

Gdcfh[YgWk]Wk hY ']b 'DUf]g. 'G]ZUb ' < UggUb
hf]i a d \]Yfh']a 'A UfUh\ cb

G]ZUb ' < UggUb 'hf]i a d \]Yfh'VY]a 'C`ma d]Ua UfUh\cb ']b 'DUf]g
i bX'gWk fY]Vh'Gdcfh[YgWk]Wk hY 'a]h'F Y_cfXnY]h' i bX
A YXU]'`Yb fUi gWk "

8Yf'A UfUh\cb 'VY]'XYb'C`ma d]gWk Yb'Gd]Y`Yb']b 'DUf]g \ Uh'b]Wk h'bi f
Y]bYb' bYi Y'F Y_cfX[YgWk k]bX][_Y]h'VYgWk f]YVYbž'gcbXYfb'Ui Wk
Y]bYb'VYa Yf_Ybgk YfhYb'A Y]YbghY]b']a ' : fUi Yb'Ui Z'a Uf_]Yfh"
G]ZUb' < UggUb 'Ui g'XYb'B]YXYf'UbXYbž'X]Y'Ui g'Y'h\]cd]Yb'ghUa a hž
g]Wk YfhY'g]Wk 'XYb'C`ma d]Ug]Y[']b'Y]bYf'NY]h'j cb'&.&.&.)) 'Ghi bXYb
i bX'gWk f]YV'XUa]h'; YgWk]Wk hYž']bXYa 'g]Y'U'g'YfghY' : fUi ' [c'XYbY
A YXU]'`Yb ']b 'U'`Yb 'XfY]'@Ub[ghfYW_Yb!8]gn]d']bYb '[Yk]bbYb
_cbbhY"

9]b 'XYb_k ØfX][Yf'K Yhh_Ua dZ

8Yf'A UfUh\cb'k Uf'[YdfÀ[h'j cb'Yi hfYa Yb'6YX]b[i b[Yb' i bX
Y]bYa 'gdUbbYbXYa ' ?cdZ]Ub! ?cdZ]F YbbYbž'XUg'V]g'ni f`YhnhYb
A]bi hY'Ub\]Y'h' < UggUbž'X]Y'Yfgh'UbXYfh\U'V'HU[Y'ni j cf']a
%\$"\$\$\$!A YhYf!@Ui Z]Ub[YhfYhYb'k Ufž'nY][hY'VYY]bXfi W_YbXY
GhÀf_Y" ð fY' < Ui dh_cb_i ffYbh]bbYbž'H][gh'5ggY ZU fY'h\]cd]Ybž
&.&.&.) , Ł' i bX' < Y`Yb 'C V]f] 'f? Yb]Už' & . &' . %\$Łž' _cbbhYb' b]Wk h'a]h
]\fYa '9bXgdi fh'a]h\ U'hYbž'XYf'X]Y'Ni gWk Ui Yf' i bX'5h\`YhYb
[`Y]Wk Yfa U» Yb']b'gY]bYb'6Ubb'nc["

< YfUi gZcfXYfi b[Yb' i bX '@Y]ghi b[`XYf
XYi hgWk Yb'5h\`YhYb

8]Y'XYi hgWk Yb'GhUfhYf]bbYb '\UhhYb'a]h'XYf'Ubgdfi Wk gj c`Yb
GhfYW_Y' i bX'XYb '\c\Yb'HYa dYfUhi fYb'ni ' _Åa dZYb" 8ca Yb]_U

A UmYf`]YZ'a]h'&.' \$.%('Ghi bXYb`Ui ZD`Uhn`&- ž'k Å\fybX`@Ui fU
<chYbfchh'a]h'Y]bYf`NY]hj cb'&.' %.-`XYb`' , "'D`Uhn`VY`Y[hY"
A UmYf`_ca a Ybh]YfhY`X]Y`<YfUi gZcfXYfi b[`XYg`FYbbYbg.` 8]Y
6Yf[`Y`k UfYb`Y]bY`<YfUi gZcfXYfi b["'9[U`k]Y`Ufh`Yg`k Ufž]Wk
k c`hY`ni Zf]YXYb`]bg`N]Y`Ui ZYb` `XYgk Y[Yb`UVY`]Wk`Ui Wk
[Y↑ VY`h"

Gdcfh[YgWk]Wk hY`k]fX` [YgWk f]YVYb

6YgcbXYfg`VYa Yf_Ybgk Yfh]gh`X]Y`@]ghi b[`j cb`G]ZUb`<UggUbž`X]Y
b]Wk h`bi f`X]YgYg`A U`hf]i a d\]YfhYž`gcbXYfb`Ui Wk`ni j cf`VY]`XYb
Gca a Yfgd]Y`Yb`]b`Hc_]c`&\$&%`9fZc`[Y`ZY]Yfb`_cbbhY`"Bi f`Y]b
UbXYfYf`5h`Yh`Uh]b`XYf`C`ma`d]U[Y`gWk UZhY`Yg`j Yf[`Y]Wk VUfY
9fZc`[Y`ni `Yfn]Y`Yb.`XYf`hgWk YWk]gWk Y`A UfUh\cb`Åi ZYf`9a`]
NUhcdY`ž`XYf`%-) &]b`XfY]`8]gn]d`]bYb` ; c`X`[Yk Ubb`"?ca a YbhUfY
j cb`Gdcfh]_cbYb`k]Y`DUi `U`F UXW]ZZY`i bhYfghfY]Wk Yb`X]Y
9]bn][Ufh][_Y]h`X]YgYf`9ffi b[YbgWk UZh` K Ug`G]ZUb`<UggUb`]Yf`]b
DUf]g`[Y`Y]ghYh`Uhž]gh`gWk k Yf`]b`K cfhY`ni `ZUggYb"

9]b`6`]W_`Ui Z`X]Y` : Uj cf]hYb

⇒ XYf`YfghYb`<Å`ZhY`XYg`FYbbYbg`UhhYb`g]Wk`a Y`fYfY
: Uj cf]h]bbYb`UV[Y`cVYb`"BUWk`%\$`?]`ca YhYfb`Z]Y`X]Y
Nk]gWk YbnY]hj cb`' (.` &`A]bi hYb`Ui Zž`k Ug`VYfY]hg`Ui Z`Y]b`Ufh
i a _Åa dZhYg`FYbbYb`]bk]Yg`"K Å\fybX`XYg`FYbbYbg`k i fXY`X]Y
; fi ddY`j cb`@Åi ZYf]bbYb`]a a Yf`_Y]bYfž`i bX`U`g`X]Y
Yh\]cd]Yf]bbYb`]f`HYa dc`Yf\Ö`hYbž`gWk]Yb`g]Wk`X]Y
; YgUa hk Yfhi b[`ni `j YfgWk]YVYb"

K UWk gYbXY`5bYf_Ybbi b[`ZØf`XYb` : fUi Yb! A UfUh\cb

8]Y`@]ghi b[Yb`]b`DUf]g`g]bX`Y]b`Y]bXfi W_gj c`Yf`6Yk Y]g`ZØf`X]Y
9bhk]W_`i b[`XYg` : fUi Yb!A UfUh\cbg`"Ni bY`a YbX`[Yk]bbYb
: fUi Yb`]b`XYf`@Ui Z[Ya Y]bgWk UZhUb`6YXYi hi b[`i bX
5bYf_Ybbi b[ž`k Ug`g]Wk`b]Wk h`bi f`]b`XYf`5bnU`X`XYf
HY`]bY`a Yf]bbYb`k]XYfgd]Y[Y`hž`gcbXYfb`Ui Wk`]b`XYf

A YX]YbVYf]W\hYfghUhh i b['i bX`XYa `Ni gW\Ui Yf]bhYfYggY""8]Y
9fa i h][i b['↑ b[Yf`5h\`YhYbž`b`XYb`Gdcfh`Y]bni hfYhYbž`k]fX
]a a Yf`k]W\h][Yfž`i a `X]Y`bÅW\ghY` ; YbYfUh]cb`j`cb
@Ui Z_Øbgh`Yf]bbYb`ni `]bgd]f]YfYb"

K Å\fybX`G]ZUb`<UggUb`a]h`\fy a `G]Y['i bX`XYa `XUa]h
j YfVi bXYbYb`FY`_cfX`]b`X]Y` ; YgW\W\hgVØW\Yf`Y]b[Y\hž`Yfk UfhYb
j]Y`Yž`XUgg`X]Y`8]g_i gg]cb`ØVYf` : fUi Yb`]a `@Y]ghi b[ggdcfh`i bX`X]Y
Bcfa Yb`XYg`A UfUh\cbg`k Y]hYf[YZØ\fh`k]fX"Gc`_ØbbhY`XYf
9]bZi gg`X]YgYf`Ui » Yf[Yk Ø\`b`]W\Yb`5h\`Yh]b`b]W\h`bi f`ZØf`XYb
A ca Ybh`gdØfVUf`gY]bž`gcbXYfb`Ui W\`ZØf`ni _ØbZh][Y`C`ma`d]gW\Yb
Gd]Y`Y`i bX`XUfØVYf`\]bUi`g"

9f[YVb]ggY`]a ` , VYfV`]W_

%" G]ZUb`<UggUb`B98`&.&&.))
&" H][gh`5ggYZU`9H<`&.&&.) ,
' " <Y`Yb`CV]f]`?9B`&.&' .%\$
(" G\Ufcb`@_YX]`?9B`&.&' .%(
) " 5a UbY`6Yf]gc`G\Ub_i`Y`9H<`&.&' .) +
*" M`_U`Gi`ni`_]`DB`&.&(. \$&
+" 8ca Yb]_U`A UmYf` ; 9F`&.` \$.%(
, " @Ui fU`<chhYbfchh ; 9F`&.` % .%-

8YhU]`g

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