

### 8fUa U'Ui Z'XYf'5+. 'GUhhY`ni [ ']b': `Ua a Yb 'J Yf\_Y\f'`U\a [ Y`Y[ h

GUhhY`ni [ 'VfYbbh'Ui Z'5+.': U\fYf'i bX'6Y]ZU\fYf'V`Y]VYb i bj Yf`Yhnh": Yi Yfk Y\f'j Yf\]bXYfh', VYf[ f]ZZ'Ui Z i a `]Y[ YbXYb'K U`X"

 $5a~8]YbghU[~\check{z}'XYb~\&\$"\$,~"\check{z}'Yf`YVhYb~5i~hc~ZU\fYf~Ui~Z'XYf~5+\check{z}$ nk ]gW\Yb~XYb~5bgW\`i~ggghY``Yb~<ca~VYf[~9ZnY~i~bX~6UX~<YfgZY`XfK~YghŁž~Y]bY~XfUa~Uh]gW\Y~G]hi~Uh]cb~\check{z}'U`g~Y]b~GUhhY`ni~[~]b~:~`Ua~a~Yb~Ui~Z[~]b[~"8~Yf~J~cf~ZU```YfY][~bYhY~g]W\~[~Y[~Yb~%'~.'~\$~I~\f~i~bX~nc[~gW\bY```X]Y~5i~Za~Yf~gUa~\_Y]h~XYf~FYhhi~b[~g\_f~AZhY~Ui~Z~g]W\."

9]b'\*(!'À\f][Yf: U\fYf'Ui g'XYa '@UbX\_fY]g'A Y]» Yb']b'GUW\gYb VYa Yf\_hY'k À\fYbX'XYf': U\fh'Y]bYb'hYW\b]gW\Yb'8YZY\_h'Ub'gY]bYf GUhhY`ni [a UgW\]bY"'@Ui h'XYb'bUW\Zc`[YbXYb'6Yf]W\hYb'nY][hY XUg': U\fnYi [']a '8]gd`Um'Ubž'XUgg'Yg'DfcV`Ya Y']a 'A chcffUi a [UV"'I a 'gW\k YfY': c`[Yb'ni 'j Yfa Y]XYbž'`Yb\_hY'XYf': U\fYf'XUg ; YgdUbb'Ui Z'XYb'GhUbXghfY]ZYbž'k c'g]W\X]Y'G]hi Uh]cb'gW\bY`` j YfgW\`]a a YfhY.'FUi W\'gh]Y['Ui g'XYa 'A chcffUi a 'Ui Z'i bX'\_i fnY NY]h'gdÀhYf'ghUbX'XYf'GUhhY`ni [']b'Jc``VfUbX"

#### FYhhi b[g\_fÀZhYi bX: Yi Yfk Y\f]a '9]bgUhn

; `ØW\_`]WXYfk Y]gY'[Y`Ub[ 'Yg'XYa '\* (!À\f][ Yb'i bX'gY]bYa

\*\*!'À\f][ Yb'6Y]ZU\fYfž'XUg'VfYbbYbXY': U\fnYi [ 'fYWXhnY]h][ 'i bX
i bj Yf`Yhnhini 'j Yf`UggYb"'I a [ Y\YbX'k i fXY'Y]bY

Fi bXZi b\_k Ufba Y`Xi b[ 'j YfUb`Ugghž'i a 'UbXYfY

J Yf\_Y\fghY]`bY\a Yfini 'k UfbYb'i bX'X]Y'VYfY]hg'Y]b[ Yhfc ZZYbYb
: Yi Yfk Y\f\_fÀZhY'ni 'i bhYfghØhnYb"

 $8]Y^9]bgUhn\_f\lambda ZhY^XYf^*: Yi Yfk Y\backslash f^* < ca VYf[~9ZhY^k UfYb^*gWkbY^*]$ 

j cf'C fhž'XcW\ 'X]Y': `Ua a Yb'k UfYb'gc']bhYbg]j ž'XUgg'ni gÀhn`]W\Y
<]`ZY'j cb'XYb': Yi Yfk Y\fYb']b'A Y`gi b[Yb'i bX'6UX'<YfgZY`X
YfZcfXYf`]W\ 'k Uf"'8 Yf'6fUbX'Xfc\hYž'Ui Z'X]Y'Ub[fYbnYbXY
6ÒgW\i b['ØVYfni [fY]ZYb'i bX']b'XYb'bU\Yb'K U'X'ni '[Y`Ub[Ybžk Ug'[`ØW\_`]W\Yfk Y]gY'j Yf\]bXYfh'k YfXYb'\_cbbhY"'Hfchn'XYg
gW\bY``Yb'<UbXY`bg'XYf': Yi Yfk Y\f'a i gghY'XYf'JYf\_Y\f']b
F]W\hi b['GØXYb'k À\fYbX'XYf'@ÒgW\UfVY]hYb'j c``gh\bX]['[YgdYffhk YfXYb"

8]Y'ghUf\_Y'FUi WXYbhk]W\_`i b['ZØ\fhY'ni XYa 'XUni ž'XUgg'Ui WX'X]Y; Y[YbZU\fVU\b'\_i fnnY]h]['[YgdYffh'k YfXYb'a i gghY"'8Yf
FØW\_ghUi 'YfghfYW\_hY'g]WX'ØVYf'Yhk U'&\$'?]`ca YhYf'i bX'gcf[hY'ZØf
Yf\YV`]WXY'JYf\_Y\fgVY\]bXYfi b[Yb"'8]Y'\DhYbg]h\Ah'XYg'6fUbXg
i bX'X]Y'XUa ]h'j YfVi bXYbYb'A U» bU\a Yb'ZØ\fhYb'gWX`]Y»`]WX'ni
Y]bYa 'k]fhgWXUZh`]WXYb'HchU`gWXUXYb'Ub'XYf
GUhhY`ni [\_ca V]bUh]cb' 'X]YgYf'k]fX'Ui Z'fi bX'&-\$"\$\$\$'9I F
[YgWX\Ahnh"'5i WX'X]Y': U\fVU\bXYW\_Y'XYg'GhUbXghfY]ZYbg'gck]Y'X]Y
Ub[fYbnYbXY'6OgWXi b['Yf`]hhYb'GWX\AXYb"

# @Ub[ Zf]gh][ Y :: c `[ Yb i b X k Y]hYfY =b Zcfa Uh]cbYb

8]Y'5i ZfÀi a UfVY]hYb'i bX'X]Y'FY]b][i b['XYf'GhfYW\_Y'bU\a Yb a Y\fYfY'Ghi bXYb']b'5bgdfi W\ži bX'X]Y'YfghYb'VY]XYb
: U\fghfY]ZYb'V`Y]VYb'V]g']b'X]Y'gdÀhYb'5VYbXghi bXYb'[YgdYffh"

♣b[YgUa h'k UfYb'a Y\fYfY'9]b\Y]hYb'XYf'Dc`]nY]Ui hcVU\bghUh]cb
6UX'<YfgZY`Xž'X]Y': Yi Yfk Y\f'<ca VYf['9ZnYž'X]Y': Yi Yfk Y\f
A Y`gi b[Ybž'X]Y': Yi Yfk Y\f'6UX'<YfgZY`Xž'X]Y'5i hcVU\ba Y]ghYfY]
< ÒbYVUW\'gck]Y'XYf'FYhhi b[gX]Ybgh'Ui g'GW\k U`a !9XYf'Ua
9]bgUhncfh'VYhY]`][h"

Gc`W\Y`XfUa Uh]gW\Yb`9]bg\AhnY`Ui Z`XYb`5i hcVU\bYb`g]bX  $[`\emptyset W\_`]W\Yfk Y]gY`b]W\h`Ub`XYf`HU[YgcfXbi b[ž`ghY``Yb`YXcW\Y]b XYi h`]W\Yg`6]`X`Z\Øf`X]Y`; YZU\fYb`XUfž`X]Y`a ]h`XYa `J Yf\_Y\f`i bX hYW\b]gW\Yb`8YZY_hYb`j YfVi bXYb`g]bX"`=a `: U```X]YgYg`GUhhY`ni [g_cbbhYb`X]Y`\bgUggYb`[YfYhhYh`k YfXYbž`k Ug`X]Y`dcW\YbXY`: fU[YXYf`G]W\Yf\Y]h`i bX`XYb`bUW\\U`h][Yb`I a [Ub[`a]h : U\fnYi [hYW\b]_`YfbYi h`Ui Zk]fZh"$ 

8 Yf'J cfZU```nY][ h'Ui » YfXYa ž'k ]Y 'gWX bY```g]WX 'X]Y 'G]hi Uh]cb'Ui Z'XYf 5i hcVU\b'ÀbXYfb'\_Ubb'i bX'k Y`WXY'A U» bU\a Yb'YfZcfXYf`]WX g]bXž'i a 'X]Y 'G]WXYf\Y]h'U``Yf'J Yf\_Y\fghY]`bY\a Yf'ni [ Yk À\f`Y]ghYb"'8]Y'?ccfX]bUh]cb'nk ]gWXYb'XYb'9]bgUhn\_fÀZhYb']gh XUVY]'YVYbgc'k ]WXh][ 'k ]Y 'X]Y 'gWXbY``Y'FYU\_h]cb'XYf': U\fYf']a 9fbghZU``"

## 8]Y'l fgUWXYb'i bX'DfÀj Ybh]cbga U» bU\a Yb j cb'@\_k!6fÀbXYb

I a 'XYfUfh][Y'I bZÀ``Y'ni 'j Yfa Y]XYbž'Ya dZY\`Yb'9I dYfhYb

fY[Y`a À»][Y'=bgdY\_h]cbYb'i bX'K Ufhi b[Yb'XYf': U\fnYi [Y''8 Uni
[Y\OfYb'b]W\h'bi f'[fi bX`Y[YbXY'G]W\Yf\Y]hgW\YW\_gž'gcbXYfb

Ui W\'gdYn]Z]gW\Y'?cbhfc``Yb'j cb'Y`Y\_hf]gW\Yb'i bX'a chcf]gW\Yb
?ca dcbYbhYb''8UfØVYf'\]bUi g']gh'Yg'fUhgUa ž'XUgg': U\fYf'ØVYf

X]Y'BchZU``dfcnYXi fYb']bZcfa ]Yfh'g]bX'i bX'k ]ggYbž'k ]Y'g]Y']a ': U``
j cb'FUi W\Ybhk]W\_`i b['cXYf'AcV]`gW\AXYb'gW\bY``'fYU[]YfYb
\_ObbYb''

## : c`[Yb'jcb'@\_k!6fÀbXYb'ZØf'XYb JYf\_Y\fgZ`igg'ibX'X]Y'=bZfUghfi\_hif

9]b '6fUb X 'k ]Y 'XYf'Ua '&\$"'5i [i gh'Ui Z'XYf'5+'\Uh'k Y]hfY]W\Yb XY ?cbgYei YbnYb 'ZØf'XYb'J Yf\_Y\f'i b X'X]Y '\dangle ZfUghfi \_hi f"'B YVYb'XYb i ba ]hhY`VUfYb 'GhÒfi b[Ybž'X]Y 'g]W\'Xi fW\'GhfU\'YbgdYffi b[Yb'i b X J Yf\_Y\fgghUi g'Ài \(^{\text{Ai}}\) Yfbž'\_Ubb'Ui W\'X]Yg'ni 'k ]fhgW\\UZh`]W\Yb J Yf`i ghYb'ZØf'I bhYfbY\a Yb'ZØ\fYbž'X]Y'Ui Z'XYb'HfUbgdcfh'j cb K UfYb'Ub[Yk]YgYb'g]bX"'@Ui h'Y]bYf'U\_hi Y``Yb'Ghi X]Y'XYg'\ddots!

8 UfØVYf`\]bUi g`\_ObbYb`X]Y`Xi fW\'6fAbXY'j Yfi fgUW\hYb`GW\AXYb
Ub`XYf`GhfU» Yb]bZfUghfi \_hi f`i bX`X]Y`Bchk YbX][ \_Y]h'j cb
FYdUfUhi fYb``Ub[ Zf]gh][ Y`5i gk ]f\_i b[ Yb`Ui Z'X]Y
JYf\_Y\fgg]W\Yf\Y]h'i bX`X]Y`HfUbgdcfh\_cghYb`\UVYb"`6Y\OfXYb
a ØggYb`cZh'i a ZUb[ fY]W\Y'JYf\_Y\fga UbU[ Ya Ybha U» bU\a Yb
Yf[ fY]ZYbž'i a `X]Y`G]W\Yf\Y]h'U``Yf'JYf\_Y\fghY]`bY\a Yf'ni
[ Yk À\f`Y]ghYb`i bX`Y]bY`gW\bY``Y`K ]YXYf\YfghY``i b[ `XYg
bcfa U`Yb`6Yhf]YVg'ni `Yfa O[`]W\Yb"

8]Y'JcfZÀ``Y'i bhYfghfY]W\Yb'ni XYa 'X]Y'6YXYi hi b[ 'XYf
: Yi Yfk Y\f!'i bX'BchZU``X]YbghYž'X]Y']a ': U``Y'j cb'6fÀbXYb'Ui Z
5i hcVU\bYb'YbhgW\Y]XYbX'g]bX"'8]Y'Bchk YbX][ \_Y]h'ZØf'[i h
Ui g[ YV]`XYhY': Yi Yfk Y\f`Yi hY'i bX'a cXYfbY'5i gfØghi b[ 'k ]fX']b
gc`W\Yb'G]hi Uh]cbYb'VYgcbXYfg'XYi h`]W\ži a 'gck c\`
A YbgW\Yb`YVYb'ni 'gW\ØhnYb'U`g'Ui W\'X]Y'5i gk ]f\_i b[ Yb'Ui Z'XYb
J Yf\_Y\f'ni 'a ]b]a ]YfYb"

EiY``Yb`k]Y`X]Y`8Yi hgWXY`: Yi Yfk Y\fj YfVUbX`i bX`XUg`

=bhYfbUh]cbU``HfUbgdcfh: cfi a `V]YhYb`k Yfhj c``Y

=bZcfa Uh]cbYb`ni `XYb`H\Ya Yb`DfÀj Ybh]cb`i bX`G]WXYf\Y]h`]a
6YfY]WX`XYg`HfUbgdcfhk YgYbg`i bX`XYf': Yi Yfk Y\f"

8YhU]`g

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