

8 Ugʻ; YZi a a Y`XYfʻ=bj YghcfYbž'k À\fYbX F ca 'VfYbbhž'k Ufi a 'ghY][h'6]hWc]b3

8]Y'k]Wkh][ghY'?fmdhck À\fi b['ghY][hžXU'X]Y'6]hWc]b!DfY]gY

ØVYf'&, "\$\$\$``dfc'GhØW_[Ygh]Y[Yb'g]bX'Wc]b']b'XYf'YhnhYb

A Àfnk cWkY"8Ug'a U['bUWk':iaaaY'Y]'Ui ggY\Ybž'k À\fYbX

Fca'bUWk'XYa'Ni gUaa YbVfi Wk'Y]b][Yf'GWk'ØggY'VUb_Yb

ZØf'XYb'?fmdhcaUf_h']b'XYb'JYfY]b][hYb'GhUUhYb'VfYbbh"

6Ub_Yb'ghØfnYb'UV'Ni Yfghrk i fXY'X]Y'G]'j Yf[UhY'6Ub_fG±

`]ei]X]YfhžXUbb'X]Y'G]`]Wcb'JU'`Ym'6Ub_fGJ6±i bX'X]Y

G][bUhi fY'6Ub_fG6BMe'j cb'XYb'5i Zg]WkhgVY\OfXYb

[YgWk'cggYb"5``Y'XfY]'6Ub_Yb'k i fXYb'j cb'?fmdhc!

#bj YghcfYb'VYj cfni [hžXU'X]Y'GJ6'aY]gh'ZØf'X]Y

:]bUbn]Yfi b['j cb'GhUfhi dg'[Ybi hnh'k i fXY"'5i >>YfXYa

k UfYb'X]YgY'6Ub_Yb'n]Ya`]Wk'UbZA``]['ZØf'N]bgYf\O\i b[Ybž
[YbUi'k]Y'XYf'?fmdhcaUf_h"'8Yf'5bgh]Y['XYf'@Y]hn]bgYb'XYf

I G!BchYbVUb_'/Uad\A'`]d/



8]Y'k]Wkh][ghY'?fmdhckÀ\fib['ghY][hž'XU'X]Y'6]hWc]b!DfY]gY'ØVYf &, "\$\$\$'`'dfc'GhØW_'[Ygh]Y[Yb'g]bX'Wc]b']b'XYf'`YhnhYb AÀfnkcWkY"'8Ug'aU['bUWk':iaaY`Y]'UiggY\Ybž'kÀ\fYbX'Fca bUWX 'XYa 'Ni gUa a YbVfi WX 'Y]b][Yf'GWX `ØggY`VUb_Yb'ZØf'XYb ?fmdhca Uf_h']b'XYb'JYfY]b][hYb'GhUUhYb'VfYbbh"

6Ub_Yb ghØfnYb UV

Ni Yfgh'k i fXY'X]Y'G]`j Yf[UhY'6Ub_'fG±'`]ei]X]Yfhž'XUbb'X]Y'G]`]Wcb J U``Ym'6Ub_'fGJ 6±'i bX'X]Y'G][bUhi fY'6Ub_'fG6B M±'j cb'XYb 5i Zg]W\hgVY\ÒfXYb'[YgW\`cggYb"

5``Y`XfY]`6Ub_Yb`kifXYb`jcb`?fmdhc!±ojYghcfYb`VYjcfni[hž`XUX]Y`GJ6`aY]gh`ZØf`X]Y`:]bUbn]Yfib[jcb`GhUfhidg`[Ybihnh`kifXY"5i»YfXYa`kUfYb`X]YgY`6Ub_Yb`n]Ya`]W\`UbZÀ``][`ZØfN]bgYf\Ò\ib[Ybž`[YbUik]Y`XYf`?fmdhcaUf_h"`8Yf`5bgh]Y[`XYf@Y]hn]bgYb`XYf`IG!BchYbVUb_`flYXŁ`UiZ`(ž+)`i`hfUZ`]\f\;`Y]W\[Yk]W\h]ba]hhYb`Y]bYg`ibgUW\[YaÀ»YbF]g]_caUbU[YaYbhg`gW\UfZ"

8]Y'k ØhYbXY'6Ub_Yb_f]gY']b'XYb'I G5'i bX'Ui W\'X]Y'j YfgW\ÀfZhY
FY[i`]Yfi b['XYg'? fmdhca Uf_hYg']b'5a Yf]_U'XfÀb[hYb']b'XYb'I G5
UbgÀgg][Y'? fmdhcZ]fa Yb']bg'5i g`UbX"'9]b][Y'X]YgYf'+bj YghcfYb
j Yf`U[Yfb']\f'; YgW\ÀZh']b'X]Y'GW\k Y]nž'XU'Y]b][Y'6Ub_Yb']a '@UbX
Y]bYb'5bgh]Y['XYf'5bZfU[Yb'Ui g'j YfgW\]YXYbYb'FYW\hgcfXbi b[Yb
ni f'?cbhcYfÒZZbi b['j YfnY]W\bYhYb"'9]b][Y'GW\k Y]nYf'6Ub_Yb
[UVYb'Ubž'XUgg'g]Y'VYfY]hg'a]h'XYa 'CbVcUfX]b['X]YgYf'?fmdhc!
7`]Ybhg'VY[cbbYb'\UVYb"

6Ub_Yb'Ui Z'XYb'6Yfa i XU!\DgY`bz';]VfU`hUfz'Di Yfhc'F]Wcz'XYb 6U\Ua Ug'i bX'XYf'8ca]b]_Ub]gW\Yb'FYdi V`]_'[Y`hYb'YVYbZU``g'U`g Cdh]cbYb'ZØf'?fmdhc!\Dj YghcfYb"

 $5 fWX V `c W_{\check{z}} Y] b `6 Y hfY] V Y f' X Y f' Z Ø b Z h[f \grave{O} * hY b `GhUV `Y W \&] b `X Y f' K Y `h\check{z} \\ Hfi Y `I G8 `fHI G8 \& \& \& ``Uh`F Y g Y fj Y b `] b `< \grave{O} \ Y `j c b `%`A]``] U f X Y `I G! \\ 8 c ``Uf `ni f' 8 Y W_{i} b [`X Y f' G hU V `Y W \&] b `Ub `X] Y `7 U d] hU``I b] c b `6 U b _ `Ui Z X Y b `6 U \ Ua Ug `hf U b g Z Y f] Y fh'' `9] b][Y `GhU V `Y W \&] b ! 6 Y hf Y] V Y f' \ U h h Y b b U W `X Y a `Ni g U a a Y b V fi W `X Y f' X f Y] `_fmd h & Z f Y i b X `] W X Y b `6 U b _ Y b Y f b g h \ U Z h Y `D f c V `Y a Y " `7] f W Y `a i g g h Y `X Y b `5 i g h U i g W `j c b `I 8 G 7 n i a '; f Y Y b V U W _ Z Ø f `Y] b `d U U f `H U [Y `g h c d d Y b "$

8 Yf I a hUi gWX VYhf]YV k i fXY 'Ua '%' "'A Àfn'k]YXYf 'Ui Z[Ybca a Ybž bUWX XYa '7]fWY 'VY_Ubbh'[UVž XUgg 'X]Y '' ž 'A]``]UfXYb I G!8c``Ufž X]Y 'Yg ']b 'GJ 6 '\ UhhYž'j c``ghÀbX]['j YfZØ[VUf 'gY]b 'k ØfXYbž'i bX VYghÀh][hYž XUgg I G8 7 'k Y]hYf\]b '%.%'a]h XYa 'I G!8c``Uf 'Y]b`ÒgVUf]gh" 'GY`Vgh'X]YgY'_`Y]bY I bhYfVfYWXi b['XYf '8 Yj]gYb[YgWX ÀZhY k i fXY'[Ybi hnhži a 'XYb I G8 7!K YWXgY`_i fg 'Ui Z'\$ž, * '` 'ni 'gYb_Yb" Hfchn 'XYf [YnÀ\a hYb 'DUb]_'hUi WXhYb 'Ua 'A cbhU['bUWX 'XYf K]YXYfUi ZbU\a Y 'XYg '6ÒfgYbVYhf]YVg '[fc» Y ': cfXYfi b[Yb 'Ui Zž; Y`X'j cb 'GhUV`YWc]bg 'UVni \YVYb"

I bhYfXYggYb 'VYgW\ `Yi b][h'g]W\ `XYf'6]hWc]b! < UbXY`ž'XU'X]Y 'DfY]gY &, ", \$\$ `` 'YffY]W\ hYbž'XUg'\ ÒW\ ghY'B]j YUi 'gY]h'- 'A cbUhYb"'8 Ug h\[A] \`]W\ Y' < UbXY\`gj c\`i a Yb'XYf'XYnYbhfU\`]g]YfhYb'6\OfgYb'f8 9L \{ gh]Y['i a '&) \$'i 'Ui Z'&) 'A]\``]UfXYb'I G!8 c\``Uf"'8]Y'HfUbgU_h]cbYb XYf'6H7!K U`Y'k YfXYb'gY]h'Bcj Ya VYf'&\$&\\Ui dhg\[AW\`]W\'Ui Z\\QVYf'\%'A\]\``]cb'8 c\``Uf'[YgW\[Ahnh'']

5VYf XUg]gh b]W h U ``Yg

8]Y 5b`Y[Yf'\cZZYb`Ui Z'X]Y 'Øb[ghYb`6Ub_Ybhi fVi `YbnYb`]b`XYb
J YfY]b][hYb`GhUUhYb`i bX`9i fcdUž'k c`Ui W\`X]Y`[fc»Y`7fYX]h
Gi]ggY`_i fn`j cf`XYa `Ni gUa a YbVfi W\`ghY\hž'bUW\XYa
[Ya i b_Y`h'k i fXYž'XUgg`X]Y`gUi X]gW\Y`BUh]cbU`VUb_`_Y]b`; Y`X
a Y\f`]b`XUg`Ub[YgW\`U[YbY`:]bUbn]bgh]hi h`ghYW_hž'XU`Yg`X]Y
%\$i !?Ud]hU`[fYbnY`ØVYfgW\fY]hYb`k ØfXY`XYf`?fYX]hj Yf[UVY`dfc
?i bXY`ni `Y]bYf`?Y\fhk YbXY`]b`XYf`; Y`Xdc`]h]_`ZØ\fYb`k ØfXY''

GdÀhYf`gU[hY`XYf`Jcfg]hnYbXY`XYf`gUi X]gW\Yb`BUh]cbU`VUb_ž`XUgg X]Y`7fYX]h`Gi]ggY`]b``YhnhYf`NY]h`_Y]bYf`Y]`Z]bUbn]Y``Y
I bhYfghØhni b[`VYUbhfU[h`\UVYž`i bX`VY\Ui dhYhYž`XUgg`X]Y
Øb[ghYb`Hi fVi `YbnYb`VY]`XYb`Gk]``!?fYX]h[YVYfU_h]Yb
i b[YfYW\hZYfh][h `gY]Yb"`8]Y`GW\kY]nYf]gW\Y`BUh]cbU`VUb_`ghUbX
U`g``YhnhYg`A]hhY``Ui Zž`i a `XYf`7fYX]h`Gi]ggY`Y]bYb`?fYX]h`ØVYf`)\$
A]``]UfXYb`GW\kY]nYf`: fUb_Yb`ni `[YkÀ\fYb"

8]Y'DfcV`Ya Y']a '6Ub_YbgY_hcf``]Y»Yb'X]Y'5b`Y[Yf'\cZZYbž'XUgggckc\``X]Y': YX'U`g'Ui W\'X]Y'9i fcdÀ]gW\Y'NYbhfU`VUb_ [Ynkib[Yb'gY]b'kØfXYbž'YfbYih'Y]bY'ei Ubh]hUh]j Y'@cW_Yfib[Y]bni `Y]hYbži a `XUgʻ6Ub_YbgmghYa 'ni 'ghUV]`]g]YfYb"

5``YfX]b[g']gh'Yg'bcW\`ni 'ZfØ\ž'i a 'XUfUi Z'ni 'k YhhYbž'XU'X]Y

\$\delta ZUh]cb'bcW\'b]W\h'j YfUb_Yfh'i bX'b]W\h'Y]ba U``[YX\haadZh']gh"

J YfY]bnY`\hY'6Ub_YbdfcV`Ya Y'_\ObbhYb'Xi fW\'[Yn]Y`\hY

<]`ZYghY``i b['cXYf'a]h'<]`ZY'bUh]cbU`Yf

K \hat{A\fi b[gUi Zg]W\hgVY\\OfXYb\z'k]Y']a': U```XYf'7fYX]h'Gi]ggY\z'
[Y`\Ogh'k YfXYb"

8 Yf @Y]hYf XYf UbU`mh]gWX Yb 5 VhY]`i b['VY]'A YhUXcfcž j 1/2b A UfWX YbUž [`Ui Vhž XUgg Y]bY 'gc `WX Y 'I bg]WX Yf \Y]h 'Ui Z 'XYa 'A Uf_h XUg '? Ud]hU` ']b 'F]WX hi b['g]WX Yf Yf '5 b `U[Yb 'hfY]VYb '_ObbhYž k Ug 'U``Y < c \ZZbi b[Yb 'Ui Z 'Y]bY 'F U``m f]g_UbhYf 'J Yfa O[Ybgk YfhY 'ni b]WX hY a UWX h"

8]Y'6]hWc]b!DfY]gY'VYk Y[Yb'g]W\]a a Yf'bcW\]bY'ghUf_Y K]XYfghUbXgncbY'j cb'&, "\$\$\$'V]g'' \$"\$\$\$'I G!8c``Ufž'UVYf'Yg']gh]bhYfYggUbh'ni 'gY\Ybž'cV'X]Yg'XYf': U```]gh'Wc]b'X]Y'Di ghY'Ui g[Y\h cXYf'bcW\'a Y\f'bUW\'cVYb'[Y\h"

8 YhU]`q

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z. '_fmd hc!b Yk g"Uh