

- +! Å\ f][Yf`Z]bXYh`bYi Y`@YVYbgei U`]hÅh
Xi fWÅ`]bbcj Uh]j Y` ; YZÅ» WÅ]fi f[]Y

9fZU\ fYb`G]Y`]b`i bgYfYa`5fh]_Y`žk]Y`YfZc`[fY]WÅY
[YZÅ» WÅ]fi f[]gWÅY`9]b[f]ZZY`]a`<Y`cg`?`]b]_i a`6Yf`]b!6i WÅ
X]Y`@YVYbgei U`]hÅh]j cb`- +! Å\ f][Yb`DUh]YbhYb`bUWÅ\ U`h][
j YfVYggYfb`"? Uf`!<Y]bn`6Y\ fYbXhYfnÅ\`h]j cb`gY]bYf
gWÅ a YfnZfY]Yb`FØW_ Y\ f`ni a`@YVYb`bUWÅ`Y]bYf`a`]b]a U`!
]bj Ug]j Yb`6Y\ UbX`i b[`gY]bYf`5fhYf]cg_`YfcgY`"9bhXYW_Yb
G]Y`X]Y`]bbcj Uh]j Yb`A Yh\ cXYb`XYf`a`cXYfbYb` ; YZÅ» a YX]n]b`



8]Y`6YXYi hi b[`a cXYfbYf` ; YZÅ» a YX]n]b.`9]b
@]WÅ hV`]W_`ZØf`Å`hYfY`A]hVØf[Yf

⊕`Y]bYf`K Y`hž]b`XYf`X]Y`NU\`X`XYf`Å`hYfYb`A YbgWÅYb`ghYh][
ni b]a a hž`k]fX`X]Y`a YX]n]b]gWÅY`J Yfgc f[i b[`ZØf`GYb]c fYb`]a a Yf
k]WÅ h][Yf`"9]b`6Y]gd]Y`ZØf`YfZc`[fY]WÅY`a YX]n]b]gWÅY`⊕`hYfj Yb]h]cb

]gh'XYf': U`'j cb'?'Uf'!<Y]bn'6Y\fybXhž'XYf'Ui Z[fi bX'j cb
5fhYf]cg_`YfcgYž'Y]bYf' [YZÀ» VYX]b[hYb'8i fWV'i hi b[gghÒfi b[ž]a
<Y']cg'?`]b]_i a '6Yf`]b!6i W\`VY\UbXY'h'k i fXY"8]YgY'9bhk]W_`i b[
nY][h'b]W'h'bi f'X]Y': cfhgWf]hhY`]b'XYf'; YZÀ» W]fi f[]Yž'gcbXYfb
j YfXYi h]W'h'Ui W`X]Y'6Ya Ø\i b[Ybž'X]Y '@VYbgei U'hÅh]a '5`hYf
Yf\YV`]W`ni`j YfVYggYfb"

⇒ a 'GYdhYa VYfž'bi f'k Yb][Y'A cbUhY`bUW`XYa 'YfghYb'9]b[f]ZZ'XYf
]a 'ž b]ghUhhZUbXž`_cbbhY`<Yff'6Y\fybXh'XUb`_nk Y]Yf'a]b]a U`!
]bj Ug]j Yf'9]b[f]ZY'Ua 'fYW'hYb'i bX`]]b_Yb'6Y]b'k]YXYf'Y]b
gW`a YfnZFY]Yg'@VYb'ZØ\fyb"8Yf'- +!Å\ f][Y'GYb]cf'Yf'YVh'bUW
a cbUhY`Ub[Yb'6YgW`k YfXYb'Y]bY'k U\fy'K YbXY']b'gY]bYf
[Ygi bX\Y]h]W`Yb'G]hi Uh]cb" ⇒W`ZfYi Y'a]W`ž'XUgg'a]f`]b'a Y]bYa
\c\Yb'5`hYf'[Y\c`ZYb'k YfXYb`_Ubb'i bX]W`bi b'gW`a YfnZFY]a Y]b
@VYb'[Yb]Y» Yb`_Ubb ž'Åi » YfhY`Yf'ni Zf]YXYb"

8i fW`X]Y'5bk YbXi b['a cXYfbYf'a]b]a U`!bj Ug]j Yf'J YfZU\fyb
YbhgW]YX'g]W`DfcZ'8f" 'a YX"5`YI UbXYf'A YmYfž'7\YZUfnh'XYf
; YZÀ» W]fi f[]Yž'ZØf'Y]bYb'gW`cbYbXYb'9]b[f]ZZ'VY]'XYa `X]Y
j YfYb[hYb'; YZÀ» Y`Yfk Y]hYfh'k i fXYb"8]Y'?b]Y_Y\`Yb'g]bX'Y]b
VYgcbXYfg`VYUbgd fi W`hYf'6YfY]W`XYg'? ØfdYfg ž'Yf`_ÅfhY`Yfž'k Ug
X]Y`<YfUi gZcfXYfi b[Yb'XYf'6Y\UbX'i b['j YfXYi h]W`h"8 Ub_
hYW`bc`c []gW`Yf': cfhgWf]hhY`_ØbbYb`Y`fnhY`\Yi hY
VY\UbX'i b[g]bhYbg]j Y'6YfY]W`Y`YfZc`[fY]W`Ub[Y\Ybž'c\bY'X]Y
DUh]YbhYb'Y]bYa '\c\Yb'F]g]_c`Xi fW`Y]bY'cZYbY`C dYfUh]cb
Ui gni gYhnYb"

8]Y'6Y\UbX'i b['j cb`<Yffb'6Y\fybXh]gh'b]W`h'bi f'Y]b
dYfgØb`]W`Yf'9fZc`[ž'gcbXYfb'ghY\h'Ui W`YI Ya d`Uf]gW`ZØf'X]Y
\Yfj cffU[YbXY'a YX]n]b]gW`Y`J Yfgcf[i b['j]b'8Yi hgW`UbX"8 Ug
<Y']cg'?`]b]_i a '6Yf`]b!6i W`ž'k Y`W`Yg'ØVYf'Y]b'XfY]ZUW
nYfh]Z]n]YfhYg'; YZÀ» nYbhfi a 'j YfZØ[hž'nY][h'Ui Zž'k]Y
]bhYfX]gn]d`]bÅfY`Ni gUa a YbUfVY]h'nk]gW`Yb'; YZÀ» W]fi f[]Yž
5b[]c`c []Y'i bX'F UX]c`c []Y'ni `cdh]a U`Yb
6Y\UbX'i b[gYf[YVb]ggYb'ZØ\fh" I bgYf'N]Y`]]gh'Ygž'ZØf`^XYb
DUh]YbhYb'X]Y']bX]j]Xi Y``dUggYbXY`H\YfUd]Y'ni `Z]bXYb ž'VYhcbh
DfcZ'`A YmYf"

9g]gh'k]W h['ni 'VYhc.bYbž'XUgg'X]Y'ghYh][Y'6YhfYi i b['i bX
BUW gc f[Yž'k]Y'fY[Y'a Å»][Y'I 'hfUgWU' i bhYfgi W i b[Ybž'XUni
VY]hfU[Ybž'X]Y'; Ygi bX\Y]hj cb'DUh]YbhYb'a]h'GhYbhg'Ub[Zf]gh]['ni
g]W Yfb" A]h'Y]bYf'Yb[a UgW][Yb'6YhfYi i b['i bX'Y]bYa
[Ygi bXYb'@VYbgk UbXY' _Ubb '< Yff'6Y\ fYbXh'Zc'fhUb'gY]bYb
@VYbgUVYbX'gW a YfnZfY]' [Yb]Y» Yb žZØ[hY'XYf'5fnh'\]bni "'8]YgY
@Y]hgÅhnY'gd]Y[Y'b'XUg'6YghfYVYb'XYf'a cXYfbYb'A YX]n]b'k]XYf.
X]Y '@VYbgei U']hÅh'Å'hYfYf'A YbgW Yb'bUW\U'h]['ni 'Yf\Ø\Yb"

?Uf'<Y]bn'6Y\ fYbXhž'XYf' ð\UVYf'Y]bYg'VYk Y[hYb'@VYbg'i bX
5i hcf'XYg'6i W Yg' Gdi fYb'i bhYf'XYf'<Ui h žYf]bbYfhg]W. ' Jcf
&\$'J\ fYb'k Uf'U'Yg'bcW ' [Ubn'UbXYfg" 'GY]bYb
9fZU\ fi b[gVYf]W hYb'bUW 'ni 'i fhY]'Ybž'g]bX'X]Y': cfhgW f]hY']b'XYf
A YX]n]b'VYa Yf_Ybgk Yfh'i bX'UggYb'\cZZYbž'XUgg'Ui W 'UbXYfYb
Å'hYfYb'A YbgW Yb'YZZY_hj] '[Y\c'ZYb'k YfXYb'_Ubb"

- K c. '<Y]cg?']b_ i a '6Yf']b!6i W
- K Ubb. '9]b[f]ZZY']a 'ž b]'i bX'GYdhYa VYf
- K Yf. '6Y\UbX'i b['Xi fW 'DfcZ''8f''a YX''5'YI UbXYf'A YmYf
i bX'gY]b'HYUa
- K Ug. 'A]b]a U'!]bj Ug]j Y'H\YfUd]Y '[Y[Yb'5fhYf]cg_'YfcgY
- K Ufi a . 'J YfVYggYfi b['XYf'@VYbgei U']hÅh']a '5'hYf

8Yf': U''j cb'<Yffb'6Y\ fYbXh'V]YhYh'Y]bYb'YfZfYi ']W Yb'5i gV']W_
Ui ZX]Y'Ni _i bZh'XYf'; Ygi bX\Y]hgj Yfgcf[i b['ZØf'GYb]cfYb"' ðXYa
]bbcj Uh]j Y'HYW bc'c[]Yb'i bX']bX]j]Xi Y''Y'6Y\UbX'i b[gd'ÅbY
i a [YgYmh'k YfXYbž'Åggh'g]W 'X]Y '@VYbgei U']hÅh'Å'hYfYf
A YbgW Yb'b'8Yi hgW 'UbX'Yf\YV']W 'ghY][Yfb"

8YhU]`g

6Ygi W Yb'G]Y'i bg'Ui Z. 'a Y]b!VYf']b"bYh