

# BYiYg: `Ug\Vchg!Id[fUXY'\_ÒbbhY'?fmdhc! AÀf\_hY'bUW\'XYf': ig]cb'fYjc`ih]cb]YfYb

K Ybb'J U`]XUhcfYb'bUWX'XYf': i g]cb'Y]bY'U\_hi U`]g]YfhY
JYfg]cb'j cb': `Ug\Vchg'fA 9J'6ccghŁ']a d`Ya Ybh]YfYbž'\_ObbhY
X]Yg'Y]bYb'A Uf\_h'fYj c`i h]cb]YfYbž'XYf'`YhnhYg'\J\f'+'\\$
A ]``]cbYb'I G!8c``Uf'j cb'A 9J'Y]b[Ybca a Yb'\Uh'8]YgYg
I d[fUXY'Yfa O[`]W\h'Yg'JU`]XUhcfYbž'Y]b'ei Y``cZZYbYg'i bX
XYa c\_fUh]gWXYg'GmghYa 'ni 'bi hnYbž'i a 'XYb'I a gUhn'ni
a UI ]a ]YfYb'i bX'A 9J'a ]h'Gd]Y`Yfb'ni 'hY]`Yb'9g']gh
gWXk]Yf][ž'Y]bY'hfUX]h]cbY``Y': ]bUbndUfU``Y'Y'ZØf': `Ug\Vchg
ni 'Z]bXYb"I bX'XUg'`]Y[h'XUfUbž'XUgg'g]Y'Y]bY'fUX]\_U`Y
5V\_Y\f'j cb'XYf': ]bUbn\_i `hi f'i bX'!dfUI]g'Ub'XYf'K U``GhfYYh
XUfghY``Yb''G]Y'g]bX'b]W\h'X]Y'ZØ\fYbXYb'K\]ghYV`ck Yf'i bX
g]Y'g]bX'b]W\h'X]Y'<cW\ZfYei Ybn\AbX'Yf'fk: HŁ"'8]YgY'?Uhn!
i bX!A Ui g!\J[X'k i fXY'\]bhYf'Y]bYa 'Xi b\_`Yb'GW\Y]Yf

- K Ybb'J U`]XUhcfYb'bUW\'XYf': i g]cb'Y]bY'U\_hi U`]g]YfhY
   J Yfg]cb'j cb': `Ug\Vchg'fA 9J'6ccghŁ']a d`Ya Ybh]YfYbž
   \_ÒbbhY'X]Yg'Y]bYb'A Uf\_h'fYj c`i h]cb]YfYbž'XYf'`YhnhYg'\*J\f
   +' \$'A ]``]cbYb'l G!8c``Uf'j cb'A 9J'Y]b[Ybca a Yb'\Uh
- 8]YgYg'l d[fUXY'Yfa Ò[`]Wkh'Yg'J U`]XUhcfYbž'Y]b
   ei Y``cZZYbYg'i bX'XYa c\_fUh]gWkYg'GmghYa 'ni 'bi hnYbž'i a
   XYb'l a gUhn'ni 'a Ul ]a ]YfYb'i bX'A 9J 'a ]h'Gd]Y`Yfb'ni
   hY]`Yb

 $9g']gh'gWk \ ]Yf][ \ \check{z}'Y]bY'hfUX]h]cbY``Y': \ ]bUbndUfU``Y`Y'ZØf': `Ug\Vchgni 'Z]bXYb"'I bX'XUg``]Y[ h'XUfUb\check{z}'XUgg'g]Y'Y]bY'fUX]_U`Y'5V_Y\f'j cbXYf': \ ]bUbn_i `hi f'i bX'!dfUl ]g'Ub'XYf'K U```GhfYYh'XUfghY``Yb"'G]Yg]bX'b]Wkh'X]Y'ZØ\fYbXYb'K \]gh`YV`ck Yf'i bX'g]Y'g]bX'b]Wkh'X]Y < cWk ZfYei Ybn\AbX`Yf'fk: HŁ"$ 

8]YgY'?Uhn!i bX!A Ui g!\J[X'k i fXY'\]bhYf'Y]bYa 'Xi b\_`Yb'GW\`Y]Yf hYW\bc`c[]gW\Yf'\bcj Uh]cb'a Ub]di`]Yfh' 'k c'XYf <cW\ZfYei Ybn\UbXY``XYa 'K \]gh`YV`ck Yf'i bX'XYf FY[i`]Yfi b[gVY\OfXY']a a Yf'nk Y]'GW\f]hhY'j cfUi g'k Uf"

8 ]Y 'GW\ Od ZYf'j cb': `Ug\ Vchg'gU\ Yb'Y]b'\A\ b`]W\ Yg'A i ghYf'XUf]b\Z\ k ]Y '<\AbX`Yf'XYb'A UI ]a i a '9I hfUWhUV`Y'J U`i Y'fA 9J \L'Ui gbi hnhYb" 8 cW\ 'UbghUhh'Y]bnY`bY'GW\ Ui gd]Y`Yf'Ubni fi ZYb\Z'a UW\ hYb'g]Y'XUg @]W\ h'Ub"'9g'k ]fX'b]W\ h'i bVYX]b[ h'X]Y': fcbh!Fi bb]b[ 'ghcddYb Gd]Y`YfY]Yb \Z'k ]Y'gY]b'A ]hVY[ f\ObXYf'D\]`'8 U]Ub'Yg'Ui gXf\Ow\_h\Z\ UVYf'Yg'k ]fX'XYf'7ca a i b]hm'\Y`ZYb\Z'j cb'X]YgYf'< UbXY`gU\_h]j ]h\Ah ni 'dfc\Z|h]YfYb"''

5`g'9f[YVb]g'XYg'A 9J!6ccgh!I d[fUXYgž':][a Ybhž'Y]b'ZØ\fYbXYf]bgh]hi h]cbY``Yf'GhU\_]b[!8]Ybgh`Y]ghYfž'GW\Ahni b[Yb'ni Zc`[YkYfXYb'X]Y'6Y`c\bi b[Yb'XYf'JU`]X]YfYf'bUW\XYf Ni gUa a YbZØ\fi b['i a 'V]g'ni')\$'i 'ghY][Yb"'K]f'\UVYb'i bg'a]h : ][ a Ybh'ni gUa a Yb[ YgYhnhži a 'a Y\f'ØVYf'X]YgYb

DUfUX][ a Ybk YWkgY`'ni 'YfZU\fYb"'5VYf'VYj cf'k ]f'Yf\_`ÀfYbž'k ]Y

X]YgYg'bYi Y'A cXY``'Zi b\_h]cb]Yfhž'a ØggYb'k ]f'j YfghY\Ybž'k c'XUg
U`hY'j YfgU[ h'\Uh"

# 8 Ug'U`hY'DUfUX][ a U.'9]bY'?i `hi f'XYf ; Y\Y]a \U`hi b[

FcVYfh'9``]gcbž'<YUX'cZ'GhU\_]b['A Uf\_Yh]b['VY]':][a Ybhž'ZØ\fhYXUg':fcbh!Fi bb]b['Ub'XYf'K U``'GhfYYh'j cb'&\$\$-'U`g
DUfU``Y`VY]gd]Y``ZØf'Y]b][Y'XYf'\Yi h][Yb'DfU\_h]\_Yb'Ui Z'''9]bY
[YbUi Y'I bhYfgi Wi b['XYg'?Ua dZYg'nk]gW\Yb'X]YgYb
Gd]hnYbfY]hYfb'i bX']\fYb'K\]gh`YV`ck Yfb'nY][hž'k Ufi a 'i bX'k]Y
XUg'hfUX]h]cbY``Y'DUfUX][a U'ZY\`Yf\UZh'k Uf'''

 $= \frac{1}{2} \left( \frac{1}{2} \right) \left($ 

5VYfini X]YgYa NY]hdi b\_hik UfYbi< cWk ZfYei Ybn\àbXiYfii bX !VÒfgYbini bYi YbiGhfUhY[]YbiØVYf[Y[Ub[Ybini a 6Y]gd]YiX]Yi 8]YiBMG9ij Yfk YbXYhYi[Y\Y]a YiCfXYfhmdYbiX]YiYgiY]bYf <UbXj ciicXYfi:]fa YbiYfa Ò[i]WkYbžiUbXYfYbi< ÀbXiYfbij cfUi gini gY]bilBYi YiK \]ghiYVick Yfik ]Yi< U]a i6cXY\_ihUi WkhYbiUi Zii bXiYg k i fXYbi6YgWk YfXYbiY]b[YfY]Wkh"i

I bX ni a 'NY]hdi b\_hij cb'; UhYg 'K \]gh`YV`ck Yf!6Y`c\bi b[gUbhfU[gU\'g]WX 'gY]b'Y][YbYg'I bhYfbY\a Ybž'Dck \UhUb'9bYf[mž'a]h Y][YbYb'6YgWk YfXYb'\_cbZfcbh]Yfh' ']b'< $\dot{O}$ \Y'j cb'&\*'A]``]cbYb'I G! 8 c``Uf'Ub'GhfUZYb''G]Y'VY\Ui dhYhYbž'XUgg'XUg'I bhYfbY\a Yb j cfgÀhn`]WX'Y]bY'; YgYhnYg` $\partial$ W\_Y'Ui g[Ybi hnh'\UVY'A \Af\_hY'j cb D>A '=bhYfWcbbYWh]cb'@@7"'

8]YgYg'6Y]gd]Y``nY][hž'XUgg'X]Y'5bfY]nY'ZØf'K \]gh'YV`ck Yf'XYf'G97 ni 'UbZÀ``]['ZØf'5i gVYi hi b['i bX']\fY'6Øfc\_fUh]Y'ni '`Ub[gUa 'g]bXž i a 'g]bbj c``Y'ŸbXYfi b[Yb'j cfni bY\a Yb"'8 Ug'GmghYa 'ni a 91 hfU\]YfYb'XYg'a Ul ]a U`Yb'K Yfhg'fA 9J Ł'Ui g'9h\YfYi a! HfUbgU\_h]cbYb'gYhnh'XUg'BYhnk Yf\_'gY\f'A\b`]W\Yb'5fhYb'j cb : fcbh!Fi bb]b[!CdYfUh]cbYb'Ui gž'i bX'k]Y'X]Y'<ÀbX`Yf'Ub'XYf'K U`` GhfYYh'Ybhk]W\_Y`b'g]Y'ghÀbX]['bYi Y'HU\_h]\_Yb"'5VYf'k]Y'G]Y'gY\Yb k YfXYbž'V]YhYh': `Ug\Vchg'Y]bY'@Ògi b[ž'X]Y'XYa 'U'hYb'DUfUX][a U d\]`cgcd\]gW\'Ybh[Y[Yb[YgYhnh']gh"

#### JcffY]hYf'A 9J'Yf\_`Afh

=a ; Y[YbgUhn'ni 'hfUX]h]cbY``Yb'6ÒfgYb'a ØggYb'U``Y'; YgWXÀZhY']b
9h\YfYi a ž'k ]Y'bcfa U`Y'HfUbgU\_h]cbYbž'Ui Z'XYf'?YhhY'ghUhh'ØVYf
Y]bY'7`YUf]b[ghY``Y'UV[Yk]W\_Y`h'k YfXYb"'5VYf'VYj cf'g]Y']b'XYf
?YhhY'UV[Yk]W\_Y`h'k YfXYbž'[Y`Ub[Yb'ZUgh'U``Y'HfUXYg']b'Y]bYb
A Ya dcc`ž']b'XYa 'A]bYf']a 'DfccZlcZlK cf\_'fDcK Ł!Dfchc\_c``
HfUbgU\_h]cbYb'a]h'\Ò\YfYb'; Ug[YVØ\fYb'[Y[YbØVYf
HfUbgU\_h]cbYb'a]h'b]YXf][YfYb'; YVØ\fYb'df]cf]g]YfYb"
J U`]XUhcfYb'ØVYfbY\aYb'X]YgY'JYfUbhk cfhi b['bUWX'XYf
Ni gUa aYbZØ\fi b["

@Ui h'9h\YfYi a "cf[ a UI ]a U`YI hfU\]YfVUfYf'K Yfh'fA 9JŁ
VYn]Y\h'g]W\'Ui Z'XYb'a UI ]a U`Yb'K Yfhž'XYf'Ui g'XYf
6`cW\_dfcXi \_h]cb'ØVYf'X]Y'GhUbXUfX!6`cW\_VY`c\bi b[ i bX'X]Y
; Ug[ YVØ\fYb'\]bUi g'YI hfU\]Yfh'k YfXYb'\_Ubbž']bXYa 'X]Y
FY]\YbZc`[ Y'XYf'HfUbgU\_h]cbYb']b'Y]bYa '6`cW\_Y]b[ YgW\`cggYbž
Ui g[ YgW\`cggYb'i bX'[ YÀbXYfh'k ]fX"

8 f]hhYžgc[YbUbbhY'A 9J!Gi W\Yfž'\UVYb'5`[cf]h\a Yb'Ybhk]W\_Y`hž X]Y']a 'HfUbgU\_h]cbgdcc`'bUW\'A 9J!A Ò[`]W\\_Y]hYb'gi W\Yb"'A]bYfž X]Y']\fY'A Ò[`]W\\_Y]hYb'Ui gk À\`Ybž'hY]`Yb'XUbb']a '; Y[Ybni [Y]bYb'HY]`'XYg'; Yk]bbg"'Gd]hnYbfY]hYf'\UVYb']\fY'Y][YbYb 5`[cf]h\a Yb'Ybhk]W\_Y`hž'X]Y'gmghYa Uh]gW\'8 UhYb']b'`ÒZZYbh`]W\Yb CfXYfVØW\Yfb'i bX'A Ya dcc`g'j Yfk YbXYbž'i a 'g]W\'Y]bni fY]\Yb"'

5bXYfYb 'HfUXYg']b 'Y]bYf'XYnYbhfU`]g]YfhYb'6ÒfgY'f89LŁ
j cfUi gY]'Ybž'k ]Y'n'I b]gk Ud'j YfgWkUZZh'XYa 'Gd]hnYbfY]hYf'Y]bYb
J cfhY]'"'6Y]'Y]bYa 'gc[YbUbbhYb'GUbXk]Wk!HfUXY'VYfYWkbYh'XYf
: fcbhfi bbYf'ni bÀWkgh'X]Y'fYgi `h]YfYbXY'DfY]gU\_h]cb'XYg']b'XYf
K UfhYgWk`Ub[Y'VYZ]bX`]WkYb'HfUXYgž'i a 'X]Y'FYbhUV]`]hÀh'ni
VYgh]a a Ybž'ZØ\fh'Y]bYb'HfUXY'a ]h'Y]bYf'\Ò\YfYb'; Ug[YVØ\f'Ui gž
i a 'bUWk'j cfbY'ni 'gdf]b[Ybž'i bX'j Yf\_Ui Zh'gcZcfhž'bUWkXYa 'XYf
j cf\Yf][Y'HfUXY'UV[Yk]W\_Y'h'k i fXY"'G]Y'Yfn]Y`Yb'bi f'XUbb'Y]bYb
; Yk]bbž'k Ybb'X]Y'DfY]gVYk Y[i b['[fÒ»Yf']gh'U`g'X]Y'; Ug[YVØ\fž
X]Y'g]Y'ZØf'XYb'Gdfi b['bUWk'j cfbY'VYnU\`h'\UVYb"'

; YbYfU`]nYX:: fcbh!Fi bb]b[ ']gh'Y]b'k Y]hYfYf'VY`]YVhYf'5bgUhn"'9g gi W\h'bUW\'dfcZ]hUV`Yb'HfUbgU\_h]cbYb#HfUXYg']a 'A Ya dcc`ž \_cd]Yfh'g]Y'i bX'Yf\ $\dot{O}$ \h'X]Y'; Ug[ YV $\dot{O}$ \fž'i a 'g]W\'Y]bni fY]\Yb"'=a ; Y[ YbgUhn'ni 'GUbXk ]W\!HfUXYg'dfcZ]h]Yfh'X]YgYf'5bgUhn'j cb'A 9J UbghY``Y'j cb'DfY]gVYk Y[i b[ Yb'VY]'Y]bYa '89L"'

 $5VYfX]YgYHU_h]_Ybg]bXb]WhijcfYfgYVUfcXYf_cbg]ghYbh"$ 

8]Y @Yi hY `\ UVYb `Yf\_Ubbhž`XUgg`Yg`j YfgWX]YXYbY`A Ò[`]WX\_Y]hYb
[]Vhž`g]WX`a ]h`9h\YfYi a `ni `VYgWXÀZh][Yb"`Hmd]gWXY`6Ybi hnYf
a ÒWXhYb`j ]Y``Y]WXh`bi f`X]Y`9H< `ØVYfhfU[Yb"`@Yi hYž`X]Y`g]WX`Ub
A 9J `VYhY]`][Ybž`nY][Yb`^YXcWX`Y\Yf`Y]bY`FYU\_h]cb`Ui Z`XUgž`k Ug
]a `BYhnk Yf\_`dUgg]Yfh"`9g`]gh`]hYfUh]j `i bX`fYZ`YI]j "`G]Y`VYcVUWXhYb

XYb'Ui gghY\YbXYb'HfUbgU\_h]cbgdcc`i bX'VYcVUW\hYbž'k Ug UbXYfY'hi b ž'gU[hY'7`Umhcb'A YbnY`ž'<YUX'cZ'DfchcWc`g'UbX Cddcfhi b]h]Yg'VY]': ][a Ybh'''

## K Ug g]bX: `Ug\Vchg3 9]b bYi Yg DUfUX][ a U

: `Ug\Vchg`]gh`Y]bY`: cfgW\i b[ g!`i bX`9bhk ]W\_`i b[ gcf[ Ub]gUh]cbž`X]Y XUfUi Z`UVn]Y`hž`X]Y`bY[ Uh]j Yb`BYhnk Yf\_YZZY\_hY`j cb`A 9J`ni fYXi n]YfYb"

G]Y`\UVYb`Y]bY`CdYb!Gci fWY!@Ògi b[`Ybhk ]W\_Y`hž`X]Y`Yg`A ]bYfb`]a DCK!Dfchc\_c```i bX`JU`]XUhcfYb`]a `DCG!Dfchc\_c```Yfa Ò[`]W\hž YZZ]n]YbhYf`a ]h`A 9J!Gi W\Yfb`ni `UfVY]hYb"`9g`VY\YfVYf[ h`Y]bY df]j UhY`5i \_h]cbž`X]Y`j ca `A Ya dcc``[YhfYbbh`]gh"`8]YgYg`GmghYa ghcddh`b]W\h`Y[`]W\Yg`: fcbh!Fi bb]b[`Ui Z:`Ug\Vchgž`UVYf`Yg j Yf\]bXYfh`XYb`j YfU``[Ya Y]bYfhYb`5bgUhnž`]bXYa `Yg HfUbgU\_h]cbYb`]b`XYf`K UfhYgW\`Ub[Y`j cf`XYf`² ZZYbh`]W\\_Y]h j YfV]f[ h"

=a 'bYi Yb'l d[fUXY'Ui Z'A 9J'6ccgh'k YfXYb': `Ug\Vchg'X]YgY
5i \_h]cb'YZZ]n]YbhYf'a UW\Ybž']bXYa 'g]Y'Y]bYb'8f]hhUbV]YhYf
bUa Ybg'6i ]`XYf'Y]bZØ\fYb"'=b'X]YgYf'J Yfg]cb'k ØfXYb'J U`]XUhcfYb
b]W\ha Y\f'X]fY\_h'a ]h'A 9J!Gi W\Yfb']b'XYf'6`cW\_dfcXi \_h]cb
ni gUa a YbUfVY]hYb"'GhUhhXYggYb'k YfXYb'6Ui \YffYb'a ]h'A 9J!
Gi W\Yfb'ni gUa a YbUfVY]hYbž'i a 'dchYbn]Y``Y'6`ÒW\_Y'ni 'VUi Yb
i bX'Ub'DfØZYf'ni 'j YfghY][Yfb"'→XXY'DUfhY]'k ØfXY'Y]bYb'; Yk ]bb'ZØf
]\fYb'6Y]hfU['Yfn]Y`Yb"'I bX'Yg'a UW\h'XYb'DfcnYgg'YZZ]n]YbhYf'i bX
ZU]fYfž'k Y]``Yg'X]Y'J U`]XUhcfYb'Ybh`UghYhi bX'a Y\f'HY]`bY\a Yf
XUj cb'dfcZ]h]YfYb'`Àggh''

 $8 ]Y `6f] ``Ubn `X] YgYg `bYi Yb `DUfUX] [a Ug `VYghY \ h `XUf] b \check{z} `XUgg `Yg XUfUi Z `UVn] Y `h\check{z} = b Y ZZ] n] Ybn Yb `ni `VY \ YVYb \check{z} `UbghUhh `gW\ `YW\hYg J Yf\ U `hYb `ni `VYghfUZYb " : fcbh! Fibb] b [!HU_h]_Yb `]a `9h\ YfYia! B Yhnk Yf_ `k ]fX `Yg `\ OW\ghk U\ fgW\ Y]b `]W\ `]a a Yf `[YVYb " ·5 VYf XifW\ `X] Y `f] W\ h][Yb `5bfY] n Y `_ObbYb `g] Y `X] YgYg `J Yf\ U `hYb `]b `Y] b hfUbgd UfYbh Yg `ib X `XYac_fUh] gW\ Yg `Gmgh Ya`` Yb_Yb \check{z} `XUg `Y] b Ygh Af_YfY `HY] `bU\ a Y `Ua `A 9J! A Uf_h `Yfa O[`]W\ h" ``$ 

5bghUhhg]W. Ui Z`Ub[gUa Y'VØfc\_fUh]gW.Y'6YUa hY'ni 'j Yf`UggYbž i a 'gW.`YW.hYg'JYf\U`hYb'ni 'VYghfUZYbž'ghfi \_hi f]Yfh'Yg'X]Y'5bfY]nYbYi ž'i a 'bY[Uh]j Y'BYhnk Yf\_YZZY\_hY'ni 'fYXi n]YfYb'i bX'A 9JXYnYbhfU`Yf'ni 'a UW.Yb"'9g']gh'b]W.h'[UfUbh]Yfhž'XUgg'YXYfJU`]XUhcf': `Ug\Vchg'bUW. 'XYf'Ni gUa a YbZØ\fi b['ØVYfbY\a Ybk]fX"'5VYf'k Ybb'Yg'X]Y'GhU\_]b[!9fhfÀ[Y'Yf\Ò\h'i bX'X]Y'bY[Uh]j YbBYhnk Yf\_YZZY\_hY'j cb'A 9J'j Yff]b[Yfhž'f]g\_]YfYb'JU`]XUhcfYbžGhU\_Yf'ni 'j Yf`]YfYbž'k Ybb'g]Y'g]W.'b]W.h'a]h': `Ug\Vchg'cXYf'Y]bYfU`hYfbUh]j Yb'A 9J!@Ògi b['VYgW.ÀZh][Yb"'

8 Ugʻ\Uhʻ: ][a Ybhʻ\_Øfn`]W\`Ub[Y\_ØbX][h'A 9J!6ccghʻ]bhY[f]YfYb]bʻgY]bYʻ9h\YfYi a !J U`]XUhcfYb"ʻ6]g\Yfʻ\UVYbʻg]YʻA 9J!6ccgh YfZc`[fY]W\`Ui Zʻ; cYf`] [YhYghYhžʻXYa ``YhnhYbʻHYghbYhnžʻXUgʻj cf`XYf 9h\YfYi a !A Yf[YʻXi fW\[YZØ\fh'k i fXY"ʻ6]g\Yfʻ\UVYbʻ]\fYʻGhi X]Yb [YnY][hžʻXUggʻXUgʻl d[fUXYʻX]YʻGhU\_]b[!9]bbU\a YbʻYf\YV`]W\ ghY][Yfb`k]fX"ʻ5VYfʻYgʻk]fX`Ui W\`XYbʻ9H<!?i bXYbʻj cbʻ:][a Ybh Yfa Ò[`]W\YbžʻUbʻA 9JʻhY]`ni bY\a Yb"

## 6]`Xi b[ ]gh k Y]hYf\]b YfZcfXYf`]W\

6]`Xi b[']gh'k]\W\h]['": `Ug\Vchg'ghY``h': cfg\Wi b[gYf[YVb]ggY'ni f JYfZO[i b['i bX'YfghY``h'cZZYbY'@Ogi b[Ybž']b'XYbYb'G]Y'X]Y'A 9J!9I hfU\_h]cb'gY\Yb'\_ObbYb'''9g'\]`Zh'\bYb'ni 'gY\Ybž'k Ug'j cf'g]\W\[Y\hž'i bX'V]YhYh'Y]bY'Ui g[Yk c[YbY'5bg]\W\hž'X]Y'gck c\``Dcg]h]j Yg\U`g'Ui \W\BY[Uh]j Yg'Yf\_Ybbh'''6]`Xi b['i bX'cZZYbY'8]g\_i gg]cbYb\g]bX'YVYbZU``g'k]\W\h][ \zeru gU[hY'9``]gcb'''

9g'[]Vhij]Y`@Àfa ii bX'b]W\higc'j]Y``G][bU``]b`X]YgYa iFUi a "'8U'X]Y
9H< ni iDcGk YW\gY`hz'gc``hYb`X]Y A YbgW\Yb`VYggYfY
9bhgW\Y]Xi b[Yb`XUfØVYf`hfYZZYbz'a]h'k Ya ig]Y`]b`6Yni ['Ui Z

DZfUghfi\_hi fUbV]YhYf`ni gUa a YbUfVY]hYb"'G]Y`\_ObbYb`X]Y
bY[Uh]j Yb`5gdY\_hY`j cb`A 9J`gY\Ybz'i bX`Yhnh`\_ObbYb`G]Y`U`g`9H<!
Hc\_Yb!\D\UVYf`\T\fY'Y][YbYb`9bhgW\Y]Xi b[Yb`hfYZZYb"':][a YbhUfVY]hYh`\Ufh`XUfUbz'A YbgW\Yb`XUVY]`ni `\Y`ZYbz'Z bX]YfhY
9bhgW\Y]Xi b[Yb`ni `hfYZZYb"`G]Y`j YfOZZYbh`]W\h'bi b]W\h'bi f`]\fY`
A 9J!Dc`]h]\_\_j cfUi g`XYg`Ni gUa a YbgW\`i ggYg`j YfUbghU`hYhYb
g]Y`Ui W\`U`Hk]hhYf!FUi a ii a `]\fYf`7ca a i b]hm`ni `\Y`ZYbz'X]Y
ÿbXYfi b[Yb`VYggYf`ni i] YfghY\Yb"`

8 YfnY]h'[]Vh'Yg'\_Y]bYb'8 fi W\_'ZØf'A]bYfž'A 9J!6Y`c\bi b[Yb'ni hY]`Yb"'JU`]XUhcfYb'\]b[Y[Yb'g]bX'kc\`'Y]bYa '\Ò\YfYb
FYdi hUh]cbgf]g]\_c'Ui g[YgYhnh"' \DZc`[YXYggYb'k]fX'XYf
K YhhVYk YfVž'gcVU'X'X]Y'JU`]XUhcfYb'X]Y'5i Z[UVY'XYf'A]bYf'bUWX
XYf'Ni gUa a YbZØ\fi b['ØVYfbY\a Ybž'Y\Yf'XUni 'ZØ\fYbž'XUgg
A 9J!6Y`c\bi b[Yb'VfY]hYf'[YhY]`h'k YfXYb'U`g'\Yi hY"

8]YgYf ⊕\U`h`k]fX j cb : ][a Ybh'[YgdcbgYfh"

п тп

8 Y f '6 Y ] hf U [ 'B Y i Yg': `Ug \ V c hg! I d [ f U X Y '\_Obbh Y '? f m d h ca À f\_h Y 'b U W X Y f ': i g ] c b 'f Y j c `i h] c b ] Y f Y b '] g h '\_Y ] b Y 'Z ] b U b n ] Y ``Y '6 Y f U h i b [ "

8 YhU]`q

6Ygi WXYb G]Y i bg Ui Z. \_fmdhc!bYk g"Uh