

## 9fZc`[fY]WXY'?fY]g'i b[h]YfgWXUi ']b I Y`gYb. FUggY\_Ub]bWXYb 'VY[Y]ghYfb'

F UggY\_Ub]bWXYbnØWXhYf`Ui g`; fUZgWXUZh`6Ybh\Y]a dfÀa ]YfYb`]\fY`VYghYb`NØWXhYf`VY]`YfZc`[fY]WXYf ?fY]g'\1 b[h]YfgWXUi `]b`I Y`gYb"

8]Y fYbca a ]YfhYb F UggY\_Ub]bWX YbnØWX hYf \ UVYb g]WX 'Ua YhnhYb '5i [i ghk c WX YbYb XY ']b I Y `gYb 'j YfgUa a Y `hž'i a ']\fY VYghYb 'H]YfY 'ni 'dfÀgYbh]YfYb" '5b 'nk Y] 'HU[Yb '\_cbbhYb 'X]Y 6Ygi WX Yf 'X]Y 'VYY]bXfi W\_YbXY '5fhYbj ]Y `ZU `h'j cb 'fi bX '%) \$ F UggY\_Ub]bWX Yb ']a '? `Y]bh]YfnØWX hYf\Y]a 'VYk i bXYfb" '8Yf ?Ub]bWX Ybni WX hj YfY]b '=%) ) 'I Y `gYb '\ UhhY 'X]Y 'J YfUbghU `hi b[\Yfj cffU[YbX cf[Ub]g]Yfhž'k Ug 'j cb 'XYb 'nU\ `fY]WX Yb'; ÀghYb dcg]h]j 'k U\f[Ybca a Yb k i fXY" '8]Yg 'nYi [h'j cb 'XYa '[fc > Yb +b\YfYgqY 'Ub' > b[h]YfqWX Ui Yb ']b 'XYf 'FY[]cb"

<Y]\_c'K c`Zž'XYf'Jcfg]hnYbXY'XYg'[ Ugh[ YVYbXYb'JYfY]bgž
YfÒZZbYhY'X]Y'GWXUi ']a 'j c``'VYgYhnhYb'JYfY]bg\Y]a 'i bX'VfUWXhY
gY]bY': fYi XY'ØVYf'X]Y'fY[ Y'HY]'bU\a Y'XYf'NØWXhYf'ni a
5i gXfi W\_"'9f'VY[ fØ» hY'Ui WX'9\fYb[ ÀghYž'XUfi bhYf'XYb
6Øf[ Yfa Y]ghYf'< U'c'6cgWXž'XYf'X]Y'GWX]fa \YffgWXUZh'ZØf'X]Y
JYfUbghU'hi b[ 'ØVYfbca a Yb'\UhhY"'6cgWX'k ØbgWXhY'XYb
NØWXhYfb'i bX'6Ygi WXYfb'j]Y``9fZc`[ 'i bX': fYi XY'k À\fYbX'XYf
GWXUi 'i bX'VYhcbhY'X]Y'\c\Y'E i U']hÀh'XYf'nØWXhYf]gWXYb
@Y]ghi b[ Yb"'K Ybb'Y]bY'gc'WX'k ]WXh][ Y'5i gghY'`i b[ 'gc'[ i h
VYgi WXh']ghž'nY][ h'XUg'X]Y'ghUf\_Y'; Ya Y]bgWXUZh'i bX'X]Y
@Y]XYbgWXUZhž'X]Y']b'XYf'FUggY\_Ub]bWXYbni WXh'ghYW\_h''</pre>

## 6Yi fhY]`i b[ 'i bX'9\fi b[ Yb

 $8\,]Y\,^\circ DfY\,]gf]WX\,hY\,f\check{z}\,^\circ 5\,^\circ Zc\,b\,g\,^\circ K\,\,]hhY\,^\circ i\,\,b\,X\,^\circ F\,c\,V\,Y\,fh\,^\circ F\,c\,hhghY\,[\,\,[\,\,Y\,\check{z}\,^\circ \setminus\, U\,hhY\,b\,]\,]$ 

 $VYfY]hg``Ua `: fY]hU[ `j cf`XYf``OZZYbh`]WXYb``5i gghY``i b[ `X]Y F UggY_Ub]bWXYb``VY[ i hUWXhYh''`=\ fY``6Yk Yfhi b[ Yb`k i fXYb`a ]h GdUbbi b[ `Yfk UfhYh''`BUWX`XYf``6Y_Ubbh[ UVY`XYf``9f[ YVb]ggY_cbbhYb`X]Y``YfZc`[ fY]WXghYb``NØWXhYf`]b``]\ fYb``? UhY[ cf]Yb`a ]h`XYa H]hY```?fY]g^\fa b[ h]Yfa Y]ghYf ``Ui g[ YnY]WXbYh`k YfXYb''`=\b``XYf`YfghYb?``UggY`gWX`]Y*)`]WX`[ ]b[ `XYf`H]hY``Ub``Gj Yb``A YYbXYfa Ubb`a ]h gY]bYa `< Yfa Y`]b``F UggY_Ub]bWXYbž``XUg`Y]bY`\Yfj cffU[ YbXY; YgUa hdi b_hnU\``j cb`' &#&$``Di b_hYb``Yfn]Y`hY''$ 

K Y]hYfY'G]Y[Yf'k UfYb'BcU\i bX'H\Yc'A YYbXYfa Ubbž'X]Y'a ]h
]\fYb'Nk Yf[k]XXYf'k]`XZUfVYb!k Y]» ']b'XYf'nk Y]hYb'?`UggY
hf]i a d\]YfhYb"; YYfh! \$\mathref{M}f[Yb'9b[VYfg'\text{@VYfnYi}[hY'X]Y'DfY]gf]W\hYf
]b'XYf'Xf]hhYb'?`UggY'a ]h'XYb': UfVYbnk Yf[Y'\chchZUfV][\text{z'k \text{A}\fYbX}
; Yf\UfX'A Uh\`U[Y']b'XYf'j]YfhYb'?`UggY'a ]h'gY]bYb
? UghUb]YbVfUi bYb'@ch\f]b[Yf'X]Y'< \text{OW\kaphVYk Yfhi b['Yf\]Y`h''
< Yfa Ubb'FUXYa U\_Yf'fci bXYhY'X]Y'@]ghY'XYf'A Y]ghYf'a ]h'gY]bYa
GUh]b'9`ZYbVY]b\text{z'FchUi [Y']b'XYf'Z\text{\text{B}b}ZhYb'?`UggY'UV\text{\text{z'i bX'5bXfYUg}}
7 nUghYf'\_Ua ']b'XYf'g]YVhYb'?`UggY'a ]h'gY]bYa '@\text{\text{C}b}XYhY\text{\text{L}g}Y'\text{\text{B}}\text{\text{L}g}Y'\text{\text{L}g}Y

9]b 'VYgcbXYfYg' < ][\`][\h'XYf'J YfUbghU`hi b['k Uf'X]Y
5i gnY]W\bi b['ZØf'XUg'VYghY'H]Yf'XYf' \(\frac{1}{2}\) [YbX\(\frac{1}{2}\) XUg' j cb 'XYf
Ni W\h[Ya Y]bgW\UZh'BcU\'i bX'H\Yc' \(\frac{1}{2}\) YbXYfa Ubb'a ]h']\fYa
Nk Yf[k]XXYf' \(\frac{1}{2}\) XZUfVYb!k Y]\(\frac{1}{2}\) "[YghY``h'k i fXY"'8]Y
NØW\hYf[Ya Y]bgW\UZh'ghY``h'b]W\h'bi f'X]Y'VYghYb'H]YfY\(\frac{1}{2}\) gcbXYfb
Ui W\'X]Y'f\(\frac{1}{2}\) YfYghYb'; YgW\]W\hYb'j cf"'Ni XYa 'k i fXY'; YYfh!
\(\sigma f[Yb'9b[VYfg'U`g'JYfY]bga Y]ghYf'Ui g[YnY]W\bYh''

## Cf[Ub]gUh]cbibX5igV]W

8]Y'VYa Yf\_Ybgk YfhY'Cf[Ub]gUh]cb'XYf'GW\Ui'k i fXY'j cb'XYb A]h[`]YXYfb'XYg'JYfY]bg'=%)) I Y`gYb'[Y`cVh''8Yf'?fY]gj YfVUbX; fUZgW\UZh'6Ybh\Y]a ž'XYf'ni 'XYb'\_`Y]bghYb']a '@UbXYgj YfVUbX K YgYf'9a g'nÀ\`hž'Ài » YfhY'gY]bY'8Ub\_VUf\_Y]h'ZØf'X]Y \Yfj cffU[YbXY'8i fW\ZØ\fi b['XYg'9j Ybhg''8Ug'9j Ybh'\Uh'b]W\h bi f'X]Y'NØW\hYf'ni gUa a Yb[YVfUW\hž'gcbXYfb'Ui W\'XYb Ni gUa a Yb\U`h'i bX'XYb'5i ghUi gW\']bbYf\U`V'XYf F UggY\_Ub]bW\Ybni W\h'[YZÒfXYfh''JcfghUbXga]h[`]YX'HcV]Ug

A YYbXYfa Ubb`k ]Yg`XUfUi Z`\]bž`XUgg`gc`W\Y`J YfUbghU`hi b[ Ybb]W\h'bi f`XYf`\c\Yb`Ni W\hei U`]hÀh`X]YbYbž`gcbXYfb`Ui W\`XYbNØW\hYfb`Y]bY`D`UhhZcfa `V]YhYbž'i a `g]W\`Ui gni hUi gW\Yb`i bXjcbY]bUbXYf`ni ``YfbYb"

A ]h'XYa '9fZc`[ 'X]YgYf'?fY]g'\ b[h]YfgW\Ui ']a 'FØW\_Yb'V`]W\_h'XYf ?fY]gj YfVUbX'a ]h'J cfZfYi XY'Ui Z'X]Y'bÀW\ghY'J YfUbghU`hi b[ .'X]Y ?fY]ggW\Ui 'A ]hhY'Bcj Ya VYf"'8]YgY'k ]fX'nU\`fY]W\Y'NØW\hYf'i bX X]Y'VYghYb'H]YfY'XYf'FY[]cb'k ]YXYf'ni gUa a YbVf]b[Yb'i bX'XUg 9b[U[Ya Ybh'XYf'NØW\hYf']b'XYb'J cfXYf[fi bX'fØW\_Yb"'8 Ug'N]Y` XYf'Cf[Ub]gUhcfYb'V`Y]Vhž'X]Y'HfUX]h]cb'XYf'FUggY\_Ub]bW\Ybni W\h ni 'VYk U\fYb'i bX'[ `Y]W\nY]h][ 'UhhfU\_h]j 'ZØf'bYi Y'A ]h[ `]YXYf'ni gY]b"

8 YhU]`q

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