

## GØXh]fc`g' i [YbX'[fØb. A]h'bYi Yf FYgc`i h]cb'[Y[Yb'CjYf!Hcif]ga i g']a 5`dYbfUi a °

8]Y': M9; 'X]g\_i h]YfhY']b'DUf]g'XYb'Cj Yf!Hci f]ga i g']a 5`dYbfUi a 'i bX'ZcfXYfhY'bUW\U`h][Y'@Ògi b[Yb'ZØf'XYb Hci f]ga i ggY\_hcf"



GØXh]fc`ž:=hU`]Yb'!'8]Y'A\f`]W\Y'; YbYfU'j YfgUa a `i b[ 'XYf
: YXYfUh]cb'cZ'Mci b[ '9i fcdYUb'; fYYbg'fl M9; Ł'ZUbX'j ca '&%"'V]g
&) "'A U]'&\$&) ']b'DUf]g'ghUhh'i bX'VfUW\hY'fi bX'%' \$'8Y`Y[ ]YfhY'Ui g
a Y\f'U`g'' \$'@\AbXYfb'ni gUa a Yb"'GØXh]fc``k Uf'Xi fW\'7Ua ]``U
7f]ghcZc`Yhh]ž'; UVf]Y``DfYbbYf'i bX'\\*i`]UbY'K ]`X'j YfhfYhYb"'6Y]
X]YgYf'VYXYi hYbXYb'J YfUbghU'hi b[ '`Y[ hY'X]Y'gØXh]fc`Yf
8Y`Y[ Uh]cb'Y]bY'Y][ YbY'FYgc`i h]cb'j cfž'X]Y'g]W\'a ]h'XYa 'Cj Yf!
Hci f]ga i g']a '5`dYbfUi a 'Ui gY]bUbXYfgYhnhY"'8]Y'FYgc`i h]cb
ZcfXYfh'A U» bU\a Yb'ZØf'Y]bY'bUW\\U`h][ Y'hci f]gh]gW\Y
9bhk ]W\_`i b[ 'gck ]Y'Y]bYb'`\AbXYfØVYf[ fY]ZYbXYb
K ]ggYbgUi ghUi gW\'i bX'k i fXY'Y]bgh]a a ][ 'j cb'U``Yb'8Y`Y[ Uh]cbYb

7 Ua ]``U'7f]ghcZc`Yhh]`gdfUWX 'j cb`Y]bYa 'k Yfhj c``Yb`5i ghUi gWX nk ]gWXYb`XYb`j YfgWX]YXYbYb`Cf[ Ub]gUh]cbYb'i bX`VYhcbhY`X]Y dc`]h]gWXY`=bgd]fUh]cbž'X]Y`Ui g`XYb`J YfUbghU`hi b[ Yb`[ Yk cbbYb k YfXYb`\_cbbhY''; UVf]Y``DfYbbYf`Yf\_`ÀfhYž`XUgg`X]Y`F Ygc`i h]cb`Y]bnYbhfU`Yg`5b`]Y[ Yb`Ui g`GØXh]fc``Ui Z`Yi fcdÀ]gWXYf`9VYbYg]WXhVUfYf`[ Ya UWXh`\Uh"'8Yf`5i ghUi gWX`ØVYf`XYb`Cj Yf!Hci f]ga i g`]gh`VYgcbXYfg`fY`Yj Ubhž`XU`X]YgYf`b]WXh`bi f``c\_U`Yž gcbXYfb`Ui WX`[`cVU`Y`BUWX\U`h][ \_Y]hgn]Y`Y`]b`: fU[ Y`ghY``h"

## $BUWX \setminus U^h][ Y]h^n]a$ 'Hci f]ga i g

8 Yf'Hci f]ga i ggY\_hcf'Vf]b[h'nU\`fY]W\Y'k]fhgW\UZh`]W\Y'JcfhY]`Y
a ]h'g]W\ž']bgVYgcbXYfY']b'8 Yi hgW\`UbXž'k c'j ]Y`Y'\_`Y]bY'i bX
a ]hhY`ghÀbX]gW\Y'I bhYfbY\a Yb']b'X]YgYa '6YfY]W\'hÀh]['g]bX"
A ]``]cbYb'A YbgW\Yb'g]bX']b'XYf'Hci f]ga i gVfUbW\Y'VYgW\ÀZh][ hž
i bX'XYf'GY\_hcf'V]YhYh'9bhk]W\_`i b[ gdYfgdY\_h]j Ybž']bgVYgcbXYfY
ZØf'`ÀbX`]W\Y'FY[]cbYb"'8]YgYf'Di b\_h'k]fX'Ui W\'j cb'XYf'; fØbYb
6i bXYghU[ gZfU\_h]cb'\Yfj cf[ Y\cVYbž'X]Y'g]W\'ZØf'Y]bYb
bUW\\U`h][ Ybž'\_`]a UZfYi bX`]W\Yb'i bX'gcn]U``[ YfYW\hYb'Hci f]ga i g
Y]bgYhnh"

8 c W 'Yg'[] Vh'Ui W 'bY[Uh]j Y'5i gk]f\_i b[Yb'XYg'Hcif]ga i gž XUfi bhYf'\c\Y'9a]gg]cbYbž'A Ø``i bX'8 fi W\_'Ui Z'K c\bi b[ga Àf\_hY Xi fW ': Yf]YbXca]n]`Y"'8 U\Yf'VYghY\h'X]Y'Bchk YbX][\_Y]h'ZØf'Y]b I a XYb\_Yb'i bX']bhY``][YbhY'@Ògi b[Yb']a 'Hcif]ga i g"'8]Y : ÒfXYfi b['Y]bYf'Yb[YfYb'HU\_hi b['XYg'ÒZZYbh`]WXYb'BU\j Yf\_Y\fg i bX'XYf'5i gVUi 'XYf'GWX]YbYb! \$\darkled{b}ZfUghfi\_hi f'g]bX'nYbhfU`Y'5bgÀhnY ni f'I bhYfghØhni b['Y]bYg'bUWX\U`h][YfYb'Hcif]ga i g"

## Ni \_i b Zhgd Y f gd Y \_ h]j Y b i b X < Y f U i g Zc f X Y f i b [ Y b

8]Y: M9; 'j YfUVgW\]YXYhY'k À\fYbX']\fYf'; YbYfU'j YfgUa a `i b[b]W\h'bi f'X]Y'FYgc`i h]cb'ni a 'Cj Yf!Hci f]ga i gž'gcbXYfb'Ui W\k Y]hYfY'k ]W\h][Y'DUd]YfYž'XUfi bhYf'Y]bY'ni f'Yi fcdÀ]gW\Yb

 $G]WXYfY]hg! "i bX"JYfhY]X][ i b[ gdc`]h]\_"gck ]Y"Y]bY"ni f"G]hi Uh]cb"]a BUYb"CghYb"" <math>\pm$ 0"X]YgYb"8c\_i a YbhYb"k ]fX"Y]b"gcZcfh][Yf"i bXXUi YfYUZhYf"K UZZYbgh]``ghUbX"]b"; UnU"[YZcfXYfh"i bX"XYf"GWXi hn XYf"N]j ]`VYj Ò`\_Yfi b[ 'h\Ya Uh]g]Yfh"8]Y"8]g\_i gg]cb"ØVYf"X]Y" =gfUY`! DU`Agh]bU!FYgc`i h]cb"k Uf"VYgcbXYfg"]bhYbg]j "i bX"XUi YfhY"V]g gdAh"]b"X]Y"BUWXh""  $\Rightarrow$ 1"]UbY"K ]`X"VYnY]WXbYhY"X]Y; YbYfU'j YfgUa a `i b[ 'U`g"`Y\ffY]WXY"9fZU\fi b[ ']b"XYf"dc`]h]gWXYb?ca dfca ]ggZ]bXi b[ "

I a 'bUW\\U`h][Y'hcif]gh]gW\Y'9bhk]W\_`i b['hUhgÀW\`]W\
i a ni gYhnYbž'a ØggYb'X]Y'<YfUi gZcfXYfi b[Yb'XYg'i b[Ygi bXYb
Hcif]ga i g'Ub[Y[Ub[Yb'k YfXYb"'8]Yg'YfZcfXYfh'i bhYf'UbXYfYa

♣bj Ygh]h]cbYb']b' ♣bZfUghfi \_hi f'k]Y'; Y\kY[Y'i bX'FUXkY[YbYhnYž
i a 'Y]bY'i a kY`hZfYi bX`]W\Y'A cV]`]hÀh'ni 'ZÒfXYfb"'5i W\'X]Y
GW\UZZi b['ZU]fYf'5fVY]hgVYX]b[i b[Yb'i bX'6Y[Y[bi b[ga ca YbhYa]h'XYf'`c\_U`Yb'6Yj Ò`\_Yfi b['g]bX'i bYf`Àgg`]W\ž'i a 'Y]bYb
hcif]ga i gZfYi bX`]W\Yb'FU\a Yb'ni 'gW\UZYb"

8]Y = h]h]Uh]j Y : XYf :: M9; ini f : F Ygc \( i \) h]cb : ØVYf : Cj Yf! Hci f]ga i g : nY][ h XYi h\( ) W \( k \) Y : k ]W \( h \) [ : Y]b : b Yi Yf \( k \) b UW \( U \) h][ Yf : 5 b g Uhn : ]a Hci f]ga i ggY\_hcf : ]gh : N]Y \( ` \) ]gh : Yg \( k \) Y b X : gck ]Y : XYb [ YgUa hYb : 5 \( d Y b f U i a : U \) g : \( O \) \_c \( c \) [ ]gW : Yb \( k \) O\_c b ca ]gW : Yb i b X : gcn]U \( b UW \( U \) h][ Yf Yb : Hci f]ga i ggh Ub Xcfh : k Y]h Yfni Yb hk ]W\_Y \( b \( k \) Y \( b \) i b ni f : ? \( ) a Ub Yi hf U \) ]h \( h \) h : 3 \( X \) \( ) "

8 YhU]`g	
Cfh	GØXh]fc`ž'≢hU`]Yb
EiY``Yb	• k k k "gi YXh]fc`bYk g"]h
	<ul><li>k k k "[fi YbY!Vi bXYghU["XY</li></ul>

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