

FcgYb\Y]a '! '9bhXYW_Y'X]Y GY\Ybgk ØfX][_Y]hYb 'j cb 'FcgYb\Y]a '! 9]b 'FY]gYZØ\fYf

9bhXYW_Y`X]Y`GY\Ybgk ØfX][_Y]hYb`j cb`FcgYb\Y]a
/ Ua d/, &%%/9]b`FY]gYZØ\fYf`FcgYb\Y]a i]ghY]b
kibXYfj c``Yf`Cfh`]b`6UmYfb`a]h'j]Y`Yb`GY\Ybgk ØfX][_Y]hYbž
X]Y`Yg`ni `YbhXYW_Yb`[]`h"`9g`[]Vh'gc`j]Y``ni `gY\Yb`i bX`ni
 Yf`YVYbž`XUgg`Y]b`6Ygi W\`]b`FcgYb\Y]a `ni `Y]bYa
i bj Yf[Ygg`]W\Yb`9f`YVb]g`k]fX"`Jcb`\]ghcf]gW\Yb`; YVÀi XYb
V]g`\]b`ni `Y]bn][Ufh][Yb`@UbXgW\UZhYb`i bX`9f`YVb]ggYbž`Yg
 []Vh'j]Y``ni `gY\Yb`i bX`ni `Yf`YVYb"`<]Yf`]gh'Y]b`_i fnYf
, VYfV`]W_ ØVYf`X]Y`GY\Ybgk ØfX][_Y]hYb'j cb`FcgYb\Y]a ži a
 \alphyb`VY]`XYf`D`Ubi b['\alpha\fYf`FY]gY`ni `\Y`ZYb"`FcgYb\Y]a g
\]ghcf]gW\Y`GY\Ybgk ØfX][_Y]hYb`FcgYb\Y]a ']gh'Y]bY`GhUXh
 a]h'j]Y`Yb`\]ghcf]gW\Yb`GY\Ybgk ØfX][_Y]hYb"`Ni `XYb
VY_UbbhYghYb`[Y\OfYb`XUg`GW\`cgg`FcgYb\Y]a ž'XUg`]a '\alpha\fY`]d/



 $9bhXYW_YX]YGYYbgk \emptyset fX][_Y]hYbjcb$

FcgYb\Y]a ''9]b'FY]gYZØ\fYf

 $FcgYb\Y]a \]ghY]b \ k \ i \ bXYfj \ c \ Yf'Cfh']b \ 6UmYfb \ a \]h'j \]Y\Yb \ GY\Ybgk \ \varnothing fX][\ _Y]hYb \ z \ X]Y \ Yg'ni \ YbhXYW_Yb'[\]`h'' \ 9g'[\]Vh'gc'j \]Y \ 'ni \ gY\Yb'i \ bX'ni \ Yf'YVYb \ ZXUgg'Y]b \ 6Ygi \ W \]b \ FcgYb\Y]a \ 'ni \ Y]bYa \ i \ bj \ Yf[\ Ygg`]WXYb'9f`YVb]g'k \]fX'''Jcb'\]ghcf]gWXYb'; \ YVÀi \ XYb'V]g \ \]b'ni \ Y]bn][\ Ufh][\ Yb'@UbXgWX UZhYb'i \ bX'9f`YVb]ggYb \ z \ Yg'[\]Vh'j \]Y \ ni \ gY\Yb'i \ bX'ni \ Yf`YVYb'' <]Yf']gh'Y]b'_i fnYf', \ VYfV`]W_'\@VYf'X]Y \ GY\Ybgk \ \varnothing fX][\ _Y]hYb'j \ cb'FcgYb\Y]a \ z \ i \ a \ \Rightarrow bYb'VY]'XYf'D`Ubi \ b[\ \Rightarrow fYf'FY]gY'ni \ `\Y'ZYb''$

FcgYb\Y]a g`\]ghcf]gW\Y GY\Ybgk ØfX][_Y]hYb

FcgYb\Y]a i]ghY]bYiGhUXhia]hij]Y`Ybi\]ghcf]gW\YbGY\Ybgk ØfX][_Y]hYb"iNi iXYbiVY_UbbhYghYbi[Y\OfYbiXUgiGW\cggFcgYb\Y]a ziXUgi]a i\J\f'%+' %'YfVUi hik i fXYzii bXiXUgiFUh\Ui gzXUgi]a i\J\f'%, (&'YfVUi hik i fXY"'6Y]XY; YVAi XYig]bXiY]bk]W\h][YgiNYi [b]giXYfi; YgW\]W\hYiXYfiGhUXhii bXiY]biA i ggiZØfYXYbziXYfi]biFcqYb\Y]a i]gh"

8 UgʻGWX`cggʻFcgYb\Y]a ʻ]ghʻY]bʻVUfcW_Ygʻ; YVÀi XYžʻXUgʻY]ba U`XYaʻ: ØfghYbʻjcbʻH\ifbʻibXʻHUI]gʻ[Y\ÒfhY''< YihYʻ]ghʻYgʻY]b AigYiažʻ]bʻXYaʻa Ubʻj]Y`Yʻ]bhYfYggUbhYʻ5igghY``ib[YbʻibX 9IdcbUhYʻØVYfʻX]Yʻ; YgWX]WXhYʻXYfʻGhUXhʻibXʻXYgʻGWX`cggYgqY\Ybʻ_Ubb''

8 UgʻF Uh\ Ui gʻj cbʻF cgYb\Y]aʻ]ghʻY]bʻk Y]hYfYgʻk]W\h][Yg \]ghcf]gW\Ygʻ; YVÀi XYʻ]bʻXYfʻGhUXh"ʻ9gʻ]ghʻY]bʻbYi [ch]gW\Yg ; YVÀi XYŽ'XUgʻ]aʻ\J\fʻ%, (&'YfVUi h`k i fXY"'< Yi hYʻ]ghʻYgʻXUg NYbhfi aʻXYfʻJYfk U`hi b[i bX`Y]bʻVY`]YVhYgʻN]Y``ZØfʻHci f]ghYbžʻX]Y X]Yʻ5fW\]hY_hi fʻXYgʻ; YVÀi XYgʻVYk i bXYfbʻa ÒW\hYb"

?ibghibX?i`hif]bFcgYb\Y]a

FcgYb\Y]a 'V]YhYh'Ui W\'j]Y`Y'_i `hi fY``Y'GY\Ybgk ØfX][_Y]hYb"'Ni XYb'VY_UbbhYghYb'[Y\ÒfYb'XUg'A i gYi a ']a 'GW\`cgg'FcgYb\Y]a ž

XUg'Y]bY'[fc»Y'GUaa`ib['Ub'?ibghkYf_Yb'ibX'\]ghcf]gW\Yb; Y[YbghÀbXYb'VY\YfVYf[hž'ibX'XUg'GhUXhh\YUhYfž'XUg fY[Y`aÀ»]['5iZZØ\fib[Yb']YfgW\]YXYbYf'; YbfYg'V]YhYh''

a 'AigYia']a 'GWX`cgg'FcgYb\Y]a '_ÒbbYb'6Ygi WXYf'Y]bY'[fc»Y5igk U\`'Ub'?i bghk Yf_Yb'Ui g'j YfgWX]YXYbYb'9dcWXYbVYki bXYfbž'XUfi bhYf'; Ya À`XYž'G_i `dhi fYbž'DcfnY``Ubž'A ÒVY``i bXj]Y`Yg'a Y\f"'5i WX'Y]b'6Ygi WX']a 'GhUXhh\YUhYf'`c\bh'g]WX''<]Yf_ÒbbYb'6Ygi WXYf'j YfgWX]YXYbY'5i ZZØ\fi b[Yb'Yf`YVYbž'XUfi bhYfAig]WU`gž'CdYfbž'6U``Yhh'i bX'j]Y`Yg'a Y\f"

9]bn][Ufh][Y '@UbXgW\ UZhYb'i bX '9f`YVb]ggY']b FcgYb\Y]a

FcgYb\Y]a ']gh'Ui W\'Y]b'Cfh'a]h'j]Y`Yb'Y]bn][Ufh][Yb@UbXgW\UZhYb'i bX'9f`YVb]ggYb"'9]bYg'XYf'VY`]YVhYghYb'N]Y`Y']ghXYf'7\]Ya gYYž'XYf'[fÒ» hY'GYY'6UmYfbg"'<]Yf'_ÒbbYb'6Ygi W\YfY]bY'J]Y`nU\`'j cb'5_h]j]hÀhYb'i bhYfbY\a Ybž'XUfi bhYfGW\k]a a Ybž'6cchZU\fYbž'5b[Y`b'i bX'j]Y`Yg'a Y\f"

9]b'k Y]hYfYg'VY`]YVhYg'N]Y`']gh'XYf'7\]Ya [Ui ž'Y]bY'FY[]cbž'X]Y j c``Yf'gW\ÒbYf'@UbXgW\UZhYb'i bX']Xm``]gW\Yf'8\ÒfZYf']gh''' <]Yf _\ObbYb'6Ygi W\Yf'Y]bY'J]Y`nU\`'j cb'5_h]j]h\hYb'i bhYfbY\a Ybž XUfi bhYf'K UbXYfbž'FUXZU\fYbž'G_]ZU\fYb'i bX'j]Y`Yg'a Y\f''

: Un]h

FcgYb\Y]a ']gh'Y]b'k i bXYfj c``Yf'Cfhž'XYf'j]Y`Y
GY\Ybgk ØfX][_Y]hYb'ni 'V]YhYb'\Uh"'Jcb'\]ghcf]gW\Yb'; YVÀi XYb
V]g'\]b'ni 'Y]bn][Ufh][Yb'@UbXgW\UZhYb'i bX'9f`YVb]ggYbž'Yg'[]Vh
j]Y``ni 'gY\Yb'i bX'ni 'Yf`YVYb"'9g'`c\bh'g]W\ž'Y]bYb'6Ygi W\']b
FcgYb\Y]a 'ni 'a UW\Ybž'i a 'U```X]Y'k i bXYfj c``Yb
GY\Ybgk ØfX][_Y]hYb'ni 'YbhXYW_Yb"

6 Ygi W Yb G]Y ibg Ui Z Y]bY!fY]gY XY