

# CghYf\c`n'9bhXYW\_Yb.'BUhi fž'?i`]bUf]\_ i bX'5VYbhYi Yf'ZØf'X]Y': Ua ]`]Y

 $9bhXYW_Yb^*G]Y^*X]Y^*BUhifkibXYf\tilde{z}_i^*]bUf]gWXYb^*<][\ \ `][\ \ hgibX^*\]ghcf]gWXYb^*GhAhhYb^*jcb^*CghYf\c^n"^9f^*YVYb^*G]Y^*U_h]jIf^*UiV^*a]h^*:Ua]^*]Y^*ibX^*hc^*Yb^*JYfUbghU^*hib[Yb^*]$ 



K ]``\_ca a Yb`ni `Y]bYa `\_`Y]bYb`5VghYW\Yf`bUW\`CghYf\c`nžY]bYf
FY[]cb`]b`B]YXYfgUW\gYbžX]Y`cZh`]a `GW\UhhYb`]\fYf`VY\_UbbhYfYb
BUW\VUfb`ghY\hž`UVYf`Y]bY`: Ø``Y`j cb`9f`YVb]ggYb`i bX
i bYbhXYW\_hYb`GW\`Ob\Y]hYb`ni `V]YhYb`\Uh``9[U`ž`cV`Xi `Y]b
BUhi fZfYi bX`V]ghž`XYf`X]Y`]Xm``]gW\Yb`@UbXgW\UZhYb`Yf\_i bXYb
a `OW\hYž`Y]b`: Y]bgW\a YW\_Yfž`XYf`X]Y`\_i `]bUf]gW\Yb`? Ogh`]W\\_Y]hYb
XYf`FY[]cb`YbhXYW\_Yb`k]``ž`cXYf`Y]b`; YgW\]W\hg]bhYfYgg]YfhYfž`XYf
a Y\f`ØVYf`X]Y`VYk Y[hY`JYf[Ub[Yb\Y]h`YfZU\fYb`a OW\hY`
CghYf\c`n`\Uh`ZØf`YXYb`Yhk Ug`ni `V]YhYb"`\D`XYb`\_ca a YbXYb
5VgW\b]hhYb`bY\a Yb`k]f`X]W\`a ]h`Ui Z`Y]bY`gdUbbYbXY`FY]gY
Xi fW\`X]Y`5VYbhYi Yfž`X]Y`X]YgY`W\Ufa UbhY`; Y[YbX`ni `V]YhYb`\Uh'
@Ugg`X]W\`j cb`XYb`BUhi fk i bXYfbž`XYb``YW\_YfYb`GdYn]U`]h\hYb\z\
\]ghcf]gW\Yb`Gh\hhYb`i bX`UVk YW\g`i b[gfY]W\Yb

# 9bhXYW\_i b[ XYfBUhi fk i bXYf'j cb CghYf\c`n

CghYf\c`nžY]b'\_`Y]bYgž'UVYf'W\Ufa UbhYg'; YV]Yh']b
B]YXYfgUW\gYbž']gh'Y]b'j YfghYW\_hYg'¾ k Y`ž'XUg'BUhi fZfYi bXY'i bX
5VYbhYi fYf'[ `Y]W\Yfa U» Yb']b'gY]bYb'6Ubb'n]Y\h''8]Y'FY[]cb
V]YhYh'Y]bY'Y]bn][ Ufh][ Y'A ]gW\i b[ 'Ui g'Y]bn][ Ufh][ Yb
@UbXgW\UZhYbž'fi \][ Yb'K À`XYfb'i bX'i bVYfØ\fhYb
: Yi W\h[ YV]YhYbž'X]Y'bi f'XUfUi Z'k UfhYbž'YbhXYW\_h'ni 'k YfXYb"

8]Y'< Ua a Y`k UfXYbžY]b'VY\_UbbhYg'B Uhi fgWki hn[YV]Yh']b CghYf\c`nž']ghY]b'k U\f\UZh'a U[]gWkYf'Cfh"'<]Yf'Z]bXYh'a Ub'Y]bY ZUgn]b]YfYbXY': `cfU'i bX': Ui bU"'6Y]'Y]bYa `GdUn]Yf[Ub['Xi fWk'X]Yk Y]hYb'K ]YgYb'i bX'X]WkhYb'K À`XYf'\_ObbYb'6Ygi WkYf'X]YnU\`fY]WkYb'DZUbnYbUfhYb'VYk i bXYfbž'X]Y'X]Y'@UbXgWkUZhdfÀ[Yb"'6YgcbXYfg'X]Y'GYYb'i bX'\_`Y]bYb'HY]WkYž'X]Y'g]WkjYfghYW\_h'nk]gWkYb'XYb'6Ài a Yb'VYZ]bXYbž'V]YhYb'Y]bYbdYfZY\_hYb'FØW\_ni [gcfh'ZØf'X]j YfgY'Jc[Y`UfhYb"'Jc[Y`ZfYi bXYgc``hYb'i bVYX]b[h'X]Y'Gi a dZXchhYfV`i a Y'i bX'XYb'DZYfXYa]gh\_ÀZYf']a '5i [Y'VY\U`hYbž'X]Y'\]Yf'\Y]a]gWk'g]bX"

9]b'k Y]hYfYg'<][\`][\hi]gh'XYf'C ghYf\c`nYf'?i fdUf\_ž'XYf'a]h gY]bYb'k Y]h'Ài Z][Yb'; fØbZÀWXYb'i bX'V`Ø\YbXYb'6`i a YbVYYhYb YXYb'6Ygi WXYf'j YfnUi VYfh"8Yf'DUf\_']gh']XYU`'ZØf'Y]bYb [Ya Øh`]WXYb'BUWXa]hhU[ggdUn]Yf[Ub['cXYf'Y]b'D]W\_b]W\_'a]h'XYf: Ua]`]Y"'<]Yf'\_Ubb'a Ub'k i bXYfVUf'YbhgdUbbYb'i bX'X]Y'Zf]gWXY @i Zh'[Yb]Y»Yb"'Ni XYa 'Z]bXYb']a 'Gca a Yf'cZh'?cbnYfhY'i bX\_\_i `hi fY``Y'JYfUbghU`hi b[Yb']b'XYf': fY]`i ZhVØ\bY'ghUhhž'X]Y YVYbZU``q'Y]bYb'6Yqi WX'k Yfh'q]bX"

: Øf`X]Y`5VYbhYi Yf`i gh][ Yb`[ ]Vh'Yg`]a `HYi ZY`ga ccfž`XYa
VY\_UbbhYb`<cW.a ccf[ YV]Yhž'nU\`fY]W\Y`A Ò[ `]W\\_Y]hYbž'X]Y`BUhi f
U\_h]j `ni `Yf`YVYb"`5i Z'nU\`fY]W\Yb`K UbXYfk Y[ Yb`i bX
FUXghfYW\_Ybž'X]Y`Xi fW\`X]YgYg`VYY]bXfi W\_YbXY
BUhi fgW\i hn[ YV]Yh`ZØ\fYbž'\_Ubb`a Ub`X]Y`gU[ Yb\UZhY`GW\Òb\Y]h
i bX`J ]Y`ZU`h`XYf`@UbXgW\UZh`\Ui hbU\`Yf`YVYb"`8]Y`K Y[ Y`g]bX`[ i h</pre>

a Uf\_]Yfh'i bX'V]YhYb'i bhYfgWX]YX`]WXY'GWXk]Yf][\_Y]hg[fUXYžgcXUgg'gckc\`'5bZ\\b[Yf'U\g'U\W\'YfZU\fYbY'K UbXYfYf'Ui Z']\fY?cghYb'\_ca a Yb"

- K UbXYfi b[ 'ni f' < Y]`][ [ Y]gh\_UdY``Y.'9]bY ``Y]W\hY</li>
  K UbXYfi b[ 'j cb'WU"') '\_a ž'X]Y'g]W\k i bXYfVUf'ZØf
  : Ua ]`]Yb'Y][ bYh"
- FUXfci hY'Xi fW 'XUg'HYi ZY`ga ccf.'7U"'&\$'\_a '`Ub[Y GhfYW\_Yž']XYU`'ZØf'FUXhci fYb'a ]h': fYi bXYb'cXYf'XYf : Ua ]`]Y"
- 6cchghci f'Ui Z'XYb': `ØggYb.'9f\_i bXYb'G]Y'X]Y
   ; Yk ÀggYf'XYf'I a [YVi b[''Y]b][Y'5bV]YhYf'cf[Ub]g]YfYb
   [YZØ\fhY'Hci fYb"

8]Y'GW\Ob\Y]h'jcb'CghYf\c`n'nY][h'g]W\niXYa ']b']\fYb
nU\`fY]W\Yb'K UbXYf!'ibX'BUhif`Y\fdZUXYb"'8]YgY'g]bX'b]W\h
bif']XYU'ž'ia 'X]Y'@UbXgW\UZh'ni'Yf\_ibXYbž'gcbXYfb'V]YhYb'UiW\
]bZcfa Uh]jY'GhUh]cbYb'ØVYf'X]Y'`c\_U`Y'JY[YhUh]cb'ibX'H]YfkY`h"
Gc'\_Ubb'a Ub'VY]a 'K UbXYfb'[`Y]W\nY]h]['j]Y``ØVYf'X]Y
ia[YVYbXY'BUhif``YfbYb"

K Yf'[YfbY'Zchc[fUZ]Yfhž'Z]bXYh'\]Yf'ni XYa 'i bnÀ\`][Y'Zchc[YbYGhY``Ybž'k]Y'XYb'<cWaccf!DZUXž'XYf'a]h'ZUgn]b]YfYbXYb5i gV`]W\_Yb'i bX'VYgcbXYfYb`UbXgW\UZh`]W\Yb'A Yf\_a U`YbUi Zk UfhYh"'8]Y': UfVYb'XYf'BUhi f'j Uf]]YfYb'Y'bUW\'\\J\fYgnY]h'i bXV]YhYb'ni 'YXYf'NY]h'XYg'\\J\fYg'bYi Yž'UhYa VYfUi VYbXYDYfgdY\_h]j Yb"

: Øf B Uhi fZfYi b X Y ž X ] Y 'a Y \ f 'ØV Y f 'X ] Y 'f Y [ ] c b U 'Y b 'H] Y f Y 'Y f Z U \ f Y b
a ÒW h Y b ž 'Y a d Z] Y \ `h 'g] W 'Y ] b '6 Y gi W '] a 'C gh Y f \ c `n Y f 'H] Y f d U f \_ "
< ] Y f '\_ O b b Y b '6 Y gi W Y f 'X ] Y 'Y ] b \ Y ] a ] g W Y 'H] Y f k Y `h \ Ui hb U \
Y f `Y V Y b 'i b X '] b h Y f Y g g U b h Y '9] b V `] W \_ Y '] b 'X ] Y '@Y V Y b g f Ài a Y 'i b X 'X Y b
B U hi f g W \ i hn 'Y f \ U `h Y b "</pre>

Ni gUa a YbZUggYbX``Àggh'g]W\'gU[Ybž'XUgg'CghYf\c`n'Y]b kibXYfVUfYf'Cfh']ghžia 'X]Y'GW\Òb\Y]h'XYf'BUhif'ni 'YbhXYW\_Yb ibX'g]W\'jcb'XYf'Fi\Y'ibX'XYa ': f]YXYb'X]YgYf'Y]bn][Ufh][Yb FY[]cb'jYfnUiVYfb'ni '`UggYb"'CV']b'XYb'h]YZYb'K À`XYfbž'XYb a U`Yf]gW\Yb'A ccfYb'cXYf'XYb'W\Ufa UbhYb'DUf\_g' 'CghYf\c`n'\Uh  $Z\emptyset$ f'YXYb'Yhk Ug'ni 'V]YhYb"

# $?i \]bUf]gWXY' < ][ \] \hg`XYf`FY[ ]cb`Yf`YVYb$

CghYf\c`n']gh'b]Wkh'bi f'ZØf'gY]bY'UhYa VYfUi VYbXY'BUhi f'i bX; YgWk]WkhY'VY\_Ubbhž'gcbXYfb'Ui Wk'ZØf'gY]bY'`YW\_YfYb\_i`]bUf]gWkYb'5b[YVchY"8]Y'FY[]cb'j YfY]bh'hfUX]h]cbY``YXYi hgWkY'?ØWkY'a ]h'Y]bZ]Y»YbXYb']bhYfbUh]cbU`Yb'9]bZØggYb'i bX\_fYUh]j Yb'BYi ]bhYfdfYhUh]cbYb'`c\_U`Yf'; Yf]WkhY"'9[U`ž'cV'Xi 'Y]b:Y]bgWka YW\_Yf'V]gh'cXYf'Y]bZUWk'bi f'[i hYg'9ggYb'gWkAhnhž'X]Y; Ughfcbca Yb']b'CghYf\c`n'\UVYb'ZØf'YXYb'Yhk Ug'ni 'V]YhYb"

- 6ck `Y`a ]h'GWk UfhYba U[Yb` 'Y]b'\Yfn\UZhYg'; Yf]W\hž XUg'dYfZY\_h'ni 'Y]bYa '\_U`hYb'6]Yf'dUggh"
- GWk Ufnk A`XYf'GWk]b\_Yb' ']XYU`'ZØf'Y]bYb'GbUW\_'cXYf
   Y]bY'J cfgdY]gY"
- F]bXYffci`UXY``nUfh'i bX'j c``Yf'; YgW\a UW\_ž'cZh'a]h Fch\_c\``i bX'?UfhcZZY`b'gYfj]Yfh"

9]b'k Y]hYfYg'<][\`][\h'XYf'CghYf\c`nYf'?ØW\Y']gh'XUg' < UbXk Yf\_`]W\Yg'6]Yf"'A Y\fYfY'`c\_U`Y'A ]\_fcVfUi YfY]Yb'\UVYb g]W\'YhUV`]Yfh'i bX'V]YhYb']\fYb'6Ygi W\Yfb'X]Y'A Ò[`]W\\_Y]hž']b'X]Y ?i bgh'XYg'6]YfVfUi Ybg'Y]bni hUi W\Yb"'6Y]'Y]bYf'6fUi YfY]ZØ\fi b[ \_Ubbgh'Xi 'b]W\h'bi f'X]Y'<YfghY``i b[ ga Yh\cXYb'\_YbbYb`YfbYbž gcbXYfb'Ui W\'X]Y'j YfgW\]YXYbYb'6]YfgcfhYb'dfcV]YfYb" 6YqcbXYfg'ni 'Ya dZY\`Yb'q]bX.

- < Y``Y'6]YfY' 'Zf]gW\'i bX'gdf]hn][ ž']XYU``ZØf'k Ufa Y Gca a YfhU[Y"
- 8ib\_`Y´6]YfY``jc``aibX]['ibX`gUbZhž`dYfZY\_h`ZØf`Y]bY
   [Ya Øh`]WXY`FibXY"

 7 fUZh'6]YfY 'Y]bn][ Ufh][ Y'A ]gW\i b[ Ybž'X]Y'cZh'bi f gU]gcbU`Yf\À`h`]W\g]bX"

#### 7\Ufa UbhY 7UZÅq i bX 6 AW\_YfY]Yb

8]Y'FY[]cb'CghYf\c`n'\Uh'Ui W\'Y]bY'J]Y`nU\``j cb'7UZÅg'i bX
6ÀW\_YfY]Ybž'X]Y'fY[]cbU`Y'GØ»][\_Y]hYb'i bX'8YggYfhg'UbV]YhYb"
6YgcbXYfg'VYfØ\a h']gh'XYf'CghYf\c`nYf'GhfYi gY`\_i W\Ybž'XYf
k Ufa 'gYfj]Yfh'i bX'a ]h'GU\bY'cXYf'JUb]``YY]g'[YbcggYb'k YfXYb
Ubb"

9]b][Y'YadZY'YbgkYfhY'7UZÅg'g]bX.

7 UZÅ #6 À W_Y f Y ]	6YgcbXYf\Y]h
7 UZÅ 'Ua 'A Uf_h	@c_U`[YfÒghYhYf'?UZZYY'ibX
	\Ui g[ Ya UW\hYf'?i W\Yb
6UW_\Ui g'CghYf\c`n	HfUX]h]cbY``Y`6fchY`ibX`;YVÀW_
	Ui g'Y][YbYf'DfcXi_h]cb
@UbXVÀW_YfY]~GWXa]Xh	?`Ugg]gWXY'XYi hgWXY
	6UW_k UfYb a ]h gU]gcbU Yb
	5b[YVchYb

## A Uf\_hhU[YibX~c\_U~Y~DfcXinYbhYb

9]b'[Ubn'VYgcbXYfYg'9f`YVb]g'V]YhYb'X]Y'K cWXYba Àf\_hYž'X]Y fY[Y`a À»][']b'CghYf\c`n'ghUhhZ]bXYb"'<]Yf'\_Ubbgh'Xi 'b]WXh'bi f Zf]gWXY'DfcXi \_hY'X]fY\_h'j cb'XYb'@UbXk]fhYb'\_Ui ZYbž'gcbXYfb YVYbZU``g'X]Y'A Ò[`]WX\_Y]hž'Y]b][Y'Òfh`]WXY'8Y`]\_UhYggYb'ni '\_cghYb i bX'a ]h'XYb'DfcXi nYbhYb'ni 'd`Ui XYfb"Hmd]gWXY'K UfYbž'X]Y'Xi \]Yf'Z]bXYb'\_Ubbghž'i a ZUggYb.

- : f]gWXYg C Vghi bX; Ya ØgY XYf GU]gcb
- < Ui g[ Ya UW\hY A Ufa Y`UXYb i bX < cb][
- FY[]cbU`Y'?ÀgYgdYn]U`]hÀhYb

5i » YfXYa []Vh'Yg'c Zh'gdUbbYbXY'@j Y!8 Ya cbghfUh]cbYbž'k c'Xi `YfbYb'\_Ubbghž'k ]Y'VYgh]a a hY'fY[]cbU`Y'GdYn]U`]hÀhYb'ni VYfY]hYh k YfXYb"'8]YgY'A Àf\_hY'g]bX'Y]b'k U\fYg': Ygh'ZØf'X]Y'G]bbY'i bX

#### $: YghY i bX'_i)bUf]gWX Y'9j Ybhg$

 $8 ]Y `FY[] cb'j YfUbghU`hYh'Ui W. `'À\f`]W. 'j YfgW.]YXYbY': YghY ž'X]Y g]W. 'fi bX'i a `XUg'H\Ya U'9ggYb'i bX'Hf]b_Yb'XfY\Yb''8 ]YgY 9j Ybhg'[YVYb'X]f'X]Y'dYfZY_hY'; Y`Y[Yb\Y]hž'X]Y'; Ughfcbca ]Y'i bX ?i `hi f']b'CghYf\c`n'ni 'Yf`YVYb'''CV'Yg'g]W. 'i a 'Y]b'6]YfZYghž'Y]b ? ÀgYZYgh'cXYf'Y]bY'K Y]bj Yf_cghi b[ `\UbXY`hž'\]Yf'\Ugh'Xi 'X]Y A <math>O[`]W._Y]h$ z'nU\`fY]W.Y'? Ogh)W.\_Y]hYb'ni 'dfcV]YfYb'i bX [`Y]W.NY]h][ 'a ]h'XYb'9]b\Y]a ]gW.Yb'ni ']bhYfU[]YfYb''

9]b'<][\`][\hi]gh'XUg'CghYf\c`nYf'GW\`Ya a YfZYghž'k c fY[]cbU`Y'?ÒW\Y']\fY'GdYn]U`]hÀhYb'dfÀgYbh]YfYb'i bX'6Ygi W\Yf X]Y'AÒ[`]W\\_Y]h'\UVYbž'j cb'GhUbX'ni 'GhUbX'ni 'gW\`YbXYfb'i bX g]W\'Xi fW\'X]Y'j YfgW\]YXYbYb'5b[YVchY'ni 'dfcV]YfYb"

CV'Xi 'Y]b'; ci fa Yh'V]ghžXYf'ZY]bY'GdY]gYb'gWXÀhnh'cXYf'Y]bZUWXbi f'X]Y'`c\_U`Y'?ØWXY'YbhXYW\_Yb'a ÒWXhYgh' 'CghYf\c`n'V]YhYh'Y]bUVk YWXg`i b[gfY]WXYg'i bX'gWXa UW\_\UZhYg'\_i `]bUf]gWXYg5VYbhYi Yf°

## $< ]ghcf]gWXYGhÀhhYbibX]\fY;YgWX]WXhYb$

9]b \YfUi gfU[YbXYg^6Y]gd]Y`]ghX]Y Gh"!  $\approx$  \Ubb]g!?]fWXY^]b XYfGhUXhCghYf\c`n!GW\Ufa VYW\_"8]YgY?]fWXY'k i fXY']a '%&"  $\Rightarrow$ U\f\i bXYfhYfVUi hii bX`]ghY]b k i bXYfgW\ÒbYg^6Y]gd]Y`ZØffca Ub]gWXY'5fW\]hY\_hi f"'8]Y'df\AW\h][Yb'<c`ngW\b]hnYfY]Yb ii bXX|Y'VYY]bXfi W\_YbXYb'; `UgZYbghYfYfn\A\`Yb'; YgW\]W\hYb'Ui g'XYa

; `Ui VYb'i bX'XYf'?i bghZYfh][ \_Y]h'XYf'XUa U`][ Yb'NY]h"'6Y]'Y]bYa Fi bX[ Ub[ 'Xi fW\'X]Y'?]fW\Y'\_Ubb'a Ub'X]Y'Gh]``Y'i bX'XYb \]ghcf]gW\Yb'7\Ufa Y'[ Yb]Y $\gg$ Yb"

8]Y'U`hYb'K UggYf[fÀVYb'fi bX'i a 'X]Y'GhUXh'g]bX'Y]b'k Y]hYfYg
VYXYi hYbXYg'FY`]\_h'Ui g'XYf'J Yf[Ub[Yb\Y]h"'G]Y'k i fXYb']a
A]hhY`U`hYf'Ub[Y`Y[hži a 'X]Y'GhUXh'j cf'5b[f]ZZYb'ni 'gW\ØhnYb"'6Y]
Y]bYa 'GdUn]Yf[Ub['Ybh`Ub['XYf'; fÀVYb'\_Ubb'a Ub'b]W\h'bi f'X]Y
5i gg]W\h'[Yb]Y» Ybž'gcbXYfb'Ui W\'a Y\f'ØVYf'X]Y'ghfUhY[]gW\Y
6YXYi hi b['X]YgYf'K UggYfk Y[Y'YfZU\fYb"'5b'j]Y`Yb'GhY``Yb'[]Vh
Yg'\DZcfa Uh]cbghUZY`bž'X]Y'X]Y'; YgW\]W\hY'X]YgYf
J YfhY]X][i b[gUb`U[Yb'Yf'Ài hYfb"

 $8 \ Uf \emptyset VYf' \setminus ]b \ Ui \ g' g]b \ X' X]Y' K \ \emptyset ghi \ b [ \ g[ \ Y` \mathring{A}b \ XY']b' i \ b X' i \ a$   $C \ ghYf \setminus c`n'j \ cb' \setminus ]ghcf]gWXYf' 6 Y XYi \ hi \ b [ "'8]YgY'Y]bgh' VYg]Y XY`hYb$   $; \ YV]YhY' [ \ YVYb'5i \ ZgWX`i \ gg' \emptyset VYf' X]Y' k \ ]fhgWX \ UZh`]WXYb' i \ b X'gcn]U`Yb$   $J \ Yf \mathring{A}b \ XYfi \ b [ \ Yb \ X' X]Y' X]Y'FY[ ]cb' Xi \ fWX [ \ Ya \ UWXh' \setminus Uh''$   $5fWX \mathring{A}c`c[ ]gWXY'5i \ g[ \ fUVi \ b[ \ Yb' \setminus UVYb' nU \setminus `fY]WXY'5fhYZU_hY'Ubg$  @ $WXh'[ \ YVfUWXhz'X]Y'k \ ]WXh][ \ Y'<]bk \ Y]gY'Ui \ Z'XUg' @YVYb']b' 9dc WXYb$   $k \ [Y'XYa' A]hhY`U`hYf'[ \ YVYb'' ]$ 

9]b~k~Yb][~UVgY]hg~XYf~hmd]gWVYb~Hci~f]ghYbd~ZUXY~Z]b~XYh~a~Ub~X]Y~

 $Fi ]bY `XYf'? `cghYf_]fWXY'j cb `CghYf\c`nž'X]Y `ZfØ\Yf'HY]``Y]bYg \\ N]ghYfn]YbgYf_`cghYfg'k Uf"'8]Y'Fi ]bYb `YfnÀ\`Yb'j cb `XYf'fY`][ ]ÒgYb ; YgWX]WX hY `XYf'FY[ ]cb'i bX'g]bX'Y]b `VYnUi VYfbXYf'Cfh'ZØf'U``Yž X]Y `Ub `XYf'Gd]f]hi U`]hÀhii bX `XYb'HfUX]h]cbYb'j Yf[ Ub[ YbYf'NY]hYb ]bhYfYgq]Yfh'q]bX"$ 

8]Y'<]ghcf]Y'XYg'CfhghY]`g'6YI\Òj YXY']gh'YVYbZU``g
VYa Yf\_Ybgk Yfh"'<]Yf'Z]bXYh'a Ub'[i h'Yf\U`hYbY': UWk Yf\_\Ài gYfž
X]Y'Ui g'XYa '%+"'i bX'%, "'\U\f\i bXYfh'ghUa a Yb"'8]YgY'6Ui k Yf\_Y
g]bX'b]Wkh'bi f'UfWk]hY\_hcb]gWkY'A Y]ghYfk Yf\_Yž'gcbXYfb'nYi [Yb
Ui Wk'j cb'XYb'@YVYbgVYX]b[i b[Yb'XYf'A YbgWkYb']b'X]YgYf'NY]h"
: Ø\fi b[Yb'Xi fWk'XUg'J]YfhY`'V]YhYb'gdUbbYbXY'9]bV`]W\_Y'i bX
; YgWk]WkhYb'ØVYf'X]Y'XUa U`][Yb'<UbXk Yf\_Yf'i bX'XUg'U``hÀ[`]WkY

Cfh	6YgWxfY]Vib[	6YgcbXYf\Y]hYb
Gh"! ∞ \ Ubb]g!?]fW\Y	Fca Ub]gWXY'?]fWXY	; `UgZYbghYfž
	Ui gʻXYa ʻ%&"	< c`ngW\b]hnYfY]Yb
	划\f\i bXYfh	
< Y]a Uha i gYi a	8c_i a YbhUh]cb XYf	5``hU[g[Y[YbghÀbXYž
CghYf\c`n	fY[]cbU`Yb	:chc[fUZ]Yb
	; YgWX]WXhY	
6if['ni'F]hhYf\iXY	Fi]bYb'Y]bYf	< ]ghcf]gWkY F c``Yž
	a ]hhY`U`hYf`]W\Yb	5i gV`]W <u></u> Y
	6i f[	
?`cghYf_]fW\Y	Fi]bY'Y]bYg	FY`][]ÒgY'6YXYi hi b[
	Y\Ya U`][Yb	
	N]ghYfn]YbgYf_`cghYfg	
6YI\ÒjYXY	< ]ghc f]gW\ Y g	: UWk Yf_\Ài gYfž
	:UWXkYf_j]YfhY`	:∅\fib[Yb

8]Y'9f\_i bXi b['X]YgYf'\]ghcf]gW\Yb'GhÀhhYb']b'CghYf\c`n
Yfa Ò[`]W\hYg'XYb'6Ygi W\Yfbž'h]YZ']b'X]Y'; YgW\]W\hY'XYf'FY[]cb
Y]bni hUi W\Yb'i bX'X]Y'; YgW\]W\hYb'XYf'A YbgW\Yb'ni 'YbhXYW\_Ybž
X]Y'X]YgY'CfhY'[YdfÀ[h'\UVYb"'\XXYg'X]YgYf', VYfV`Y]VgY`'Ui g'XYf
JYf[Ub[Yb\Y]h']gh'a Y\f'U`g'bi f'Y]b'GhY]b'Yg']gh'Y]b'GhØW\_
`YVYbX][Yf'; YgW\]W\hYž'XUg'XUfUi Z'k UfhYhž'YfnÀ\`h'ni 'k YfXYb"
K Ybb'Xi 'a Y\f'ØVYf'X]Y'\]ghcf]gW\Yb'GW\ÀhnY'j cb'CghYf\c`n

YfZU\fYb'a ÒW\hYghž'VYgi W\Y'X]Y'cZZ]n]Y``Y'K YVg]hY'XYf'GhUXh.'CghYf\c`n"

# 5\_h]j i f`Ui V`]a 'CghYf\c`n. 'K UbXYfi b[Yb i bX'FUXhci fYb

CghYf\c`n']gh'b]Wkh'bi f'Y]b'Cfh'a ]h'fY]Wk\U`h][Yf'; YgWk]WkhY'i bX\_i`]bUf]gWkYb'; YbØggYbž'gcbXYfb'Ui Wk'Y]b'k U\fYg'DUfUX]Yg'ZØfCi hXccf!9bh\i g]UghYb"'8]YgY'FY[]cb']b'B]YXYfgUWkgYb'V]YhYhY]bY'J]Y`nU\`'j cb'A Ò[`]Wk\_Y]hYb'ZØf'K UbXYfi b[Yb'i bXFUXhci fYbž'X]Y'gck c\`'ZØf'5bZ\b[Yf'U`g'Ui Wk'ZØf'YfZU\fYbYGdcfh`Yf'[YY][bYh'g]bX"'8]Y'UVkYWkg`i b[gfY]WkY'@UbXgWkUZh'i bXX]Y'nU\`fY]WkYb'KY[Y'`UXYb'XUni 'Y]bž'X]Y'BUhi f']b'j c``Yb'NØ[Ybni '[Yb]Y»Yb'i bX'U\_h]j'ni 'gY]b"

8]Y'K UbXYfk Y[Y']b'i bX'i a 'CghYf\c`n'g]bX'[i h'Ui g[YgWk]`XYfh i bX'ZØ\fYb'Xi fWk'a U`Yf]gWkY'K À`XYfž'K]YgYb'i bX'Ybh`Ub[]Xm``]gWkYf': `ØggY"' < ]Yf'g]bX'Y]b][Y'XYf'VY`]YVhYghYb K UbXYffci hYb.

- 8 Yf'C ghYf\c`nYf'K UddYb'K UbXYfk Y[.'8]YgY'Fci hY
  ]gh'i b[YZÀ\f'%\$'?]`ca YhYf'`Ub['i bX'ZØ\fh'Xi fW\'X]Y
  k i bXYfgW\ÒbY'BUhi f'fi bX'i a 'C ghYf\c`n!GW\Ufa VYW\_"
  GW\UZY'i bX'?Ø\Y'[fUgYb']b'XYb'K]YgYbž'k À\fYbX'J Ò[Y`]b'XYb'6Ài a Yb'nk]hgW\Yfb"
- 8 Yf'H]ghYf'6Ui Yfba ccf'Fi bXk Y[.'9]b'gdUbbYbXYf
  K Y['Xi fWX 'XUg'BUhi fgWXi hn[YV]Yhž'XYf'WU"', '?]`ca YhYf
  `Ub[']gh"'<]Yf'\_Ubb'a Ub'X]Y'j]Y`ZA`h][Y': `cfU'i bX': Ui bU
  Yf\_i bXYb'i bX'ni ['Y]WX'a Y\f'ØVYf'X]Y'fY[]cbU'Y'A ccfY
  YfZU\fYb"</li>
- K UbXYfi b[ 'Ub'XYf' < Ua a Y. '8]YgY'Fci hY'Ybh`Ub[ 'XYg : `i ggYg' < Ua a Y']gh'VYgcbXYfg'ZØf'BUhi f`]YV\UVYf
  Ya dZY\`Ybgk Yfh"'A Ub'\_Ubb'X]Y'YbhgdUbbYbXY
  5ha cgd\ÀfY'XYg'K UggYfg'[ Yb]Y» Yb'i bX'j ]Y``Y]W\h'gc[ Uf Y]b'dUUf'9bhYb'VYcVUW\hYb°</li>

 g]bXž'\Uh'a Ub'X]Y'A Ò[`]W\\_Y]hž'X]Y'l a [YVi b['Ui Z'nk Y]'FÀXYfb'ni Yf\_i bXYb'''<]Yf'g]bX'Y]b][Y'hc``Y'Fci hYb.

- 8 Yf'K YgYf!F UXk Y[.'8]YgY'VY`]YVhY'GhfYW\_Y'ZØ\fh'X]fY\_h
   Ub'XYf'K YgYf'Ybh`Ub['i bX'V]YhYh'UhYa VYfUi VYbXY
   5i gV`]W\_Y'Ui Z'XYb': `i gg'i bX'X]Y'i a `]Y[YbXYb
   @UbXgW\UZhYb"'A Ub'\_Ubb'V]g'ni 'XYb'\ØVgW\Yb'GhÀXhYb
   6fYa Yb'cXYf'JYfXYb'fUXY`b"
- 8 Yf'; fØb!'i bX'K U`Xk Y[.'8]YgY'Fci hY'ZØ\fh'Xi fW\XX]YX]W\hYb'K À`XYf'j cb'CghYf\c`n'i bX'V]YhYh'Y]bY
  YfZf]gW\YbXY'5Vk YW\g`i b['ni f'gh\AXh]gW\Yb'I a [YVi b["
  =XYU`'ZØf'Y]bY'YbhqdUbbhY': U\ffUXhci f'a ]h'XYf': Ua ]`]Y"

Ni gàhn`]W\ni 'XYb'\Yff`]W\Yb'Fci hYb']gh'X]Y' $\pm$ ZfUghfi \_hi f'ZØf K UbXYfYf'i bX'FUXZU\fYf']b'CghYf\c`n'[i h'Ui g[YVUi h''9g'[]Vh nU\`fY]W\Y'FUghd`àhnY'i bX'D]W\_b]W\_VYfY]W\Yž'Ub'XYbYb'a Ub Y]bY'DUi gY'Y]b`Y[Yb'i bX'X]Y'BUhi f'[Yb]Y»Yb'\_Ubb''J]Y`Y'7UZÅg i bX'FYghUi fUbhg'Ybh`Ub['XYf'K Y[Y'V]YhYb'fY[]cbU`Y'GbUW\_g'i bX 9fZf]gW\i b[Yb'Ubž'gcXUgg'a Ub'g]W\'bUW\'Y]bYf'U\_h]j Yb'Hci f ghÀf\_Yb'\_Ubb''

 $< ]Yf^*g]bX^*Y]b][Y^*H]ddg^*Z\emptyset f^*Y]bYb^*[Y^*ib[YbYb^*5\_h]jif^*UiV^*]b\\ CghYf^*c^n.$ 

5_h]j ]hÀh	9a dZc\`YbY	6 Y g c b X Y f Y '< ] b k Y ] g Y
	5i gfØghi b[	
K UbXYfi b[	K UbXYfgW\i\Yž	8Yb_h'Ub
	K UggYfZUgWXYž	kYhhYfUb[YdUgghY
	_`Y]bY`GbUW <u>_</u> g	?`Y]Xi b[ °
FUXhci f	: U\ffUX\Y`a ž	5 W hY h'Ui Z'XY b
	GcbbYbWfYa Yž	JYf_Y\f'Ui Z'XYb
	?UfhYba UhYf]U`	<uidhghfu»yb"< td=""></uidhghfu»yb"<>
BUhi fVYcVUW hi b[	: Yfb[`Ugž	GY]X``Y]gYži a 'X]Y

5_h]j ]hÀh	9a dZc\`YbY	6YgcbXYfY '< ]bk Y]gY
	5i gfØghi b[	
	: chcUddUfUhž	H]YfY 'b]W\ h'ni
	Bch]nVi W	ghÒfY b°

K Ybb'Xi 'Ub'Y]bYa '[YZØ\fhYb'5VYbhYi Yf']bhYfYgg]Yfh'V]ghž'V]YhYb Y]b][Y'`c\_U`Y'I bhYfbY\a Yb'Hci fYb'ni ': i » 'cXYf'a ]h'XYa : U\ffUX'Ub"'8]YgY'; i ]XYg'\_YbbYb'X]Y'FY[]cb'VYghYbg'i bX \_ÒbbYb'X]f']bhYfYggUbhY': U\_hYb'ØVYf': `cfUž': Ui bU'i bX'X]Y ; YgWX]WXhY'XYf'; Y[YbX'bÀ\YfVf]b[Yb"

9[U`žcV`Xi Y]bYb`YbhgdUbbhYb`GdUn]Yf[Ub[']a ; fØbYb`a U[gh cXYf`XUg`5VYbhYi Yf`Ui Z'Y]bYf``Ub[Yb`FUXhci f`gi W\ghž`CghYf\c`n\Uh`ZØf`YXYb`Yhk Ugʻni 'V]YhYb"`Bi hnY`X]Y; Y`Y[Yb\Y]hž`X]YUhYa VYfUi VYbXY`@UbXgW\UZh`ni 'Yf\_i bXYb`i bX`X]W\`Ub`XYf Zf]gW\Yb`@ Zh`ni 'VYk Y[Yb"'6Ygi W\Y`X]Y`cZZ]n]Y``Y`K YVg]hY`j cb`CghYf\c`n`ZØf`k Y]hYfY`\DZcfa Uh]cbYb`ØVYf`K UbXYfi b[Yb`i bX FUXhci fYb`]b`XYf`FY[]cb"

# : Ua ]`]YbZfYi bX`]WXY'5i gZ`i [ gn]Y`Y'i bX 5hhfU\_h]cbYb

 $8 \ Ugg \ C \ ghY \ f \ c \ n'Y \ ]bY \ J \ ]Y \ nu \ ''j \ cb \ 'ZUa \ ] \ ']Y \ b \ ZfY \ i \ b \ X \ ]WX \ Yb \ Si \ gZ \ i \ [gn]Y \ Yb \ V]Y \ hY \ hz \ ]gh' _Y \ ]b'; \ Y \ Y \ ]a \ b \ ]g'' \ 8 \ ]Y' \ F \ Y \ [gh' \ dY \ f \ Y \ ]Y'' \ J \ cb \ Zgh' \ gd \ Ub \ Yb \ Yb' \ Y \ ]gh' \ HU \ [a \ ]h'XY \ f' \ [Ub \ nYb' : \ Ua \ ] \ ']Y'' \ J \ cb \ ]b \ Yf \ Ub \ Yb' \ Y \ ]b' \ Yb' \ YghY \ b \ Shh \ Yb' \ Y' \ Y' \ ShY \ fb' \ i \ b \ X'? \ ]b \ XY \ f' \ [Y]WX \ Yf \ U \ Yb' \ YY \ [Y] \ ghY \ fb \ k \ Yf \ XYb''$ 

## %" 8 Yf Ncc Ua 'A YYf ]b 6fYa Yf\Uj Yb

9hk UgʻUi »Yf\U`Vʻj cbʻCghYf\c`nžʻUVYfʻXYZ]b]h]j ʻY]bYbʻ6Ygi Wk k Yfhžʻ]ghʻXYfʻNccʻUa ʻA YYfʻ]bʻ6fYa Yf\Uj Yb"ʿA]hʻgY]bYf Y]bn][ Ufh][ Ybʻ@U[ YʻUbʻXYfʻBcfXgYYʻV]YhYhʻX]YgYfʻNccʻb]Wkhʻbi f Y]bYʻJ]Y`nU\``j cbʻH]YfYbžʻgcbXYfbʻUi WkʻYf`YVb]gfY]WkY A YYfYgh]Yfg\ck g"'<]Yfʻ\_ÒbbYbʻ?]bXYfʻD]b[i]bYžʻFcVVYbʻi bX j ]Y`YʻUbXYfYʻH]YfY`\Ui hbU\`Yf`YVYbʻi bX`a Y\f`ØVYf`XYb

#### &"'8Yf'?`YhhYfk U`X']a ; fØbYb

 $: \emptyset f`UVYbhYi Yf`i gh][Y`: Ua ]`]Yb`]gh`XYf`? `YhhYfk U`X`C ghYf\c`n Y]b`A i gg"`A ]h'j YfgW\]YXYbYb`DUfWci fg`]b`i bhYfgW\]YX`]W\Yb < O\Yb[fUXYb`]gh`Yg`Y]bY`[fc» Ufh][Y`A O[`]W\_Y]h`Z\Øf`?]bXYf`i bX 9`hYfbž`]\fY`; YgW\]W_`]W\_Y]h`i bX`5i gXUi Yf`ni `hYghYb"`9g`[]Vh Ui W\`gdYn]Y``Y`?i fgY`Z\Øf`\Øb[YfY`?]bXYfž`gcXUgg`X]Y`[UbnY : Ua ]`]Y`hY]`bY\a Yb`_Ubb"$ 

## ' "8Ug 8Yi hgWXY 5i gk UbXYfYf\Ui g

±0.76fYa Yf\Uj Ybžibi f'Y]bY'\_i fnY'5i hcZU\fh'j cb'CghYf\c`n
YbhZYfbhž'VYZ]bXYh'g]W\'XUg'<mark>8 Yi hgW\Y'5i gk UbXYfYf\Ui g"</mark>
8]YgYg']bhYfU\_h]j Y'Ai gYi a 'YfnÀ\`h'X]Y'; YgW\]W\hY'XYf'XYi hgW\Yb
5i gk UbXYfYf'i bX'V]YhYh'gdUbbYbXY'5i gghY``i b[Yb'ZØf'YXY
5`hYfg[fi ddY"'6YgcbXYfg'ZØf'?]bXYf'[]Vh'Yg'j]Y`Y
A]ha UW\ghUh]cbYbž'X]Y'XUg'H\Ya U'UbgW\Ui`]W\'i bX'`Y\ffY]W\
[YghU`hYb"

#### ("8Yf:fY]nY]hdUf\_AU]aUf\_h

 $8 \ Yf: \ fY]nY]hdUf\_`AU]aUf\_h`]b`XYf`BA\Y'j cb`CghYf\c`n`V]YhYhnu\`fY]WXY: U\f[YgWXAZhY'i bX`5_h]j]hAhYb`ZØf`X]Y`[UbnY: Ua]`]Y"Jcb`UiZfY[YbXYb`5WXhYfVU\bYb`V]g`\]b`ni`fi\][Yb`?UfiggY``g`]ghZØf`^YXYb`YhkUg`XUVY]"`5iWX`ZUa]`]YbZfYibX`]WXY`JYfUbghU`hib[Ybk]Y`?]bXYfZYghY`g]bX`fY[Y`aA`»][`[Yd`Ubhž`X]Y`XYb`6YgiWX`bcWXUhhfU_h]jYf`aUWXYb"$ 

# ) "BUhi fYf`YVb]gnYbhfi a ']b 'CghYf\c`n!GW\Ufa VYW\_

8 UgʻB Uhi fYf`YVb]gnYbhfi a ʻ]bʻC ghYf\c`n!GW\Ufa VYW\_ʻ]ghʻY]bY\Yfj cffU[YbXYʻ; Y`Y[Yb\Y]hʻZØfʻ: Ua ]`]YbžʻX]YʻB Uhi fʻni ʻYf\_i bXYb'' <]Yfʻ\_ObbYbʻ?]bXYfʻa Y\fʻØVYfʻ: `cfUʻi bXʻ: Ui bUʻʻYfbYbʻi bXʻUb[YZØ\fhYbʻK UbXYfi b[YbʻhY]`bY\a Yb''8 UgʻNYbhfi a ʻV]YhYhʻUi W\K cf\_g\cdgʻi bXʻ5i gZØ[YʻUbžʻX]Yʻg]W\ʻ]XYU`ʻZØfʻGW\i `YbʻcXYf : Ua ]`]Yb[fi ddYbʻY][bYb''

#### 

#### +"'5ei UdUf\_']b'5`hYbVYf[

 $: \emptyset f `K UggYffUhhYb `V]YhYh`XYf `5ei UdUf_`5`hYbVYf[ `Y]b YfZf]gWXYbXYg `9f`YVb]g" `8]Y `j YfgWX]YXYbYb `6YW_Ybž'Fi hgWXYb `i bX K Y``bYggVYfY]WXY`a UWXYb `XYb `5ei UdUf_`ni `Y]bYa `dYfZY_hYb N]Y``Ub `Y]bYa `\Y]» Yb `Gca a YfhU[ "'9g`[ ]Vh`gdYn]Y``Yb ?]bXYfVYfY]WXY`a ]h`Z`UWXYb `6YW_Ybž'X]Y `]XYU``Z<math>\emptyset f `X]Y `\_`Y]bYfYb ; AghY `g]bX"$ 

#### , "'Hfc'UbYf'Gd]Y`d`Uhn

 $9]b"k Y]hYfYg"<][ \ \ \ ][ \ \ \ ][ \ \ \ ][ \ \ \ ]]hYb"]gh"XYf"Hfc 'UbYf Gd]Y"d"Uhn"]b"C ghYf\c`n""8]YgYf"[ fc \ \ \ Y"Gd]Y"d`Uhn"V]YhYh i a ZUb[ fY]WXY"? "YhhYfa Ò[ `]WX_Y]hYbž"GWXUi _Y"b"i bX"Fi hgWXYbž X]Y"X]Y": UbhUg]Y"UbfY[ Yb""9"hYfb"_\ObbYb"g]WX"Ui Z"XYb"6\Ab_Yb YbhgdUbbYbž"k\A\fYbX"X]Y"?]bXYf"gd]Y"Yb"i bX"bYi Y": fYi bXY Z]bXYb"$ 

#### - "6Ui Yfb\cZVYgi W

9]bY'[fc»Ufh][Y'A Ò[`]WX\_Y]hž?]bXYfb'X]Y'BUhi f'bÀ\Yf'ni 'Vf]b[Ybž]gh'Y]b'6Ygi WX'Ui Z'Y]bYa 'XYf'nU\`fY]WXYb'6Ui Yfb\ÒZY']b'XYf
La[YVi b["'<]Yf'\UVYb': Ua]`]Yb'X]Y'A Ò[`]WX\_Y]hž'j YfgWX]YXYbY
H]YfY'ni 'gY\Ybž'g]Y'ni 'ZØhhYfb'i bX'gc[Uf'VY]'XYf'9fbhY'ni '\Y`ZYb"
J]Y`Y'6Yhf]YVY'V]YhYb'gdYn]Y``Y'Dfc[fUa a Y'ZØf'?]bXYf'Ub"

#### Ni gUa a Yb[YZUggh

9[U`žcV'G]Y'X]Y'H]Yfk Y`h'\Ui hbU\'Yf`YVYbž'UWh]cbfY]W\Y

# J YfUbghU`hi b[ Yb i bX : YghYž X]Y Xi b]W h j YfdUggYb gc``hYgh

CghYf\c`nžY]bY'VYnUi VYfbXY'FY[]cb']a '<YfnYb'B]YXYfgUWXgYbgž V]YhYh'XUg'[UbnY'\*J\\f'ØVYf'Y]bY'Vi bhY'DU`YhhY'Ub JYfUbghU`hi b[Yb'i bX': YghYbž'X]Y'gck c\`'9]b\Y]a ]gWXY'U`g'Ui WX 6Ygi WXYf'Ubn]Y\Yb"'CV'hfUX]h]cbY``Y': YghYž'\_i `hi fY``Y'9j Ybhg'cXYf gU]gcbU`Y'A Àf\_hYž'\]Yf']gh'ZØf''YXYb'; YgWXa UW\_'Yhk Ug'XUVY]"'<]Yf g]bX'Y]b][Y'<][\`][\hgž'X]Y'Xi 'VY]'XY]bYa '6Ygi WX']b'CghYf\c`n b]WXh'j YfdUggYb'gc``hYgh

- : fØ\`]b[gYfk UW\Yb']a 'I bhYf\c`n' '9]b : fØ\`]b[ga Uf\_hž'XYf'hmd]gW\Yfk Y]gY']a '5df]`'ghUhhZ]bXYh" 8]Y': Ygh`]W\\_Y]hYb'VY]b\U`hYb'?i bgh\UbXk Yf\_ž \_i`]bUf]gW\Y'?Ògh`]W\\_Y]hYb'i bX'@j Y!A i g]\_"
- C ghY fZY`X Y f`G W ØhnY b ZY gh` '9]b`hfUX]h]c b gfY]W Y g`: Y ghž X U g`^À\f`]W `]a '5i [i gh`[YZY]Y fh`k]fX" G W ØhnY b d U f U X Y ž A i g]\_ 'i b X 'Y]b Y 'J]Y`nU\`'j c b`: U\f[Yg W À ZhY b`gcf[Yb`ZØ f Y]b`i b j Y f [Ygq`]W Y g`9 f`Y V b ] g"
- < YfVghZYgh']b'CghYf\c`n' '8]YgYg': Ygh']a 'C\_hcVYf
  j YfV]bXYh'HfUW\hYbž'A i g]\_'i bX'\_i `]bUf]gW\Y'; YbØggY"'9g
  ]gh'Y]bY'\Yfj cffU[YbXY'; Y`Y[Yb\Y]hž'`c\_U`Y'GdYn]U`]hÀhYb
  ni 'dfcV]YfYb"
  </p>

9]b'k Y]hYfYg'[fc»Yg'<][\`][\h']b'XYf'FY[]cb']gh'XYf'CghYf\c`nYf
K Y]\bUW\hga Uf\_hž'XYf'bcfa U`Yfk Y]gY'j cb'9bXY'Bcj Ya VYf'V]g
\_i fn'j cf'K Y]\bUW\hYb'ghUhhZ]bXYh''8Yf'A Uf\_h'VY[Y]ghYfh'a ]h
ZYgh`]W\Yf'6Y`Yi W\hi b[ž\UbX[YZYfh][hYb'; YgW\Yb\_Yb'i bX'`c\_U`Yb

@YW\_YfY]Ybž'k]Y'@YV\_i WXYb'i bX'; `Ø\kY]b"'<]Yf'g]bX'Y]b][Y'XYf  $5hhfU_h]cbYb$ .

HU[	6YgcbXYfY <sup>.</sup> 9fY][b]ggY
%" <sup>·</sup> 5Xj Ybh	9fòzzbib['XYg'AUf_hYgž'5b_ibZh
	XYg'B]_c`Ui g
&"`5Xj Ybh	@jj Y!A i g]'j cb 'Òfh`]W\Yb
	7\ÒfYb
' " <sup>·</sup> 5Xj Ybh	< UbXk Yf_gj cfZØ\fi b[Yb i bX
	?]bXYfdfc[fUa a
(" <sup>5</sup> Xj Ybh	: Ygh`]W\Yg': Yi Yfk Yf_'i bX
	5VgWX`i ggZY]Yf

9]b'k Y]hYfYf'ZYghYf'HYfa ]b']a '? U`YbXYf'XYf'FY[]cb']gh'XYf'
A ÂfWX Yb\UZhY'5Xj Ybhž'XYf'Y]b'5VYbhYi Yf'ZØf'X]Y'[UbnY
: Ua ]`]Y'V]YhYh"'?]bXYf'XØfZYb'g]WX'Ui Z``YVYbXY
K Y]\bUWXhga ÀfWXYbZ][i fYb'i bX'gdUbbYbXY'K cf\_g\cdg'ZfYi Ybž
k]Y'XUg'6UghY`b'j cb'K Y]\bUWXhg[YgWXYb\_Yb"'5i WX'X]Y
9fk UWXgYbYb'\_ca a Yb'b]WXh'ni '\_i fnž'a ]h'YX`Yb'K Y]bYb'i bX
\UbX[Ya UWXhYb'?i bghk Yf\_Yb"'8]Y'ZYgh`]WXY'Gh]a a i b[']gh
bU\Yni '[fY]ZVUf'i bX'n]Y\h'6Yqi WXYf'Ui g'bU\'i bX'ZYfb'Ub"

8]Y``c\_U`Y`@YVYbgUfh!A YggY`]a :: fØ\'U\f`]gh'Y]b`k Y]hYfYf
A Y]`YbghY]b`]a :J YfUbghU`hi b[g\_U`YbXYf'j cb`CghYf\c`n"'<]Yf'XfY\h
g]W\`U``Yg'i a :; Ygi bX\Y]hž'K Y``bYgg'i bX`bUW\\U`h][Y
@YVYbgk Y]gY"'8]Y`A YggY`V]YhYh`Y]bY`D`UhhZcfa :ZØf``c\_U`Y
DfcXi nYbhYb`i bX'<UbXk Yf\_Yfž']\fY`DfcXi \_hY`ni 'dfÀgYbh]YfYb"
K cf\_g\cdg'ni 'H\Ya Yb`k ]Y'<UbXUfVY]hž'BUhi f\Y]`\_i bXY'i bX
[Ygi bXY'9fbÀ\fi b['fi bXYb'XUg'Dfc[fUa a 'UV"

#### H]ddg ZØf XY]bYb 6Ygi W..

- : fØ\nY]h][ 'UbfY]gYbž'i a 'X]Y'VYghYb'D`ÀhnY'ni 'g]W\Yfbž VYgcbXYfg'VY]'VY`]YVhYb'JYfUbghU`hi b[Yb"
- 9]bYb``c\_U`Yb`: Ø\fYf`cXYf`GhUXhd`Ub`a ]hni bY\a Ybž`i a b]W\h'XUg`K YgYbh`]W\Y`ni 'j YfdUggYb"
- I bVYX]b[h'hfUX]h]cbY``Y'; Yf]W\hY'ni 'dfcV]YfYb' 'X]Y fY[]cbU`Yb'GdYn]U`]h\hYb'g]bX'Y]b'; Ybi gg°

I a 'XYb'j c``Yb'l a ZUb[ 'XYf'J YfUbghU`hi b[ Yb'i bX': YghY']b CghYf\c`n'ni 'Yf`YVYbž'gc``hYgh'Xi 'X]Y'Òfh`]W\Yb'BUW\f]W\hYb'i bX J YfUbghU`hi b[ Yb'fY[ Y`a À» ][ 'ØVYfdfØZYbž']bgVYgcbXYfY'Ui Z cZZ]n]Y``Yb'K YVgY]hYb'k ]Y'cghYf\c`n"XY"'CV'Xi ']b'XYf'GhUXh'V]gh cXYf'Y]bYb'HU[ YgUi gZi [ 'd`Ubghž'X]Y'J YfUbghU`hi b[ Yb']b CghYf\c`n'g]bX'Y]bY'[ fc» Ufh][ Y'A Ò[ `]W\\_Y]hž'X]Y'`c\_U`Y'?i `hi f'ni Yf`YVYb'i bX'i bj Yf[ Ygg`]W\Y'9f]bbYfi b[ Yb'ni 'gW\UZZYb"

#### 8 Y hU]`c

6Ygi WXYb G]Y i bg Ui Z Y]bY!fY]gY "XY