

Dc`c!J]fYb`]b`XYi hgWY a`5Vk UggYf YbhXYW_h. `K]Y`[YZÀ\ f`]W`]gh`Yg3

Dc`cj]fYb`]b`XYi hgWY a`5Vk UggYf`YbhXYW_h. `F]g`_Yb`ZØf
I b[Y]a dZhYž<]bhYf[fi bX`ni f`GW`i W_]a dZi b[`i bX
DfÀj Ybh]cb"

A ØbWYbž`8Yi hgW`UbX`!`5`Ufa]YfYbXY`BUWf]W`hYb`Ui g
XYi hgWYb`5Vk UggYfdfcVYb`g]bX`Ygž`X]Y`]b`XYf`6i bXYgfYdi V`_]
ZØf`Gh]fbfi bnY`b`gc f[Yb. `8 Ug[YZØfW`hYhY`Dc`cj]fi g`hfY]Vh`k]YXYf
gY]b`i bk YgYb`5bU`mgYb`]b`5Vk ÀggYfb`j cb`Gh`XhYb`k]Y
A ØbWYbž`6cbbž? Ø`b`i bX`<Ua Vi f[`UVYb`XUg`J]fi g`Ui Z[YgdØfh"
8cW`VYj cf`X]Y`DUb`_`Ui gVf]W`hž`Y]bY`VYfi `[YbXY`BUWf]W`h`9g
`UbXY`h`g]W`b]W`h`i a`XYb`K`]Xhmd`XYg`J]fi gž`gcbXYfb`i a
j Yf`ÀbXYfhY`Dc`cj]fYbž`X]Y`j cb`XYf`GW`i W_]a dZi b[`ghUa a Yb"
8]YgY`9bhXYW`i b[`Vf]b[h`YXcW`Y]b][Y`i fU[Yb`a]h`g]W`ž`j cf
U`Ya`k Y]`Dc`cj]fi g`]b`8Yi hgW`UbX`U`g`dfU`h]gW`Ui g[Yghc`fVYb
[]`h`K`Y`h`VYf]W`hYhž`XUgg`X]Y`9ffY[Yf`À`ØW`ghk`U`fgW`Y]b`]W`
Xi fW`A YbgWYb`Ui g`@`ÀbXYfb`Y]b[YgW`Yddh`k`i`fXYbž`]b`XYbYb
X]Y`GW`i W_]a dZi b[`bcW`k`Y]h`j`YfVfY]hYh`]gh`6YgcbXYfg`]b`5Zf`_U
i bX`5g]Yb`k`YfXYb`X]YgY`æ`dZi b[Yb`]a a Yf`bcW`Xi fW`[YZØ`fhž
k Yg`U`V`XUg`J]fi g`Y`Yf`Ui g[YgW`]YXYb`i bX`k`Y]hYf[Y[YVYb
k YfXYb`_Ubb"

8 Ug`F`cVYfh?`cW`!`ægh]hi`h`gW`À[h`5`Ufa .`C`V`k`c`X`XYfnY]h`_Y]bY
Dc`c!J YfXUW`hgZ`À`Y`]b`8Yi hgW`UbX`[Ya`Y`XYh`k`i`fXYbž`]gh`X]Y
9bhXYW`i b[`XYf`J]fYb`]b`XYf`5Vk UggYfUbU`mh`_`Y]b`NY]WYb`XUZØfž
XUgg`XUg`J]fi g`Xi fW`Ui g`i bhYf`i bg`n]f`_i`]Yfh`K`]Y`X]Y`
**GØXXYi hgWY`NY]hi b[`Yfj`cf`VYhž`]gh`XUg`F]g`_c`ZØf`Y]bY
9f`fUb`_i b[`Yf]b[ž`XU`X]Y`æ`dZe`i`chY`Yfni`UbXY
YfZfYi`]W`Yfk`Y]gY`VY]`VYY]bXfi`W`YbXYb`-`\$`Dfc`nYbh`]Y[`h`**

5Vk UggYf'U`g'≠bX]_Uhc f. '8]Y 'i bg]W\ hVUfY
; YZU\ f'XYf'≠bZY_h]c b

A]h'XYf'_cbh]bi]Yf']W\Yb', VYfk UW\i b['XYf'5Vk UggYfk YfhY
j Yfgi W'h'XUg'F? ≡Y]bY'a Ø['W\Y'6YXfc\i b['ja '?Y]a 'ni
Yfgh]W_Yb"'9g'VYhc bhž'XUgg'a YX]n]b]gW\Yg'DYfgcbU'VYgcbXYfg
k UW\gUa '[Y[YbØVYf'Gma dhca Yb'XYf'Dc`]ca mY`]h]g'gY]b'gc`hY"
8]YgY'\Y]a hØW_]gW\Y'?fUb_\Y]h]gh'b]W\h'bi f'k U\bg]bb][
UbghY_W_YbXž'gcbXYfb'_Ubb'VY]i b[Y]a dZhYb'A YbgW\Yb'ni
XUi Yf\UZhYb'@À\ a i b[Yb'ZØ\ fYb"Dc`]ca mY`]h]g'k Uf'Y]bgh'X]Y
GW\ fY_W_[YghU'h'i bhYf'?]bXYf_fUb_\Y]hYbž'VY_Ubbh'U'g
'?]bXYf'À\ a i b["'Jcf'U`Ya '?Y]b_]bXYf'k UfYb'VYgcbXYfg
VYhfcZYb'i bX'a i gghYb'a]h'V'Y]VYbXYb'GW\ÀXYb'ZØfg'@VYb
fYW\ bYb"

8Yf'<]bhYf[fi bX'ZØf'X]Y'YfbYi hYb': i bXY']b'5Vk UggYfdfcVYb''Y[h
]b'XYf'6YgW\ UZZYb\Y]h'XYf'Dc`]cj]fYb'gY'Vgh"8Yf'Dc`]cj]fi gž'Y]b
9bhYfcj]fi gž']bZ]n]Yfh'\Ui dhgÀW\`]W\ 'XYb'J YfXUi i b[ghfU_h"'≠
@ÀbXYfb'a]h'gW\`YW\hYb'<m[]YbYVYX]b[i b[Yb'k]fX'XUg'J]fi g'cZh
ØVYf'_cbhUa]b]YfhY'<ÀbXY'U'g'GW\ a]Yf]bZY_h]cb'cXYf'Xi fW\
j Yfi bfY]b][hYg'K UggYf'j YfVfY]hYh"8Ub_'i a ZUggYbXYf
=a dZ_Ua dU[bYb']b'XYf'J Yf[Ub[Yb\Y]h]gh'X]YgY'GYi W\Y']b'j]Y'Yb
HY]'Yb'XYf'K Y'h'bU\Yni 'Ui g[YfchYhž'k cVY]'ja a Yf'k]YXYf
j YfY]bnY'hY'5i gv fØW\Y']b'j YfgW\]YXYbYb'K Y'hfY[]cbYb'[Ya Y'XYh
k i fXYb"

9]b'K Yhh'Ui Z'[Y[Yb'X]Y'NY]h. 'DfÀj Yb h]c b 'i b X
K UW\ gUa _Y]h'g]bX'Yb hgW\ Y]XYbX°

Bi b'ghY`h'g]W\ 'X]Y': fU[Y. 'K Ufi a 'gYmh'a Ub'ØVYf\Ui dh'bcW\ 'Ui Z
X]Y'GW\ 'i W_]a dZi b[ž'k Ybb'5'hYfbUh]j Yb'YI]gh]YfYb3'8Yf
<Ui dh[fi bX'XUZØf''Y[h]b'Y]bYf'9][YbUfh'XYf']bU_h]j]YfhYb'Dc`]c!
=a dZghcZZY. '8]YgY'j Yf\]bXYfb'nk Uf'YZZY_h]j 'Y]bY'9f_fUb_i b[ž
b]W\h'YXcW\ 'Y]bY'≠ZY_h]cb'cXYf'X]Y'K Y]hYf[UVY'XYg'9ffY[Yfg"
6YgcbXYfg]b'@ÀbXYfb'a]h'b]YXf][Yb' =a dZei chYb'ghY`h'XUg'Y]bYb
Yf\YV']W\Yb'F]g]_cZU_hcf'XUf"@ÀbXYf']b'5Zf'_U'i bX'5g]Yb'bi hnYb
X]Y'GW\ 'i W_]a dZi b['XU\Yfž'i a 'Y]bY'ZÀW\YbXYW_YbXY' =a a i b]hÀh

]b`XYf`6Yj Ò`_Yfi b[`ni ` [Yk À\`f`Y]ghYbž`k cVY]`XUg`F]g]_c`j cb
⇒ dZdc`]c!: À`Yb`]b`?Ui Z[Ybca a Yb`k]fX"

8Yf`?Ua dZ[Y[Yb`Dc`]c`]gh`U`gc`"Àb[gh`bcW`b]W`h`[Yk cbbYb`"
Nk Uf`n]f`_i `]YfYb`Dc`]c`!K]`Xj]fYb`Yi hY`ZUgh`bi f`bcW`b]b`DU_]ghUb
i bX`5Z[\Ub]ghUbž`XcW`XUg`[`cVU`Y`N]Y`ž`Dc`]c`j c`gh`ÀbX][
Ui gni fchhYbž`k i fXY`V]g\Yf`b]W`h`YffY]W`h`"8]Y`DUbXYa]Y! ÷\fYž`]b
XYbYb`Fci h]bY! ⇒ dZ b[Yb`Ui Z`XYf`[Ubnyb`K Y`hi bhYfvfcW`Yb
k i fXYbž`\UVYb`XUg`F]g]_c`ZØf`XUg`K]YXYfUi ZYVYb`X]YgYf
?fUb`_Y]h`bi f`bcW`j Yf[fÒ» Yfh" ?Y]bY`NY]h`ni `j Yf`]YfYbž`XYbb`X]Y
dYfa UbYbhY`K UW`gUa _Y]h`i bX`gW`bY`Yg`< UbXY`b`g]bX`Yhnh
a Y\`f`XYbb`Y`[YZfU[h`

8YhU]`g	
Cfh	A ØbW`Ybž`8Yi hgW`UbX

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