

A]b]ghYfd fÄg]XYbh' < UgY`c ZZ'VYg]W\ h][h
5dch\Y_Y. 'GhfY]h'i a 'F YZcfa [YgYhn

A]b]ghYfd fÄg]XYbh' < UgY`c ZZ'VYgi W\ h' < U`VYfghUXhž'gd f]W\ h
g]W\ ' _Uf' [Y[Yb'GW\ Y]bUdch\Y_Yb'i bX'ZØf
E i U']hÄhgghUbXUfXg']b'XYf'D\Ufa Un]Y'Ui g"

⊕ `Y]bYa 'U_hi Y`Yb'6Ygi W\]b' < U`VYfghUXh'\Uh'GUW\ gYb!5b\U`hg
A]b]ghYfd fÄg]XYbh'F Y]bYf' < UgY`c ZZ'Y]bYb'9]bV`]W_]b'X]Y
\YfUi gZc fXYfbXY'@U[Y'XYf'5dch\Y_Yb'j cf'C fh'Yf\U`hYb"6Y]
X]YgYa 'HfYZZYb'a]h'XYa '5dch\Y_Yf'I `f]W\ ;fcgW\ž'XYf'ni [`Y]W\
DfÄg]XYbh'XYf'@UbXYgUdch\Y_Yf_Ua a Yf'GUW\ gYb!5b\U`h'ghž
gck]Y'k Y]hYfYb'J YfhfYhYfb'XYg'5dch\Y_Yfj YfVUbXYgž'k i fXYb
YfbghY'6YXYb_Yb'ØVYf'X]Y'k]fhgW\UZh]W\Yb'6YX]b[i b[Yb'XYf
5dch\Y_Yb' [YÄi » Yfh"

6YgcbXYfg'U`Ufa]YfYbX'g]bX'X]Y'NU\`Ybž'X]Y'j cb'Xbg!5bXfYUg
A ØbW\ 'dfÄgYbh]Yfh'k i fXYb"⊕ a `YhnhYb'X\ f'a i gghYb') \$\$
5dch\Y_Yb']\fY'HØfYb'gW\`Y]» Ybž'k Ug'X]Y'9I]ghYbn'j]Y'Yf'6Yhf]YVY
]b': fU[Y'ghY`h"8 Ug' < Ui dhd fC V`Ya ž'gc'A ØbW\ž'gh'X]Y'gY]h'X\ fYb
ghU[b]YfYbXY' < cbcf]Yfi b['XYf'5dch\Y_Yb'Y]ghi b[Yb"8]YgY'a Y\ f
U`g'VYgcf[b]gYffY[YbXY'9bhk]W_ i b['ghY`h'X]Y'Ni _i bZiXYf
5dch\Y_Yf'j cf']a a YbgY' < YfUi gZc fXYfi b[Yb"l a gc'k]W\ h][Yf']gh
Ygž'X]YgY'H\Ya Yb'cZZYb'Ubni gdfYW\Yb'i bX'@Øgi b[Yb'ni `Z]bXYb"

GhUbXUfXg'XYf'5dch\Y_Yb'i bhYf'8fi W_

9]b'nybhfU`Yg'H\Ya U'XYf'8]g_i gg]cb'k Uf'XUg'[Yd`UbhY
5dch\Y_Yb'fYzcfa [YgYhn'XYg'6i bXYg[Ygi bX\Y]hga]b]ghYf]i a g"
⊕ gVYgcbXYfY'XYf'D`Ubž'gc[YbUb bhY' GW\ Y]bUdch\Y_Yb
Y]bni Ø\ fYbž'gc f[h'ZØf' [fc» Yb'l ba i h'i bhYf'XYb'5dch\Y_Yfb"
8]YgY`B Yi] [_Y]hYb'g]bX'b]W\ h'bi f']b'XYf'6fUbW\Y'Y]b'\Y]»

X]g_i h]YfhYg'H\Ya Už'gcbXYfb'VYhfYZZYb'Ui W\X]Y'E i U]hÅh'XYf
; Ygi bX\Y]hgj Yfgcf[i b['b'8Yi hgW\UbX"A]b]ghYfdFÀg]XYbh
< UgY`cZZ\Uh'XYi h]W\ [Ya UW hž'XUgg'Yf'Y]bY'gc`W\Y'9bhk]W`i b[
b]W\h'U_nYdh]YfYb`_Ubb"G]bYf'A Y]bi b['bUW\`a ØggYb'X]Y`\c\Yb
E i U]hÅhgghUbXUfXgž'X]Y'DUh]YbhYb`]b'8Yi hgW\UbX'Yfk UfhYbž
i bVYX]b[h'[Yk U\fh'V'Y]VYb"

< UgY`cZZ'VYhcbhYž'XUgg`_ca dYhYbhY'6YfUhi b['ZØf'X]Y'DUh]YbhYb
i bUVX]b[VUf`]ghi bX'XUgg`]b'Nk Y]ZY`gZÅ`Yb'Y]b`c_U`UbgÅgg][Yf
5dch\Y_Yf`_cbgi`h]Yfh'k YfXYb'gc`hYž'i a`Z bX]YfhY
9bhgW\Y]Xi b[Yb'ni`hfYZZYb"8]YgY'G]W\hk Y]gY`]gh'YggYbn]Y`ž'i a
XUg`J YfhfUi Ybgj Yf\Å`hb]g`nk]gW\Yb'DUh]YbhYb`i bX'5dch\Y_Yfb`ni
ghÅf_Yb`i bX'ni`Yf\U`hYb"

5VgY]hg'XYf'8]g_i gg]cb'ØVYf'X]Y'GW\Y]bUdch\Y_Yb`k i fXY'Ui W\
XUg`[YbYfY`Y'5dch\Y_YbghYfVYb`i bX'X]Y'XUa`]h]YfVi bXYbYb
k]fhgW\UZh]W\Yb'6Y`Ughi b[Yb'Ub[YgdFcW\Yb"8]Y`hfUX]h]cbY`Yb
5dch\Y_Yb`gY\Yb`g]W\Y]bYa`ni bY\`a YbX`i bZfYi bX`]W\Yb
k]fhgW\UZh]W\Yb`l a`Z'X`[Y[YbØVYfž'XUg`Xi fW`ghÅbX][Y
F YZcfa Yb`i bX'5bdUggi b[Yb'XYf`[YgYhn`]W\Yb
F U\`a YbVYX]b[i b[Yb'bcW\`j YfgW\ÅfZh'k]fX"

8]Y`J YfY]bVUfi b[`j cb'dfU_h]_UV`Yb`@Øgi b[Yb`]gh'YbhgW\Y]XYbXž
i a`X]Y'9i]ghYbn'XYf'5dch\Y_Yb`ni`g]W\Yfb`i bX`[`Y]W\N]h][`X]Y
E i U]hÅh'XYf'; Ygi bX\Y]hgj Yfgcf[i b[`cW\ni`U`hYb"
A]b]ghYfdFÀg]XYbh< UgY`cZZ'i bX'X]Y'UbXYfYb'6YhY']][hYb`ghY\Yb
bi b`j cf'XYf`< YfUi gZcfXYfi b[ž'K Y[Y'ni`Z]bXYbž'i a`X]Y
5dch\Y_Yb`]b`GUW\gYb!5b\U`h'ni`i bhYfghØhnYb`i bX'X]Y`Gcf[Yb
\fYf`ϕ\UVYf'9fbgh'ni`bY\`a Yb"8]Y'Ub\U`hYbXY'8YVUhhY'ØVYf'XUg
5dch\Y_Yb`fYZcfa`[YgYhn`k]fX`gca`]h]b'XYb`_ca`a YbXYb`K`cW\Yb
i bX'A`cbUhYb`Y]bY`k]W\h][Y`F`c`Y`gd]Y`Yb"

5b[Yg]W\hg'X]YgYf'G]hi Uh]cb`g]bX`gck`c`\`dc`]h]gW\Y'U`g`Ui W\
ØZZYbh]W\Y'; YgdFÅW\Y`[YZfU[hž'i a`X]Y`Ni`_i bZh'XYf'5dch\Y_Yb
bUW\U`h][`ni`[YghU`hYb`i bX'X]Y'E i U]hÅh'XYf`J Yfgcf[i b[`ZØf'U`Y
6Øf[Yf`ni`[Yk`Å`f`Y]ghYb"

6Ygi W\Yb`G]Y`i bg`Ui Z.`X]Y!bUW\ f]W\ hYb"bYh