

## 7\Ya ]\_U`]YbVYf[i b[ ']b 'XYf'FY[ ]cb. 6`]W\_`Y'[ ]Vh'9bhk Ufbi b[

 $\pm$ 0 F c gY b ZY `X `k Uf `Y]b `@Y W\_ `]b `Y]b Ya `7 \ Ya ]\_U`]Y b V Y \ À `hY f \ Ufa `c g" ': c fa U '6`]W\_ `Y '[ ]V h'9b hk Uf bi b[ 'i b X ``c V h' X]Y F Y hhi b[ g\_fÀ ZhY "

 $\begin{tabular}{ll} FcgYbZY`X`Yf`YVhY`Ua`ZfØ\Yb`BUW\a]hhU[`Y]bYb`9]bgUhn`jcb: YiYfk Y\f`ibX`FYhhib[g_fÀZhYbž`XYf`j]Y`Y`5bk c\bYf`]b \\ 5`Ufa VYfY]hgW\UZh'jYfgYhnhY"`8Yf`; fibX`ZØf`X]Y`\Y_h]gW\Yb \\ 5_h]j]hÀhYb`k Uf`Y]b`@YW_`]b`Y]bYa`HUb_`XYg`GdYX]h]cbg`UghYfgž XUg`7\Ya]_U`]Yb`hfUbgdcfh]YfhY"`Hfchn`XYf`6Ygcf[b]gž`X]Y`gW\bY``UiZ_Uaž`_cbbhY`gW\bY```9bhk Ufbib[`[Y[YVYb`kYfXYbž`XU`X]YUig[YhfYhYbY`:`Øgq][_Y]h`U`g`ibVYXYb_`]W\Y]b[YghiZh`kifXY"$ 

A cbU'¾ W\`Yfž'A Uf\_Yh]b[ 'A UbU[Yf'XYf': cfa U'6`]W\_`YFAXYfŽ Fc``Ybž']bZcfa ]YfhY'X]Y'FYXU\_h]cb'ØVYf'X]Y'G]hi Uh]cb'i bXghY``hY'ZYgh' 6Y]'XYf'Ui g[YhfYhYbYb': `Øgg][\_Y]h'\UbXY`h'Yg'g]W\ia 'Y]bYb'i bVYXYb\_`]W\Yb'GhcZZ'' 8]Yg'VYfi\][hY'X]Y'; Ya ØhYfžX]Y']b'XYb'i a `]Y[YbXYb'; Ya Y]bXYb'Xi fW\X]Y'BUW\f]W\h'j cbY]bYa 'a Ò[`]W\Yb'; YZU\f[i hY]bgUhn'Ui Z[YgW\fYW\_h'k i fXYb''

## DfcZYgg]cbY``Y`FYU\_h]cbYb'i bX'9bhk Ufbi b[

 $8 ]Y `f Ug W Y `F Y U_h] cb `XYf `: Yi Yfk Y \fi b X `XYf `9] bg Uhn_f Å ZhY `k Uf Yb hg W XY] XYb X Zi a `X]Y `G]hi Uh] cb `i b hYf `? cb hf c ``Y `ni `Vf] b [Yb `i b X k Y] hYfY `F]g]_Yb `ni `j Yfa Y] XYb "'6`] \w_`Y `VYXUb_hY `g] W `Ui g X f Ø \w_`] W VY] `XYb `9] bg Uhn_f Å ZhYb `ZØf `] \fY `g W \b Y ``Y `i b X `Y ZZ] n] Yb hY `5 f VY] h" <math display="block">8 ]YgY `Dfc ZY gg] cb U`] h Ah `nY] [hY `g] W `]b `XYf `g W b Of_Y ``cg Y b 6 Yk A`h] [i b [`XYg `J cf Z U ``g Z `X] Y `X Ug `J Yfh f Ui Yb `XYf `5 bk c \b Yf `] b `X] Y 6 YfY] hg W U Zhg X] Y bg hY `gh Af_Yb `Xi f ZhY "$ 

8]Y'[YbUiY'I fgUWXY'ZØf'XUg'@YW\_'k]fX'XYfnY]h'i bhYfgi WXh''CZh g]bX'Yg'hYWXb]gWXY'8YZY\_hY'cXYf'a YbgWX`]WXYg'JYfgU[Ybž'X]Y gc`WXY'G]hi Uh]cbYb'Ui g`ÒgYb'\_ÒbbYb'''K]f\_`]WXY'; YZU\fYb'\_cbbhYb'YxcWX'Ui g[YgWX`cggYb'kYfXYbž'kUg'Xi fWX'X]Y'gWXbY``Y 8]U[bcgh]\_'XYf': UWX\_fÀZhY'Yfa Ò[`]WXh'ki fXY''

±b·NY]hYbži]b·XYbYb·8]g\_i gg]cbYb·ØVYf·G]WXYf\Y]h·i bX
I a k Y`hVYk i gghgY]b·]b·XYf·² ZZYbh`]WX\_Y]h·ghUf\_'h\Ya Uh]g]Yfh
k YfXYbž·g]bX·gc`WXYʻJ cfZÀ``Yʻ]a a Yf·Y]b·gYbg]V`YgʻH\Ya U"′8Ug
K ]WXh][ ghY·]b·X]YgYf·G]hi Uh]cb·k Uf·YXcWX·X]Y·G]WXYf\Y]h·XYf
6Yj Ò`\_Yfi b[ ž·X]Y·]b·F cgYbZY`X′[ Yk À\f`Y]ghYh·k Uf″

8]Y'AYWWUb]gaYb'XYf'5`Ufa]Yfib[ž'X]Y']b'gc`WWYb': À``Yb'[fY]ZYbžg]bX'b]WWh'bifik]WWh]['ZØf'X]Y'gWWbY``Y'FYU\_h]cb'XYf'9]bgUhn\_fÀZhYžgcbXYfb'UiWW'ZØf'X]Y'5iZ\_`Àfib['XYf'2ZZYbh`]WW\_Y]h''NU\``cgY6Øf[Yfž'X]Y'aÒ[`]WWYfkY]gY'XifWW'X]Y'5`UfaaY`Xib['jYfibg]WWYfh'kUfYbž'ZUbXYb'XifWW'X]Y'fUgWWYb'+bZcfaUh]cbYbgWWbY``k]YXYf'Fi\Y''HfUbgdUfYbWm']g'\_Ym']b'Wf]g]g'aUbU[YaYbhžUbX'h\Y'WYUf'Wcaaib]Wh]cb'UVcih'h\Y'bUhifY'cZ'h\Y'`YU\_YXgiVghUbW'd`UmYX'U'g][b]Z]WUbh'fc`Y''

## K ]WX h][ Y '9f\_Ybbhb]ggY 'Ui g'XYa 'J cfZU``

8]YgYf'JcfZU```nY][h'Y]ba U``a Y\f'X]Y'Bchk YbX][\_Y]h'Y]bYf'[ih Zib\_h]cb]YfYbXYb'BchZU``]bZfUghfi\_hif"'8]Y'NigUa a YbUfVY]h nk]gWXYb'`c\_U`Yb'IbhYfbY\a Ybž'6Y\ÒfXYb'ibX'FYhhib[gX]YbghYb\_Ubb']a a YbgY'JcfhY]`Y'Vf]b[Ybž'k Ybb'Yg'XUfia''[Y\hž'gWXbY``UiZibYfk UfhYhY'G]hiUh]cbYb'ni'fYU[]YfYb"

8 i fW. 'X]Y '9fZU\fi b[YbžX]Y ']b 'gc `W.Yb ': À ``Yb '[YgUa a Y`h'k YfXYbž\_Ubb 'X]Y 'G]W.Yf\Y]h']b 'XYf'FY[]cb 'k Y]hYf'j YfVYggYfh'k YfXYb" '8]Y 6YfY]hgW. UZhž'gW.bY``ni '\UbXY`b 'i bX'X]Y 'f]W.h][Yb '\DZcfa Uh]cbYb k Y]hYfni [YVYbž'hfÀ[h'XUni 'VY]ž'XUgg'X]Y '5bk c\bYf'g]W.']b ']\fYb Y][YbYb'j ]Yf'K ÀbXYb'g]W.Yf'ZØ\`Yb'\_ObbYb"

±bg[YgUa h'k Uf'XYf'; YZU\f[ihY]bgUhn']b'FcgYbZY`X'Y]b'6Y]gd]Y`
XUZØfž'k]Y'k]W\h]['gW\bY``Yg'<UbXY`b'ibX'dfÀn]gY'?ca a ib]\_Uh]cb
]b'?f]gYbg]hiUh]cbYb'g]bX"'8Yf'JcfZU``ž'XYf'nibÀW\gh

VYgcf[b]gYffY[YbX'YfgWk]YbžkifXY'XifWk'dfcZYgg]cbY``Y
9]bgUhn\_fÀZhY'ibX'hfUbgdUfYbhY'=bZcfaUh]cbYb'gWkbY``ibhYf
?cbhfc``Y'[YVfUWkh''8]Yg'ghÀf\_h'XUg';YZØ\``XYf'G]WkYf\Y]h']b'XYf
FY[]cb'ibX'nY][hž'XUgg'X]Y'NigUaaYbUfVY]h'jcb'IbhYfbY\aYbibX'FYhhib[gX]YbghYb'Y]b'[fc»Yg'D`ig']b'XYf';YZU\fYbUVkY\f
XUfghY``h''

8 YhU]`g

6Ygi WXYb G]Y i bg Ui Z b!U[ "XY