

G\]f]b '8 Uj]X 'i bX '5m`j] U. : fUi Ybdck Yf
YfcVYfh'X]Y 'XYi hgW\Yb '7\ Ufhg

G\]f]b '8 Uj]X 'VY\Ui dhYh'a]h'~6Ui W\ '6Y]bY 'Dc" 'YfbYi h'X]Y
Gd]hnY 'XYf'XYi hgW\Yb 'G]b['Y!7\Ufhg" '5m`j] U'Xca]b]Yfh'X]Y
5'Vi a !7\Ufhg"

6UXYb!6UXYb'fXdUŁ' 'ϕ'XYf'K Y'h'XYf'A i g]_W\Ufhg'nY][Yb': fUi Yb
]b'X]YgYf'K cW\Y'Y]bXfi W_gj c`žk Yf'XUg'GU[Yb '\Uh" 'G\]f]b '8 Uj]X
VYk Y]gh'a]h']\fYf'gYbgUh]cbY`Yb'G]b['Y' 6Ui W\ '6Y]bY 'Dc ž'XUgg
g]Y 'b]W\h'bi f'Y]b'<]h']ghž'gcbXYfb'XUfØVYf'\]bUi g'Ui W\ 'XUg'NYi [
ni f'k]YXYf\c'hYb'Bi a a Yf'Y]bg'\Uh" '6YfY]hg'ni a 'ZØbZhYb'A U`
\]bhYfY]bUbXYf'g]W\Yfh'g]W\ 'X]Y'GÅb[Yf]b'X]YgY 'VY[Y\fhY 'Dcg]h]cb
]b'XYb'CZZ]n]Y`Yb'8Yi hgW\Yb '7\Ufhgž'i bX'XUg'a UW\h'g]Y'ni 'Y]bYa
ZYghYb'6YghUbXhY]'XYf'U_hi Y`Yb'Dcd_i 'hi f"

DUFU`Y`XUni '\Å'h'X]Y'hU'Ybh]YfhY'5m`j] U'Ui g'FYW_\]b[\Ui gYb'a]h
]\fYa 'Xf]hhYb'5'Vi a ' ϕ '@YVY 'X]Y'Gd]hnY 'XYf'5'Vi a !7\Ufhg"
8]YgY'_ØbghYf]gW\Y '@Y]ghi b[']gh'VYgcbXYfg'VYa Yf_Ybgk Yfhž'XU
5m`j] U'g]W\ 'VYfY]hg']b'XYf'J cfk cW\Y'Ub'X]Y'YfghY'GhY`Y' [Y_Åa dZh
\Uh" '8]Y '@ghY'k]fX'YXcW\ 'a Y\ f'U'g'bi f'j cb'X]YgYb'VY]XYb': fUi Yb
Xca]b]Yfh' 'X]Y'GdUbbi b[']b'XYb'7\Ufhg']gh'\cW\ž'k Ybb'a Ub'g]W\
X]Y'bYi YghYb'9]bghY][Yf'Ubg]Y\h"

8]Y 'J YfZc`[Yf'i bX'X]Y 'B Yi \ Y]hYb

<]bhYf'5m`j] U'Zc`[Yb'Y]bY'FY]\Y'j cb'BYi YfgW\Y]bi b[Ybž'X]Y'X]YgY
K cW\Y'a]h'VYgcbXYfYb'5'VYb'Ui Zk UfhYb""8]Y' ϕX]Y!F cW_VUbX
'@Ycb]XYb '\Uh'Yg'a]h']\fYa 'FY'YUgY' Gcd\]gh]WUhYX'GUX'Gcb[g
Ui ZY]bYb'VYUW\h]W\Yb'nk Y]hYb'D'Uhn'[YgW\UZZh" '5i W\ 'GUVf]bU
7UfdYbhYf'ghYi Yfh'a]h']\fYa '5'Vi a ' G\cfh'B 'Gk YYh '[Ub'n'cVYb
a]h' 'g]Y'gW\UZZh'Yg'Ui ZXYb'Xf]hhYb'D'Uhn" '@ci]g'Hca '\]bgcb'gW\`À[h

a]h'gY]bYa 'K Yf_ @]j Y 'X]Y'K Y`Y'XYf'BcghU'[]Y'i bX`UbXYh'Ui Z
D`Uhn'j]Yf"A cbc'ϕW'fi bXYh'X]Y'Hcd':]j Y'a]h']\fYa '5`Vi a
Gma d\cb]W@]j Y' 'H\Y'GYWc bX'7\UdhYf'UV'i bX'nY][hz`XUgg'Ui W
Y]b'k Yb]['Gma V]cgY'nk]gW\Yb'FcW_i bX'Gma d\cb]_ [YgW\Ånh
k]fX"

9]b'k Y]hYfYg'gdUbbYbXYg'9fY][b]g']b'XYf'K Y'h'XYf'5`VYb'g]bX'X]Y
B UW\ f]W\hYb'ØVYf'X]Y'FYi b]cb'XYf'; U`U[\Yf!6fØXYf'j cb'C Ug]g"
=f'_Ugg]gW\Yg'5`Vi a ' fK \Uh g'H\Y'Ghcfm'Å A cfb]b[; 'cfm3 ž`XUg
'U\ fY'Ub['U'g'Y]bYg'XYf'VYghYb'K Yf_Y'XYf'6f]hcd!ÿfU'[YZY]Yfh
k]fXž'\Uh'Yg'bUW'k]Y'j cf']b'X]Y'7\Ufhg'[YgW\UZZhi bX'VY'Y[h'bi b
D`Uhn'++'8]Yg']gh'Y]b'VYa Yf_Ybgk YfhYf'K]YXYfY]bgh]Y[ž`XYf'Y]b
; YZØ\`XYf'BcghU'[]Y'i bX'J YfVi bXYb\Y]h'ni 'Y]bYf'j Yf[Ub[YbYb
NY]h'a]h'g]W\Vf]b[hz']b'XYf'X]Y'6UbX'[fc»Y'9fZc'[Y'ZY]YfhY"

7\Ufhg'i bX']\fY'8mbUa]_

8]Y'8mbUa]_]a 'A i g]_ [YgW\ÅZhi]gh'Ui ZfY[YbXž'i bX'X]Y'7\Ufhg
g]bX'cZhiY]b'Gd]Y[Y'j cb'bYi Yb'HfYbXg'i bX'Ui Z_ca a YbXYb
HU'Yb'hYb" B Ua Ybg\UZhY' ? ØbghYf'k]Y'5m]j U'i bX'G\]f]b'8Uj]X
nY][Ybž'k Ug'Yg'VYXYi hYhž']b'XYf'\Yi h][Yb'A i g]_k Y'h'fY'Yj Ubh'ni
gY]bž'k Å\ fYbX'BYi ']b[Y'k]Y'@Ycb]XYb'i bX'7UfdYb'hYf'VYk Y]gYbž
XUgg'Zf]gW\Y'≠YYb']a 'ϕX]Y!'i bX'Dcd!GY_hcf'gY\ f' [YgW\Ånh
k YfXYb"5m]j U'i bX'5dUW\Y'&\$+\`U'hYb'g]W\]b'XYb'G]b[`Y!7\Ufhg
k Y]hYf\]b'ghUf_"=f'<]h' K i bXYf' V'Y]Vh'Ub'XYf'Gd]hYž'k Å\ fYbX
X]Y' ? ØbghYf'5XUa 'Dcfhi bX'7c" 'a]h']\fYa ' [Ya Y]bgUa Yb'HfUW_
A c] Y 'bi f'_bUdd'\]b'hYf'\]bYb''Y[Yb"5fhYa Ug'\Uh'a]h' =@]_Y
H\Y'K Um'Mci '?]gg'A Y 'Y]bYb'_Y]bYb'FØW_gW\ f]h'j cb'D`Uhn'XYf]
Ui Zj]Yf'[Ya UW\hž'i bX'GUVf]bU'7UfdYb'hYf'a]h']\fYf'G]b[`Y
9gdfYggc 'g]W\Yfh'g]W\ D`Uhn'ZØbZ 'Y]b'NY]W\Ybž'XUgg'X]Y
Dcda i g]_`YVYbX]['i bX']b'ghÅbX][Yf'6Yk Y[i b[']gh"

8]YgY'NU\`Yb'[YVYb'b]W\h'bi f'Y]bYb'9]bV`]W_]b'XYb
a i g]_U`]gW\Yb'; YgW\ a UW_ XYf'^2 ZYb'h]W\ _Y]hž'gcbXYfb'Ui W\]b
X]Y'hU'Ybh]YfhY'; Ya Y]bgW\UZh'X]Y']b'8Yi hgW\`UbX'U_hj ']gh"8]Y
7\Ufhg'YfnÅ\`Yb'Y]bY'; YgW\]W\hY'j cb'@Y]XYbgW\UZh'ZØf'A i g]_i bX
XYb'VYXYi hYbXYb'8UfV]Yhi b[Ybž'X]Y': Ubg'YXY'K cW\Y'`YgYb'i bX
\ØfYb"8]Y'bÅW\ghY'K cW\Y'_ØbbhY'VYfY]hg'bYi Y', VYffUgW\i b[Yb

i bX`Ui ZfY[YbXY`9bħk]W_`i b[Yb`]a `a i g]_U`]gWXYb` ; YgWXY\Yb`a]h
g]WXY`Vf]b[Ybž`i bX`X]Y` : Ubg`XØfZYb` [YgdUbbhigY]bž`k Ug`X]Y
_ca a YbXYb`HU[Y`]b`XYb`9fZc` [g[YgWXY]WXYb`XYf`?Øbgh`Yf
Vf]b[Yb`"

8YhU]`g

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