h`bi`f`Ui`ZfY[`YbXž`gcbXYfb`Ui`W
\\YfUi`gZcfXYfbX`a`UW`h`Ni`XYa`k`]fX`gck`c`\\`XYf`Ghm]b[`!DfcnYgg
U`g`Ui`W`XUg`9bXYf[`YVb]g`j`cb`XYb`A`]hVYk`YfVYf]bbYb`gck`]Y
Y]bYa`:`UW`a`Ubb`i`]b`X]YgYa`:`U`:`;`i`]Xc`A`Uf]U`?fYhgW`a`Yf`
VYÄi`[`h`

9]b`k`Y]hYfYf`5gdY`_h`]gh`X]Y`Ni`gW`Ui`YfVYhY`]i`b[`"K`Yf`X]Y
GYbXi`b[`gW`Ui`hž`\\U`h`c`Zi`X]Y`A`Ö[`]W`_Y]hž`ZÖf`gY]bY
@]YV`]b[`g`_UbX]XUh]b`UVni`gh]a`a`Ybž`k`Ug`X]Y`ϕhYfU`_h]cb`Yf`\\Ö`h
i`bX`X]Y`Ni`gW`Ui`YfV]bXi`b[`gh`Ä`f`h`"8]YgY`A`U`»`bU`a`Yb`\\UVYb
XUni`VY][`YhfU[`Ybž`XUgg`G`\\c`dd]b[`E`i`YYb`ØVYf`X]Y`ϕ`Y`f`\\]bk`Y[
\\c`\\Y`9]bgW`U`he`i`chYb`Yfn]Y`Yb`_c`bb`hY`"

8]Y`DfcXi`nYbhYb`\\UVYb`ni`XYa`XUfUi`Z[`YUW`hY`hž`XUgg`X]Y
GYbXi`b[`]b]W`h`bi`f`U`g`A`cXYk`YhVYk`YfV`k`U`f[`Ybca`a`Yb`k`]fXž
gcbXYfb`Ui`W`U`g`D`U`h`Zc`fa`ni`f`:`ÖfXYfi`b[`]XYg
GY`V`ghVYk`i`gg`hgY]bg`"8]Y`?`UbX]XUh]bbYb`_ca`a`Yb`Ui`g
i`bhYfgW`]YX`]W`Yb`@YVYbgVYfY]W`Yb`i`bX`Vf]b[`Yb`]\\fY
dYfgÖb`]W`Yb`<]bhYf[`fØbXY`a`]hY]bž`k`cXi`fW`X]Y`Ni`gW`Ui`Yf`Y]bY
J`YfV]bXi`b[`]ni`X`Yb`HY]`bY`a`Yf]bbYb`Ui`ZV`Ui`Yb`_Ö`bbYb`"

9]b`Z`i`gg`Ui`Z`X]Y`A`cXYVfUbW`Y

8]Y`5i`gk`]f`_i`b[`Yb`j`cb`G`\\c`dd]b[`E`i`YYb`Ui`Z`X]Y`A`cXYVfUbW`Y
g]bX`b]W`h`ni`i`bhYfgW`Ä`h`Yb`"8]Y`G`\\c`k`\\U`h`b]W`h`bi`f`HfYbXg
[`YgYhnhž`gcbXYfb`Ui`W`Ui`Z[`YnY][`hž`k`]Y`k`]W`h][`ϕ`X]j`]Xi`U`]h`Ä`h`i`bX
dYfgÖb`]W`Yf`Gh`]g]bX`"J]Y`Y`Ni`gW`Ui`Yf`k`YfXYb`j`cb`XYb`A`ch`c`g
]bgd]f]Yf`hž`i`bX`X]Y`[`YnY][`hYb`C`i`hZ]hg`a`ch]j`]YfYb`g]Y`XUni`ž`bYi`Y
@cc`_g`Ui`gni`dfcV]YfYb`"Ni`XYa`dfcZ]h]YfYb`j`]Y`Y`c`_U`Y`8Yg][`bYf
i`bX`A`cXY[`YgW`Ä`Z`h`j`cb`XYf`G]W`hV`Uf`_Y]hž`X]Y`g]Y`Xi`fW`X]Y
GYbXi`b[`]Yf`\\U`h`Yb`"ϕ`a`a`Yf`k`]YXYf`k`YfXYb`_Y]bYfY`@UVY`g
dfÄgYb]h]Yf`hž`X]Y`Xi`fW`X]Y`G`\\c`k`Y]b[`]fÖ`»`YfYg`Di`V`]i`a`YffY]W`Yb
_Ö`bbYb`"

G`\\c`dd]b[`]E`i`YYb`\\U`h`X]Y`@UbXgW`U`Zi`XYg`XYi`hgW`Yb`:`YfbgY`\\Ybg
bYi`XYZ]b]Yf`h`i`bX`nY][`hž`k`]Y`F`YU`]h`!`HJ`Y]bY`VYgcbXYfY`6]bXi`b[
nk`]gW`Yb`Dfca`]bYbhYbž`Ni`gW`Ui`Yfb`i`bX`5`hU[`ggW`Öb`\\Y]h`ZÖfXYfb

_Ubb"8 Ub_gY]bYf'cf][]bY`Yb': cfa UHY'i bX'XYf
i bj Yfk YWgY`VUFYb'5bgÅhnY']b'XYf'DfÅgYbhUh]cb'V`Y]Vh'X]Y'G\ck
Ui W'k Y]hYf\]b'fY`Yj Ubh'i bX'VY`]YVh"

' B 5;

8 YhU]`g

6Ygi W'Yb'G]Y'i bg'Ui Z.'a Y]b!VYf`]b"bYh