

?U]gYfg`Ui hYfYf'?UVUfYhh]ghYb']a Gcaa Yf]bhYfj]Yk. '9]b'6`]W_'\]bhYf'X]Y ?i`]ggYb

9fZU\fYb'G]Yžk]Y'X]Y'?U]gYfg`Ui hYfYf'I bh]YfY'X]Y Gca a YfdUi gY'a]h'?fYUh]j]hÀh'i bX'K]hn'ZØ``Yb' 'Y]b =bhYfj]Yk']a 'Y]bn][Ufh][Yb'JYfY]bg\Y]a "

8]Y'I f`Ui VgnY]h'Vf]b[h'ZØf'j]Y`Y'Y]bY'5i gnY]hž'XcW\'b]W\h
ZØf'X]Y'? U]gYfg`Ui hYfYf'I bh]YfY"'8]Y'? UVUfYhh]ghYbž
VY_Ubbh'ZØf']\fYb'gW\UfZYb'K]hnž'g]bX'Ui W\']b'XYf
Gca a YfdUi gY'U_h]j'"'9]b'; YgdfÀW\'ØVYf']\fY'D`ÀbY'i bX
X]Y'6YXYi hi b['j cb'<i a cf']b'XYf'U_hi Y``Yb'NY]h"

CVk c\`XYf`GhUXhVYhf]YV'ni f`Gca a YfdUi gY'_ca a h'i bX`Dc`]h]_Yfg]W\"]b`X]Y': Yf]Yb'ni fØW_n]Y\YbžV`Y]Vh'X]Y'? fYUh]j]hÀh`XYf?U]gYfg`Ui hYfYf`I bh]YfY'i b[YVfcW\Yb"`A Uf]bU'HUa ½ggmi bX K c`Z[Ub[`A UfgW\U``ž'X]Y`VY]XYb'? ÒdZY'\]bhYf`XYa ??UVUfYhhž\UVYb'XYbbcW\'Y]bYb'; fi bX'[YZ bXYbž'g]W\'ni gUa a Ybni gYhnYbi bX']\fY'J]g]cbYb'ZØf'X]Y'bÀW\ghY`GU]gcb'ni 'VYgdfYW\Yb": Øf']\fGca a Yf!\DhYfj]Yk '\UVYb'g]Y'g]W\'Y]bYb'[Ubn'VYgcbXYfYb'CfhUi g[Ygi W\h'XUg'J YfY]bg\Y]a 'XYg'5ei Uf]Yb!'i bX HYffUf]Ybj YfY]bg"'9]b'i b[Yk Ò\b`]W\Yf'HfYZZdi b_hž'XYf'XYb\Y]XYbgW\UZh`]W\Yb'BUhi fZfYi bXYb'b]W\h'bi f'X]Y'A Ò[`]W_Y]h'[]Vhž\ØVYf']\fY'<YfnYbgUb[Y`Y[Yb\Y]hYb'ni 'd`Ui XYfbž'gcbXYfb'Ui W\X]Y'; Y`Y[Yb\Y]hYV]YhYhž'XUg'@YVYb']b']\fYf'ZUWYhhYbfY]W\Yb': cfani 'ZY]Yfb"

8]YGiWXYbUWXXYf=bgd]fUh]cb

 8]Y'A YbgW\Yb'VfUi W\Yb'<i a cfž'VYgcbXYfg']b'?f]gYbnY]hYb ž a Y]bh'A UfgW\U``"8]YgYf'; YXUb_Y'a ch]j]Yfh'X]Y'I bh]YfYž'Ui W\']b XYf'j Yfa Y]bh']W\'fi \][Yb'GU]gcb']\f'_fYUh]j Yg'GW\UZZYb'b]W\h'ni i bhYfVfYW\Yb" 9g']gh'k]W\h][ž'XYb'Ni gW\Ui Yfb'Y]bYb'FUi a 'ni V]YhYbž']b'XYa 'g]Y'`UW\Yb'_ObbYbž'Ui W\'k Ybb'Yg'XfUi » Yb\Y_h]gW\'ni [Y\h" 'A]h']\fYb'Dfc[fUa a Yb'k c``Yb'g]Y'Y]b'k Yb][@]W\h']b'X]Y'Xi b_`Yb'9W_Yb'XYg'5``hU[g'Vf]b[Yb"

9]b $F \varnothing W_V^{\)}W_i$ b $X \cdot 5i gV^{\)}W_i$

8]Y``YhnhYb`JcfghY``i b[Yb`jcf`XYf`GcaaYfdUigY`kUfYb`Y]b`jc``Yf
9fZc`["8]Y`?U]gYfg`UihYfYf`Ibh]YfY`\UVYb`XUg`DiV`]_ia`a]h
Y]bYa`A]I`Uig`GUh]fY`ibX`\Y]hYfYb`5bY_XchYb`VYghYbg
ibhYf\U`hYb"`K]f`\UVYb`Y]bY`A]gWkib[`Uig`VYghY\YbXYb`ibX
bYiYb`BiaaYfb`dfcV]Yfhž`Yf_`Àfh`HUa½ggm"`8]Yg`YfaÒ[`]Wkh`XYb
?UVUfYhh]ghYbž`]\fYb`NigWkUiYfb`YhkUg`JYfhfUihYg`ibX
[`Y]WknY]h][`9fZf]gWkYbXYg`ni`V]YhYb"

± XYb _ca a Yb XYb A cb UhYb g]b X VYfY]hg b Yi Y Dfc Y_hY]b

D`Ubi b ["'9g k]f X Ub Y]b Ya Dfc [f Ua a [YUf VY]hYhž X Ug X]Y _ `Y]b Yb

i b X [fc » Yb < Yf Ui g Zc f XYfi b [Yb XYg 5 ``hU [g `\ i a cf j c ``

VY `Yi W hYh" K]f a Ò W hYb XYb A Ybg W Yb Y]b GhØ W_ @Y V Ybg Zf Yi XY

ni f Ø W_ [Y V Yb ž V Yhc bh A Ufg W U``" < i a cf `U`g J Ybh]` XUg]gh X Ug

A chhc ž a]h X Ya X]Y I bh]Yf Y]b X]Y b À W ghY F i b X Y [Y \ Yb k c ``Yb"

B]Wkhibi fiXUgi?UVUfYhhi]bhYfYgg]YfhiX]YiVY]XYbi?ØbghiYf/ig]Yig]bX Ui Wki]biXYfiFY[]cbiU_h]j "iA]higcn]UiYbiDfciY_hYbii bX ?ccdYfUh]cbYbik ciiYbig]Yi]\fYiFY]WkkY]hYifkY]hYfbii bX j YfgWk]YXYbYi[YgYigWkUZhi]WkYiH\YaYbiUbgdfYWkYb"i9gi]ghi]\bYb k]W\h][\check{z} 'XUgg']\f'9]bZ'i gg'ØVYf'X]Y'6Ø\bY'\]bUi g[Y\h'i bX'g]W\']b XYf'; Ya Y]bgW\UZh'k]XYfgd]Y[Y`h"

8 Yf'Gca a Yfžgc'Yf_`Àfh'XUg'? UVUfYhh!8i cž']gh'Y]b']XYU`Yf
NY]hdi b_hži a 'ØVYf'J YfÀbXYfi b[Yb'bUWkni XYb_Yb'i bX'_fYUh]j Y

→XYYb'ni 'Ybhk]W_Y`b'' K]f'g]bX'XYb'K ØbgWkYb'i bX'9fk Ufhi b[Yb
i bgYfYg'Di V`]_i a g'j YfdZ]WkhYh ž'gU[h'HUa ½ggm'' 8 Yg\U`V'\ÒfYb
k]f'b]Y'Ui Zž'ni '`YfbYb'i bX'i bg'k Y]hYfni Ybhk]W_Y`b'' '8 Ug'nY][h
g]Wk'b]Wkh'bi f']b']\fYf'6Ø\bYbdfÀgYbnž'gcbXYfb'Ui Wk']b']\fYf
6YfY]hgWkUZhž'a]h'XYf'NY]h'ni '[Y\Yb'i bX'U_hi Y``Y'H\Ya Yb
Ui Zni [fY]ZYb"'8]Yg']gh'ZØf'X]Y'I bh]YfY'Y]b'nYbhfU`Yg'9`Ya Ybh']\fYf
5fVY]h"

?UVUfYhha]h<YfnibXJYfghUbX

Ni gUa a Yb[YZUggh`Àgghg]WX`gU[Ybž`XUgg`X]Y`?U]gYfg`Ui hYfYf
I bh]YfY`Ui WX`k À\fYbX`XYf`Gca a YfdUi gY`i bYfa ØX`]WX`Ub`]\fYf
?i bgh`UfVY]hYb"`G]Y`g]bX`a Y\f`U`g`bi f`?UVUfYhh]ghYb```g]Y`g]bX
; YgWX]WXhYbYfnÀ\`Yfž`X]Y`Yg`j YfghY\Ybž`X]Y`Dc`]h]_`i bX`X]Y
; YgY``gWXUZh`\i a cfj c```ni `fYZY_h]YfYb"`\D`Y]bYf`NY]hž`]b`XYf`j]Y`Y
A YbgWXYb`bUWX`Yhk Ug`Dcg]h]j Ya `gi WXYbž`]gh`]\f`5b[YVch
j]Y``Y]WXh`k]WXh][Yf`XYbb`Y''`9g`nY][hž`XUgg`<i a cf`Y]bY
i b]j YfgY``Y`GdfUWXY`]ghž`X]Y`6fØW_Yb`VUi Yb`i bX`<YfnYb
Yfk Àfa Yb`_Ubb"

8] Y 'U_hi Y ``Y 'dc`]h]gW\Y '@U[Y ']b '8 Yi hgW\`UbXž'[Y_YbbnY]W\bYh Xi fW\'\Ài Z][Y '?cU`]h]cbgk YW\gY``i bX '[YgY``gW\UZh`]W\Y GdUbbi b[Ybžv]YhYhrA UhYf]U`ZØfx]Y I bh]YfY i bX UbXYfY? Øbgh`Yf" 8]YgY? Øbgh`Yf'\UVYb cZhx]Y 5i Z[UVYžHUVi g'Ubni gdfYW\Yb i bXY]bYb Gd]Y[Y`j cfx]Y; YgY``gW\UZh`ni \U`hYb" Gc k YfXYb H\Ya Ybk]Y A][fUh]cbžI ak Y`hVYk i gghgY]b i bX gcn]U`Y I b[`Y]W\Y]h`]b]\fYb Dfc[fUaaYb VY\UbXY`hži a Y]b 6Yk i gghgY]b ZØfX]YgYk]W\h][Yb [YgY``qW\UZh`]W\Yb': fU[Yb ni qW\UZZYb"

?i`hi fY``Yf'9]bZ`i gg'i bX'[YgY``gW\UZh`]W\Yf 6Y]hfU[

? UVUfYhh]ghYb k]Y 'A Uf]bU 'HUa ½ggm'i bX 'K c 'Z[Ub['A UfgW\U '` bi hnYb']\fY '6Ø\bY 'b]W\h'bi f'ni f'I bhYf\U 'hi b[ž'gcbXYfb'Ui W\ni f 5i gY]bUbXYfgYhni b['a]h'U_hi Y ``Yb'9fY][b]ggYb"'8]YgY'5fh'j cb ?i bgh'\Uh'X]Y : À\][_Y]hž'A YbgW\Yb'ni a 'BUW\XYb_Yb'Ubni fY[Yb i bX'g]Y'XUni 'ni 'Vf]b[Ybž'GhY ``i b['ni 'VYn]Y\Yb' 'Y]bY'k]W\h][Y : i b_h]cb']b'Y]bYf'8Ya c_fUh]Y"'8]Y'I bh]YfY'VYn]Y\Yb'\Ài Z]['`c_U'Y i bX'bUh]cbU'Y'H\Ya Yb']b']\fY'5i Zhf]hhY'Y]bž'k Ug']\fY'FY`Yj Ubn b]W\h'bi f'Ui Z'X]Y'6Ø\bYž'gcbXYfb'Ui W\']b'X]Y'dc`]h]gW\Y 8]g_i gg]cb'Vf]b[h"

9]b 'VYa Yf_Ybgk YfhYg'6Y]gd]Y`'Ui g'XYf'J Yf[Ub[Yb\Y]h'g]bX'X]Y
5i Zhf]hhY'XYf'XUa U`][Yb'?UVUfYhh]ghYb'k À\fYbX'XYf'K Y]a UfYf
FYdi V`]_ž'U`g'X]YgY'Xi fW\'GUh]fY'i bX'=fcb]Y'dc`]h]gW\Y'A]ggghÀbXY
UbdfUb[YfhYb"'8]Y'@YVYbgi a ghÀbXY'i bX'<YfUi gZcfXYfi b[Yb
k UfYb'XUa U`g'YVYbgc'_ca d`]n]Yfhžii bX'X]Y'?Øbgh`Yf'gd]Y`hYb'Y]bY
VYXYi hYbXY'Fc``Y'VY]'XYf'GYbg]V]`]g]Yfi b['XYf'² ZZYbh`]W_Y]h"'8]Yg
nY][hž'XUgg'?UVUfYhh'b]W\h'bi f'I bhYf\U`hi b[']ghž'gcbXYfb'Ui W\
Y]bY'5fh'j cb'gcn]U`Ya '?ca a YbhUfž'XYf']b'?f]gYbnY]hYb'VYgcbXYfg
k]W\h][']gh"

NU\`Yb`i bX`: U_hYb`ni f`? UVUfYhhgnYbY`]b 8Yi hgWX`UbX

 8]Yg'nY][h'XUg' + hYfYggY' Ub' X]YgYf'?i bghZcfa 'i bX'X]Y'FY'Yj Ubnž X]Y'g]Y']b'XYf'?i 'hi f'gd]Y'h''Ni XYa 'VYf]W\hYb'nU\'fY]W\Y ?UVUfYhh]ghYb'j cb'Ui gj Yf_Ui ZhYb'G\ck g'i bX'Y]bYf'k UW\gYbXYb BUW\ZfU[Y'bUW\'@]j Y!9bhYfhU]ba Ybh''8Yf'K]fhgW\UZhgnk Y]['XYf @]j Ya i g]_'i bX'?UVUfYhhj YfUbghU'hi b[Yb'hfÀ[h'Yf\YV`]W\'ni f `c_U'Yb'i bX'bUh]cbU`Yb'²_cbca]Y'VY]ž'k Ug']b'NY]hYb'XYf DUbXYa]Y'VYgcbXYfg'XYi h']W\'k i fXYž'U`g'j]Y`Y'?ØbghYf'i bX JYfUbghU'hi b[gcfhY'i a ']\fY'9l]ghYbn'_Àa dZhYb''

8 i fW. 'GdYbXYbU_h]cbYb'i bX'ÒZZYbh`]W.Y': ÒfXYfdfc[fUa a Y_cbbhY'j]Y`Yb'_`Y]bYb'? UVUfYhhVØ\bYb'[Y\c`ZYb'k YfXYbž'X]Yk À\fYbX'XYf'FYghf]_h]cbYb'[YgW.`cggYb'V`Y]VYb'a i gghYb"'8]YgYbhYfghØhni b[']gh'VYgcbXYfg'k]W.h][ži a 'X]Y'J]Y`ZU`h'XYfXYi hgW.Yb'? UVUfYhhgnYbY'ni 'Yf\U`hYb'i bX'X]Y'Gh]a a Yb'ni ZÒfXYfbž'X]Y'[YgY``gW.UZh`]W.'fY`Yj UbhY'H\Ya Yb'UbgdfYW.Yb"

8 YhU]`q

6 Ygi WX Yb 'G]Y 'i bg 'Ui Z 'b!U["XY