

## 6Yf`]b'[fY]Zh'XifW.'GW\bY``YfY BYiVUihYb'ZØf'a UfcXY'6fØW\_Yb'

6Yf`]b'd`Ubh'gW\bY``YfY'BYi VUi hYb'ZØf'a UfcXY'6f@W\_Yb"
JYf\_Y\fggYbUhcf]b'I hY'6cbXY'\_ØbX][h'j YfY]bZUW\hY
DfØZj YfZU\fYb'Ub"



6Yf`]bž'8Yi hgW `UbX'!' \delta '6Yf`]b'k YfXYb'a UfcXY'6fØW\_Yb
\_ØbZh][ 'gWkbY``Yf'Xi fWk'BYi VUi hYb'YfgYhnh"'8]Yg'\_ØbX][ hY'X]Y
J Yfk U`hi b[ 'j cb'J Yf\_Y\fggYbUhcf]b'l hY'6cbXY'ff781 \delta 'Ub'"8i fWk
Y]bY'J YfY]bZJWki b[ 'i bX'F YXi n]Yfi b[ 'XYf'DfØZgWkf]hhY'gc``Yb'X]Y
D`Ubi b[ Yb'YZZ]n]YbhYf'[ YghU`hYh'k YfXYb"'Ni \_ØbZh][ ']gh'`YX][ `]Wk
Y]bY'DfØZi b[ 'i bX'5bYf\_Ybbi b[ 'XYf'J cfd`Ubi b[ gd\UgY'Xi fWk'X]Y
ni ghÀbX][ Y'DfØZVY\ÒfXY'YfZcfXYf`]Wkž'k À\fYbX'ni j cf'nk Y]
DfØZi b[ Yb'bchk YbX][ 'k UfYb"'8]YgY'A U» bU\a Y'gc``Y]bY
Yf\YV`]WkY'6YgWk`Yi b][ i b[ 'j cb'Y]bYa 'V]g'nk Y]'\delta\fYb']b'XYf
D`Ubi b[ g!'i bX'J YfUbgWk`U[ i b[ gd\UgY'Yfa Ò[ `]WkYb"

8]Y'FY[Y`i b[Ybž'X]Y'XYf'<Ui dhUi ggWki gg'XYg 5V[YcfXbYhYb\Ui gYg'VYgWk`cggYb'\Uhž'g]bX'ni bÀWkgh'Ui Z'ZØbZ JVfY:VYZf]ghYh":6]g\Yfik UfYb:X]Y:DfØZnY]hYb:XYf

D`Ubi b[gi bhYf`U[Yb:Ui Z'bYi b:A cbUhY:Ub[YgYhnhž'k Ug:g]W\:bi b

Ui Z'Y]bYb:A cbUh'j Yf\_Øfnh":JYf\_Y\fggYbUhcf]b:6cbXY

j YfXYi h`]W\hY:XYb:<UbX`i b[gXfi W\_'VY]a:H\Ya U'6fØW\_Ybž

]bgVYgcbXYfY:bUW\:XYa:5Vf]gg:a Y\fYfYf'6fØW\_Yb:]b:XYf'GhUXhž

k Ug:X]Y:Bchk YbX][\_Y]h:VYgW\:Yi b][hYf'BYi VUi hYb:i bhYfqhfY]W\:h"

## 6i bXYgk Y]hY'D'Ubi b[gVYgWX'Yi b][i b[

8]Y'9bhk]W\_i b[Yb']b'6Yf`]b'ghY\Yb']a '9]b\_`Ub['a]h'XYb''Øb[ghYb6YgW\`ØggYb'XYg'6i bXYghU[Yg"'5a '&\$"'C\_hcVYf'&\$&'
j YfUVgW\]YXYhY'XUg'DUf`Ua Ybh'Y]b'; YgYhn'ni f
D`Ubi b[gVYgW\`Yi b][i b[']a 'J Yf\_Y\fgVYfY]W\"
6i bXYgj Yf\_Y\fga ]b]ghYf'Jc`\_Yf'K ]gg]b['fl 8 DŁ'Ài » YfhY'g]W\
dcg]h]j 'ØVYf'X]YgYb'6YgW\`i ggž'XYf'gW\bY``Y'D`Ubi b[Yb'i bX
6Ui j cf\UVYb'ZØf'6fØW\_Ybž'GW\]YbYb'i bX'GhfU» Yb'ni a 'N]Y'`\Uh"
8 Yf'; YgYhnYgYbhk i fZ']gh'XUg'9f[YVb]g'`Ub[k]Yf][Yf
J Yf\UbX`i b[Yb']bbYf\U`V'XYf'5a dY`\_cU`]h]cb'Ui g'GD8 ž'; fØbYb
i bX': 8 Dž'X]Y'g]W\']a '?cU`]h]cbgj YfhfU['Ui Z'X]Y'6YgW\`Yi b][i b[
XYf'D`Ubi b[g!'i bX'6Ui d\UgYb'j YfghÀbX][h\\UhhYb"

9]b nYbhfu`Ygʻ9`Ya YbhʻXYgʻ; YgYhnYgʻ]ghʻX]Yʻ9]bZØ\fi b[ʻY]bYg @UVY`gʻ j cbʻØVYffU[YbXYa ʻÒZZYbh`]W\Ybʻ $\pm$ bhYfYggY ž'XUg Xf]b[YbXYbʻJcf\UVYbʻni [YcfXbYhʻk]fX"`A]hʻX]YgYa ʻ@UVY`g]bX j Yf\_ØfnhYʻJYfZU\fYbʻi bXʻgW\bY``YfYʻ6Ui VY[]bbYʻj YfVi bXYb" K À\fYbXʻX]Yʻ?cU`]h]cbgdUfhY]YbʻX]YʻBchk YbX][\_Y]hʻX]YgYf A U» bU\a YbʻVYhcbYbžʻYfbhYbʻg]YʻUi W\?f]h]\_ʻj cbʻXYfʻCddcg]h]cb" 781 ii bXʻ5Z8 k YfZYbʻXYfʻFY[]Yfi b[ʻj cfžʻXUgʻJYfZU\fYbʻb]W\h Ui gfY]W\YbXʻZØfʻŸbXYfi b[gUbhfÀ[Yʻ[YÒZZbYh'ni '\UVYbž'k Ugʻni Y]bYa '8Ya c\_fUh]YUVVUi 'ZØ\fY"Ni XYa 'k]fX`\]bhYfZfU[hž]bk]YZYfbʻX]Yʻj YfgW\]YXYbYbʻ $\pm$ bhYfYggYbʻ ']bgVYgcbXYfYʻnk]gW\YbGhfU» Yb!ʻi bXʻGW\]YbYbdfc $\Upsilon$ \_hYbʻ '[`Y]W\VY\UbXY`h`k YfXYb"

## $^2$ ZZY b h`] WX Y F Y U\_h] c b Y b i b X 5 i g V`] W\_

8]Y'; fØbY'Dc`]h]\_Yf]b'Gi gUbbY'A Yb[Y'\Uh'YVYbZU``g'X]Y Bchk YbX][\_Y]h'Y]bYg'VYggYfYb'Gi VghUbnYf\U`hg'VYhcbhž'k À\fYbX X]Y': 8D'X]Y'6YXYi hi b['Y]bYf'[i h'Ui g[YVUi hYb'=bZfUghfi \_hi f'ZØf K UWX ghi a 'i bX'9bhk ]W\_\i b['i bhYfghf]WX"'?f]h]\_Yf'Uf[i a Ybh]YfYbž XUgg'XYf'6Ui 'bYi Yf'5i hcVU\bYb'Y]b'ZUhU\Yg'G][bU\'ZØf'XYb ?\]a UgWXi hn'gYbXY"

#bg[YgUa hii a ZUgghiXUgibYi Yi; YgYhniX]j YfgYiÿbXYfi b[Ybi]b
a Y\fYfYbi; YgYhnYbžiXUfi bhYfiXUgi6i bXYgZYfbghfU» Yb[YgYhnii bX
XUgi5``[Ya Y]bYi9]gYbVU\b[YgYhniiNi XYa ig]Y\hiYgiY]bY
J]YfiU\fYgZf]ghiZØfi; YbY\a ][i b[gj YfZU\fYbij cfžiVUg]YfYbXiUi Z
XYfi9I !F]WXhi]b]Yi&\$&%#%%, +"i9giViY]VhiUVni k UfhYbžik ]YiX]YgY
A U» bU\a Ybi]biXYfiDfUl ]giK ]f\_i b[inY][Ybik YfXYbii bXicViXYf
Ub[YghfYVhYi6YgWXiYi b][i b[gdfcnYggi]biXYbi\_ca a YbXYbi\*J\fYb
hUhgÀWXi]WXi[fY]Zhi

8 Y hU]`g	
J c f ZU``	; YgYhn[YVib[
Cfh	6Yf`]bž'8Yi hgW\`UbX
EiY``Yb	• k k k "fVV&( "XY
	• k k k "hU[ YggW\ Ui "XY
	• k k k "Vi b X Y ghU[ "X Y

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