

; ghUXh hfUi Yfh i a 'GYdd'FUdd`. '9]bY @Y[YbXY'j Yf`Aggh'X]Y'6Ø\bY

≈gYZ GYdd] FUdd`žI bhYfbY\a Yf'Ui g'; ghUXh'Ua 7\]Ya gYYž']gh'j YfghcfVYb"'GY]b'9fVY'i bX'X]Y'HfUi Yf'XYf : Ua]`]Y'k YfXYb'[Yk ØfX][h"

; $ghUXh^*Ua$ $^*7^*]Ya$ $gYY\check{z}^*8Yi$ $hgWX^*UbX^*! \approx gYZ^*GYdd]$ $^*FUdd^*\check{z}^*Y]b$ $^*YfZc^*[fY]WXYf^*I$ $^*bhYfbY^*A$ $^*Yf^*i$ $^*bX^*Y]bY^*VY_UbbhY^*DYfgOb^*]WX_Y]h^*Ui$ g ; $ghUXh^*Ua$ $^*7^*]Ya$ $gYY\check{z}^*]gh^*j$ $^*YfghcfVYb^*'^*9f^*ghUfV^*bUWX^*_i$ $^*fnYf\check{z}$ gWX k $^*YfYf^*?fUb_{Y}^*]h^*]a$ $^*5^*hYf^*j$ $^*cb^{**}$ $^*syl^*$ $^*fYb^*GY]b^*GC^*b\check{z}^*\approx gYZ$ 5^*YI $^*UbXYf^*F$ $^*Udd^*\check{z}^*Yf]b^*bYfhY^*Ub^*XUg^*YfZO^*hY^*a^*YVYb^*gY]b^*Yg^*J$ $^*UhYfg\check{z}$ $^*XYf^*a$ $^*Jh^*S^*$ $^*JV^*fYb^*XYb^*6cc^*hgj$ $^*Yf^*Y]V^*OVYfbUVa$ *i $^*bX^*XUg^*$; *YgWXAZh $^*ZUgh^*$) $^*Syl^*Yf^*Ub[^*ZOVfhY^*]b^*XYb^*B^*ZYghYb^*D^*Uhn^*]b$ $^*XYf^*$; *Ya $^*Y]bgWX$ $^*UZh^*GYB^*Y^*$ $^*YbYfUh]cbYb^*GhUa$ *a *j $^*bXYbZ^*$ $^*Ug^*Yy^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*f^*$ $^*JV^*$ $^$

 $8]Y : Ua]`]Y `F Udd`` \ Uh'Y]bY ``Ub[Y `HfUX]h]cb `]a `I bhYfbY \ a Yfhi a ž X]Y `] \ fY `K i fnY`b `]a ` < i VYf\cZ`\Uh'' <]Yf `VYhf]YV `gY]b ; fc * j UhYfž GYdd]` J "ž `UV '%-) (`XUg` 7 UZY `, VYfZU\fh `i bX 'j Yfa]YhYhY `N]a a Yf" BYVYb `XYa `6cchgj Yf`Y]\ `VYk]fhgW\UZhYh`X]Y : Ua]`]Y `a Y\fYfY I bhYfbY\a Ybž `XUfi bhYf `XUg` < chY``7\]Ya gYY!DUbcfUa U`i bX `X]Y D]nnYf]U`7cbhY`7\]Ya c" <math>\Rightarrow$ g[YgUa h`\UVYb`X]Y `F Udd`g`]b`XYf FY[]cb`Y]bY`VYY]bXfi \(\w_YbXY `5bnU\``Ub`6YhhYbž `bÀa `]W\ `\ØVYf) \$\$ z`X]Y `g]Y`]b`]\fYb` < chY`g`UbV]YhYb"

8 Ug '9fVY' j cb 'xcgYZ'F Udd'

 $\mathfrak{L}_{gYZ} F \, \mathsf{Udd}^k \, \mathsf{i} \, \, \mathsf{fXY}^k \, \mathsf{U} \mathsf{i} \, \, \mathsf{W} \, \mathsf{U}^* \mathsf{g}^* \mathsf{Y} \mathsf{JXY} \mathsf{bgW} \, \mathsf{UZ} \mathsf{h}^* \mathsf{JW} \, \mathsf{Yf}^* \mathsf{<} \, \mathsf{UbXk} \, \, \mathsf{Yf}_{gY} \mathsf{f}^* \mathsf{i} \, \, \mathsf{bX} \mathsf{g}^* \mathsf{W} \mathsf{UZ} \mathsf{h}^* \mathsf{JW} \mathsf{Yf}^* \mathsf{V} \mathsf{JZ} \mathsf{h}^* \mathsf{JW} \mathsf{JZ} \mathsf{h}^* \mathsf{JZ} \mathsf{JW} \mathsf{JZ} \mathsf{JW} \mathsf$

BUhi f`]YV\UVYf`VY_Ubbh" 9f`VYgU» `Y]b`? Ud]hÀbgdUhYbh'i bX i bhYfghØhnhY`[Y`Y[Ybh`]W\`X]Y`7\]Ya gYY!GW\]ZZZU\fh" 9VYbgc k Uf Yf`Y]b`VY[Y]ghYfhYf`5i hcgUa a `Yfž`]bgVYgcbXYfY`j cb`6A K Mci b[h]a Yfb" 'Hfchn`gY]bYf`@Y]XYbgW\UZh`ZØf`5i hcg`nc['Yg`]\b gY`hYb`Ui g`gY]bYf`<Y]a Uh`k Y[ž`XU`Yf`X]Y`NY]h`Ua `7\]Ya gYY VYj cfni [hY" 6Øf[Yfa Y]ghYf`6Yfb\UfX`<U]bn`VYhcbhYž`XUgg`&gYZ FUdd``]b`XYf`; Ya Y]bgW\UZh`gY\f`VY`]YVh`k Uf`i bX`Y]b`[YgW\ÀhnhYf A YbgW\`k Uf"

8]Y'6YYfX][ib[gZY]Yf']gh'ZØf'XYb'%&"'5df]`ia'%('I\f']b'XYf?]fW\Y']b'; ghUXh'[Yd`Ubh"'GY]b'Gc\b'\Uh'Ub[Y_ØbX][hž'g]W\'iaX]Y'IbhYfbY\aYb'ibX'X]Y': Ua]`]Y'ni'_Øa aYfbž'ia'XUg JYfaÀW\hb]g'XYg'JUhYfg'kY]hYfniZØ\fYb"

: Ua]`]Yb[YgWX]WX hY

$$\begin{split} & \& \text{gYZFUdd`gYb]cfž'VY_Ubbh'U`g`} < i \ \text{VYf'GYdd} \ \ \ \text{z'j YfghUfV'VYfY]hg} \\ & | \text{a } 5 \text{df}] \text{``&$\&\&$']a } \text{`5`hYf'j cb'-} \% \ \text{JV} \text{fYb'''9f'k i fXY'%-} ' \%']b'; \ \text{ghUXh} \\ & [\ \text{YVcfYb''i bX'k i Wkg'a]h'gY]bYb'XfY]'GWkk YghYfb'Ui Z'XYa} \\ & \text{Y`hYf`]WkYb'5bk YgYb'XYa } < i \ \text{VYf} \ \text{cZ'Ui Z''K }]Y'cj \ \text{V!cb`]bY''XY} \\ & \text{VYf]WkhYhž'ØVYfbU\a 'Yf'a]h'&' '\ \ \ \text{JVfYb'X]Y'J YfUbhk cfhi b['ZØf'XYb' < cZ'bUWk'XYa 'HcX'gY]bYg'J UhYfg'i bX'Ybhk]W_Y`hY'X]YgYb' \\ & \text{cbh]bi }]Yf`]Wk'k Y]hYf''8]Y': Ua]`]Y'VYhf]YV'Y]bY'_`Y]bY' \\ & \text{@UbXk }]fhgWkUZhii bX'XUg'7UZÅ' , \ \text{VYfZU\fh } \ \ \text{z'XUg'} \ \ \text{gYZ'[Ya Y]bgUa' a]h'gY]bYf'A i hhYf'ZØ\fhY'' } \end{split}$$

8]Y '9f]bbYfi b[Yb 'Ub' \approx gYZ'F Udd` 'k YfXYb']b 'XYf'; Ya Y]bXY

`YVYbX][`V`Y]VYbž'b]W\h'bi f'Ui Z[fi bX'gY]bYf'i bhYfbY\a Yf]gW\Yb 9fZc`[Yž'gcbXYfb'Ui W\k Y[Yb'gY]bYg'9b[U[Ya Ybhg']b'XYf; Ya Y]bgW\UZh'i bX'gY]bYf'h]YZYb'JYfVi bXYb\Y]h'a]h'gY]bYf < Y]a Uh"

8 YhU]`g	
JcfZU``	Gcbgh][Yg
Cfh	; ghUXh'Ua '7\]Ya gYYž'8Yi hgWX`UbX
EiY``Yb	k k k "fcgYb\Y]a &("XY
	k k k "cj V!cb`]bY"XY
	• k k k "WX]Ya gYY!U`dYb`UbX"XY

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