

FUgUbhYf'5bgh]Y['Ubh]a i g`]a]gWXYf , VYf[f]ZZY']b'6Yf`]b'!'*((': À``Y'&\$&(°



6Yf`]bž'8Yi hgW `UbX'!'8]Y'5``]Ubn'[Y[Yb'Aig`]a!'ibX

=g`Ua ZY]bX`]WX_Y]hž'VY_Ubbh'U`g'7`U]až\Uh'U`Ufa]YfYbXY'NU\`Yb
ni 'Ubh]aig`]a]gWXYb'JcfZA``Yb']b'6Yf`]b'jYfOZZYbh`]WXh''=a'\J\f
&\$&('kifXYb']bg[YgUah'*((':A``Y'fY[]ghf]Yfhž'kUg'Y]bYb
XfUgh]gWXYb'5bgh]Y['jcb'bU\Yni'+\$DfcnYbh']a'JYf[`Y]WX'ni'&\$&'
VYXYihYhž'U`g'bcWX'', &'JcfZA``Y'YfZUggh'kifXYb''8]Yg'nY][hž'XUgg
Ubh]aig`]a]gWXYf'FUgg]gaigž'XYf']b'jYfgWX]YXYbYb':cfaYb
UiZhf]hhž'Y]bY'kUWXgYbXY'6YXfc\ib['XUfghY``h''6YgcbXYfg
VYgcf[b]gYffY[YbX']gh'X]Y'HUhgUWXYž'XUgg'ZUgh'nkY]'8f]hhY``XYf
6YhfcZZYbYb':fUiYb'g]bXž'\ÀiZ]['gc`WXYž'X]Y'fY`][']ÒgY'?`Y]Xib[
hfU[Yb'ibX'cZhaU`g'a]h'?]bXYfb'ibhYfkY[g'g]bX''

 $8]Y^5fh^ibX^KY]gY\tilde{z}^bXYf^Ubh]aig^a]gWXYf^FUgg]gaig^b^6Yf^b$

ni a '5i gXfi W_'_ca a hž']gh'j]Y`ZÀ`h]['i bX'fY]W\h'j cb
8]g_f]a]b]Yfi b[Yb'i bX'j YfVU`Yb', VYf[f]ZZYb'V]g'\]b'ni
_OfdYf`]W\Yb'5b[f]ZZYb''@Ui h'7`U]a 'g]bX'(*'DfcnYbh'XYf'JcfZÀ``Y
X]g_f]a]b]YfYbXYf'BUhi fž'k À\fYbX'(\$'DfcnYbh'j YfVU`Y', VYf[f]ZZY
i a ZUggYb''Ni gÀhn`]W\'k i fXYb'ZUgh') \$'?OfdYfj Yf`Yhni b[Yb
j YfnY]W\bYh''=a '6]`Xi b[gVYfY]W\ž'Y]bYf'XYf'Ua 'ghÀf_ghYb
VYhfcZZYbYb'6YfY]W\Yž'YfY][bYhYb'g]W\'') 'DfcnYbh'XYf'JcfZÀ``Yž
VY]'XYbYb'gck c\``GW\Ø`Yf'U`g'Ui W\'@Y\f_fÀZhY'U`g'HÀhYf'U[]YfhYb''
, VYf[f]ZZY'k i fXYb'Ui W\']a 'OZZYbh`]W\Yb'FUi a 'f&\$'DfcnYbhŁ'i bX
Ua '5fVY]hgd`Uhn'f%%'DfcnYbhŁ'[Ya Y`XYh''

5bgh]Y['bUWX 'XYb 'HYffcfUbgWX `A [Yb

8 Yf fUgUbhY 5 bgh]Y['XYf'J cfZÀ``Y 'gY]h'C _hc VYf'&\$&' '`Àggh'g]W\
hY]`k Y]gY 'Xi fW\ 'X]Y 'HYffcfUbgW\ `À[Y 'XYf' < Ua Ug 'Ui Z'=gfUY`
Yf_`ÀfYbž'X]Y 'k Y`hk Y]h'ni 'Y]bYf'Ni bU\a Y'j cb 'Ubh]a i g`]a]gW\Yb
Ÿi » Yfi b[Yb'i bX', VYf[f]ZZYb'[YZØ\fh'\UVYb" '8]Y 'A Y `XYghY``Y
F Ydcfh'6Yf`]bž'X]Y 'X]Y 'J cfZÀ``Y 'Xc_i a Ybh]Yfhž'\Uh'ZYgh[YghY``hž
XUgg']bgVYgcbXYfY': fUi Ybž'X]Y 'Y]b'?cdZhi W\ 'hfU[Yb'cXYf
UbXYfk Y]h]['fY`][]ÒgY'? `Y]Xi b['hfU[Ybž'ØVYfdfcdcfh]cbU`
VYhfcZZYb'g]bX" 'Gc'VYf]W\ hYh'7`U]a 'j cb'J cfZÀ``Ybž']b'XYbYb': fUi Yb
a]h'?cdZhi W\ 'VY`Y]X][h'i bX'U`g'HYffcf]gh]bbYb'VYnY]W\ bYh
k i fXYb"'

8]Y'7c!; YgW\ÀZhgZØ\fYf]b'jcb'7`U]ažF]aU'<UbUbcžZcfXYfh'Y]bYYb[aUgW\][YfY'9fZUggib['gc`W\Yf'JcfZÀ``Y'gck]Y'aY\fibUV\Àb[][Y'6YfUhib[gghY``Yb'ZØf'X]Y'6YhfcZZYbYb"'G]Y'_f]h]g]YfhYniXYa'X]Y'dc`]h]gW\Y'={bcfUbn'[Y[YbØVYf'X]YgYa'DfcV`Ya'ibXUddY``]YfhY'Ub'XYb'6Yf`]bYf'GYbUhž'XUg'VYghY\YbXYBYihfU`]hÀhg[YgYhn'UVnigW\UZZYbž'kY`W\Yg':fUiYb'a]h'?cdZhiW\X]g_f]a]b]YfY"

Dc`]h]gWXY'FYU_h]cbYb'i bX'[YgY``gWXUZh`]WXY JYfUbhk cfhi b[

 $8]Y `6Yf`]bYf`Gcn]U`gYbUhcf]b `7UbgY``?]n]`hYdY`fGD8 Ł`nY][hY`g]WX gc`]XUf]gWX `a]h`XYb`6YhfcZZYbYb`i bX`VYhcbhY`X]Y`Bchk YbX][_Y]hž$

Ubh]a i g`]a]gWXYb F Ugg]ga i g'g]WXhVUfYf ni 'a UWXYb i bX ghfi _hi fY``Y '8]g_f]a]b]Yfi b[Yb Ubni [Y\Yb"'7`U]a 'gWX`À[h'ni XYa j cfž'XYb'%"'** `]'U`g'; YXYb_hU['[Y[Yb'Ubh]a i g`]a]gWXYb F Ugg]ga i g'ni 'YhUV`]YfYbž'i a 'Ub'X]Y '9fa cfXi b['j cb'A Ufk U'9`! G\YfV]b]'ni 'Yf]bbYfb"'8]YgYg'J cf[Y\Yb'gc``'b]WXh'bi f'XYb'C dZYfb [YXYb_Ybž'gcbXYfb'Ui WX 'XUg'6Yk i gghgY]b'ZØf'X]Y 'DfcV`Ya Uh]_ gWXÀfZYb'i bX'ni 'Y]bYa 'I a XYb_Yb'XYf'; YgY``gWXUZh'VY]hfU[Yb"

8]Y 8 c_i a YbhUh]cb Ubh]a i g`]a]gWXYfJ cfZÀ``Y]b 6Yf`]b k]fX Ui WX Xi fWX X]Y 6Yf]WX hYfghUhhi b['UbXYfYf

A YbgWXYbfYWX hg]bgh]hi h]cbYb i bX B; C g ZUb_]Yfh" 8]YgY k UfbYb j cf Y]bYa 'VYi bfi \][YbXYb '5bgh]Y['j cb '8]g_f]a]b]Yfi b[Ybž]bgVYgcbXYfY]a 'Ni gUa a Yb\Ub['a]h k UWX gYbXYa 'Dcdi `]ga i g i bX =g`Ua ZY]bX`]WX_Y]h]b XYb 'A YX]Yb i bX XYf 'Dc`]h]_" '8]Y '9I '\Uh]b 'Y]bYa '5_h]cbgd`Ub 'j cb '&\$&\$ 'V]g '&\$&) 'Ubh]a i g`]a]gWXYb F Ugg]ga i g 'U`g 'gdYn]Z]gWXY: cfa 'XYg F Ugg]ga i g 'UbYf_Ubbhž'XYf Yb['a]h F Y`][]cb 'j YfVi bXYb ']ghž'k Ug'X]Y '8 f]b[`]WX_Y]h XYf 6Y_Aa dZ b['X]YgYf': cfa 'XYf'8]q_f]a]b]Yfi b['i bhYfghfY]WX h"'

#bg[YgUa h'nY][h'X]Y'G]hi Uh]cb']b'6Yf`]bž'XUgg'Ubh]a i g`]a]gW\Yf
FUgg]ga i g'b]W\h'bi f'Y]b'[YgY``gW\UZh`]W\Ygž'gcbXYfb'Ui W\'Y]b
dc`]h]gW\Yg'DfcV`Ya ']ghž'XUg'YbhgW\`cggYb'Ub[Y[Ub[Yb'k YfXYb
a i gg"'9g'V`Y]Vh'ni '\cZZYbž'XUgg'X]Y'#b]h]Uh]j Yb'j cb'7`U]a 'i bX'X]Y
I bhYfghØhni b['Xi fW\'X]Y'Dc`]h]_'ni 'Y]bYf'gdØfVUfYb'J YfVYggYfi b[
XYf'@U[Y'ZØ\fYb'k YfXYb"

 $: \emptyset f `k Y] h Y f Y ` + b Z c f a U h] c b Y b ` \emptyset V Y f ` X] Y ` U _ h i Y ` ` Y ` G] h i U h] c b ` _ O b b Y b ` G] Y \\ f V V & (\check{z} ` H U [Y g g d] Y [Y ` ` i b X ` ; ` Y] W V Y \ U b X ` i b [g U b k U ` h g W U Z h V Y g i W Y b "$

8 Y hU]`g	
Cfh	6Yf`]bž'8Yi hgWX`UbX
EiY``Yb	• k k k "fVV&("XY
	• k k k "hU[Yggd]Y[Y`"XY
	• k k k "[`Y]W\ VY\ UbX`i b[gUbk U`hg
	W UZh"[j "Uh

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