

K Yf'\Uh'X]Y'GWXY]VY'nYfVfcWXYb3'Dc`]nY] V]hhYh'i a 'NYi [Yba Y`Xi b[Yb

9]b'U_hi Y``Yf'JcfZU```k]fZh': fU[Yb'ØVYfG]WXYf\Y]h'i bX'BUWXVUfgWXUZh'Ui Z

9]b'_Øfn`]W\'Y]b[YhfYhYbYf'JcfZU```]b'Y]bYa'Kc\b[YV]Yh'\Uh'X]Y; Ya Y]bgW\UZh'Ui Z[YfØhhY`hi bX'nY][h'Y]ba U``a Y\f'X]Y < YfUi gZcfXYfi b[Yb'VYnØ[`]W\'XYf'G]W\Yf\Y]h']b'J]YfhY`b" | bVY_UbbhY'HÀhYf'\UVYb']b'XYf'j Yf[Ub[YbYb'KcW\Y'nkY]; `UgZUgW\Yb'Ui Z'Y]b'6UXZYbghYf'[YkcfZYbž'kcXi fW\'X]Y'GW\Y]VYghUf_'VYgW\ÀX][h'ki fXY"

8YfJcfZU```]b'NU\`Yb

8 Yf GUW gW UXYb ZYYb XYf J Yfa]YhYf Ui Z[fi bX XYf a i hk]``][Yb NYfghÒfi b['Yf Y]XYb a i gghY ž `]Y[h]a 'i bhYfYb XfY]ghY ``][Yb 6 YfY]W "'Hfchn XYf J cf! C fh! I bhYfgi W i b[Yb Xi fW X]Y Dc `]nY] _cbbhYb '_Y]bY 'HÀhYf Yfa]hhY `h k YfXYb "'8]Y '6 YUa hYb 'g]W YfhYb Y]b][Y 'Gdi fYb ž 'YXcW '[]Vh Yg 'V]g\Yf _Y]bY '<]bk Y]gY 'ni f = XYbh]hÀh XYf j YfUbhk cfh`]W Yb 'DYfgcbYb"

8 | Y · F c ` ` Y · X Y f · 5 i [Y b n Y i [Y b

8]Y'Dc`]nY]'\(\forall f\)W\ck\Yf'@UbX'\Uh'XUg'9b[U[Ya\Ybh'XYf'5bkc\bYf]b'X]YgYf'G]hi\Uh]cb'U`g'YbhgW\Y]XYbX'YfUW\hYh''\NYi\[Yb\z'X]Y']a\\forall fY`Yj\UbhYb'\NY]hfUi\a\'j\YfX\(\hat{A}\W\h]\[Y'\DYfgcbYb'cXYf':\U\fnYi\[Y\]

VYa Yf_h`\UVYbžk YfXYb`Xf]b[YbX`[YVYhYbž`g]W\`ni `a Y`XYb"`8]Yg_\ObbhY`\Y`ZYbž`k]W\h][Y`<]bk Y]gY`ni `gUa a Y`b`i bX`dchYbn]Y``Y HÀhYf`ni f`FYW\YbgW\UZh`ni `n]Y\Yb"`8]Y`?cbhU_h]bZcfa Uh]cbYb`ZØf X]Y`Dc`]nY]`g]bX`X]Y`9!A U]`!5XfYggY``Yj X"dfYj!^4 dc`]nY]"gUW\gYb! Ub\U`h"XY`cXYf`X]Y`HY`YZcbbi a a Yf`\$' - &%# &\$!\$"

8]Y 6YXYi hi b[ZØf X]Y ; Ya Y]bgW UZh

8]YgYf'JcfZU```\Uh'b]W\h'bi f'a UhYf]Y``Y'GW\ÀXYb'\]bhYf`UggYbž gcbXYfb'k]fZh'Ui W\'[fÒ»YfY': fU[Yb'ØVYf'XUg'G]W\Yf\Y]hg[YZØ\``]bXYf'BUW\VUfgW\UZh'Ui Z''5bkc\bYf'g]bX'j YfghÀbX`]W\YfkY]gYVYgcf[h'ØVYf'X]Y'Ni bU\a Y'j cb'JUbXU`YbU_hYb'i bX'XYfYb9]bZi gg'Ui Z'X]Y'@YVYbgei U`]hÀh']b']\fYa 'K c\bi a ZY`X"G]W\Yf\Y]hga U»bU\a Yb'i bX'Y]bY'Yb[Y'Ni gUa a YbUfVY]h]bYf\U`V'XYf'; Ya Y]bXY'g]bX'bi b'[YZfU[hYf'XYbb'Y"

5i gV`]W_.; Ya Y]bgUa 'U_h]j 'k YfXYb

8]Y'G]hi Uh]cb'_ObbhY'Y]bY'; Y'Y[Yb\Y]h'ZØf'X]Y'; Ya Y]bgW\UZh XUfghY``Ybž'Yb['ni gUa a Ybni UfVY]hYb'i bX G]W\Yf\Y]hgVYk i gghgY]b'ni 'ZOfXYfb"'BUW\VUfgW\UZhg\]`ZYb'i bX J YfUbghU`hi b[Yb'_ObbhYb'XUni 'VY]hfU[Ybž'XUgg'g]W\'6Øf[Yf VYggYf'_YbbYb`YfbYb'i bX'[Ya Y]bgUa 'ZØf'Y]b'g]W\YfYg K c\bi a ZY`X'gcf[Yb"'Bi f'ni gUa a Yb'_Ubb'a Ub'XYfUfh][Yb J cfZÀ``Yb'Ybh[Y[Ybk]f_Yb'i bX'XUg'JYfhfUi Yb']b'X]Y BUW\VUfgW\UZh'qhÀf_Yb"

B 5 :

8 YhU1`a

6 Y qi W Y b 'G] Y 'i b q 'U i Z 'b ! U ["X Y