

GWk YfYf'I bZU``Ui Z'6' \$\$. F YbhbYf'gh]fVh
VY]: fcbhU`WfUg\

9]b'gWk YfYf'I bZU``Ui Z'XYf'6' \$\$'VY]'GWfcVYb\Ui gYb
ZcfXYfh'XUg'@YVYb'Y]bYg'+%!`Å\][Yb""8Yf'6A K !: U\fyf'Ui g
XYa '?fY]g': fY]g]b['_c``X]YfhY'ZfcbhU`a]h'Y]bYa '; c`Z'

9]b'hfU[]gWYf'J Yf_Y\fgi bZU``\Uh'Ua 'GUa ghU[ž'XYa '&*""5i [i gh
&\$&(ž'Ui Z'XYf'6' \$\$'VY]'GWfcVYb\Ui gYb'XUg'@YVYb'Y]bYg
+%!`Å\][Yb'F YbhbYfg[YZcfXYfh'"8Yf'J cfZU``YfY][bYhY'g]Wk '[Y[Yb
%*.&)'I \fž'U`g'Y]b') - !`Å\][Yf'6A K !: U\fyf'Ui g'XYa '?fY]g
: fY]g]b['Ui g'V]g'Ub['i b[Y_`ÅfhYb'; f0bXYb']b'X]Y'; Y[YbZU\fvU\b
[Yf]Yh'i bX'a]h'XYa '; c`Z'XYg'CdZf'g'ni gUa a Ybgh]Y»""8]Y'HfU[]_
X]YgYg'I bZU``g`\]bhYf'Åggh'b]Wk'h'bi f'VY]'XYb'6YhfcZYbYb'Y]bYb
h]YZb'9]bXfi W_ž'gcbXYfb'k]fZ'Ui Wk ': fU[Yb'ni f
J Yf_Y\fgg]Wk Yf\Y]h'Ui Z'

8Yf'6A K !: U\fyf'k Uf'Ua 'BUWka]hU['a]h'gY]bYf') - !`Å\][Yb': fUi
]b'F]Wk hi b['b[c`ghUXh'i bhYfk Y[g""9hk U'&\$ \$'A YhYf'bUWk'XYf
5VZU\fh'GWfcVYb\Ui gYb!G0X'_Ua 'Yg'XUbb'ni 'XYf'j Yf\YYfYbXYb
'?c``]g]cb""8Yf'; c`Z'XYg'F YbhbYfg'k i fXY'gc'ghUf_'VYgWk`ÅX][hž'XUgg
Yf'j cb'XYf': Yi Yfk Y\fb'i f'bcWk'hch'Ui g'XYa 'K fUW_'[YVcf[Yb
k YfXYb'_cbbhY""Gck c\`XYf'I bZU``j Yfi fgUWYf'U'g'Ui Wk'gY]bY
: fUi 'a i gghYb'gWk Yfj Yf'Yhnh]bg'?fUb_Yb\Ui g'[YZc[Yb'k YfXYbž
k Ug'X]Y'8fUa Uh]_XYg'J cfZU``g'i bhYfghfY]Wk'h'

8]Y': c`[Yb'XYf'?c``]g]cb

9]bY'k Y]hYfY'VfYbn`][Y'G]hi Uh]cb'YfY][bYhY'g]Wk ž'U`g'Y]b
bUWk Zc'[YbXYf'+(!`Å\][Yf': U\fyf'Y]bYg'F YbUi `hgž'XYf'\]bhYf'XYa
; c`Z'XYg'F YbhbYfg'Zi \fž'b]Wk'h'a Y\f'fYWk'hY]h]['VfYa gYb'_cbbhY"
9f'_fUWk'hY']b'X]Y'I bZU``ghY``Y'i bX'VfUWk'hY'gY]bY' * * !`Å\][Y': fUi

a]h"6Y]XY'k i fXYb`Y]W'hj Yf`Ymh'i bX'ni f'l bhYfgi W'i b[`]bg
?fUb_Yb\Ui g'GW'fcVYb\Ui gYb'[YVfUW'h"

8]Y'GW'k YfY'X]YgYg'i bZU`g`YfZcXfYfhY`b]W'h'bi f'X]Y'gcZc'fh][Y
F'Y'hi b[`XYf'J Yf`YmhYbž'gcbXYfb`Ui W'`Y]bY'i a ZUggYbXY
GdYffi b[`XYf'6' \$\$]b`VY]XY`F]W'hi b[Ybž'X]Y`fi bX'j]Yf`Ghi bXYb
UbXUi YfhY": Yi Yfk Y`f'i bX`F'Y'hi b[gX]Ybgh'k UfYb`a]h'a Y`fYfYb
: U\fnYi [Yb'j c'f`C'fhž'i bX`Ui W'`nk Y]'F'Y'hi b[g`i VgW'fUi VYf
ghUbXYb`VYfY]hž'i a `X]Y`gW'k Yfj Yf`YmhYb`DYfgcbYb
gW'bY`gha Ò[`]W'`ni `j Yfgcf[Yb"

I a `X]Y[YbUi Yb`i a gh`AbXY`XYg'i bZU`g`ni ` _`ÀfYbž'k i fXY`Y]b
; i hUW'hYf`VYUi ZhfU[hž'XYf`Y]b`i bZU`UbU`mh]gW'Yg'; i hUW'hYb
UbZYfh][Yb`k]fX"8]YgY'; i hUW'hYb`g]bX`Yb'hgW'Y]XYbXž'i a
`YfUi gni Z]bXYbž'k Ug'ni `XYa `d`Òhn`]W'Yb`: U\fgdi fk YW'gY`XYg
6A K !: U`fYfg[YZ`\fh`\Uh"8YfUfh][Y`5bU`mgYb`\Y`ZYb`b]W'h'bi fž
XYb`J c'fZU`VYggYf'ni `j YfghY`Ybž'gcbXYfb`_ÒbbYb`Ui W'`k]W'h][Y
`Zc'fa Uh]cbYb`Z`f'ni _`ØbZh][Y`J Yf_Y`fg]W'Yf`Y]hga U» bU`a Yb
`]YZYfb"

8]Y`hfU[]gW'Y`9fY][b]ggY`X]YgYg`HU[Yg`Yf]bbYfb`XUfUbž'k]Y
gW'bY`Ui g`Y]bYa `F'ci h]bYZU`fnYi [`Y]bY`G]hi Uh]cb`k YfXYb`_Ubbž
X]Y`i bj c'f`YfgY`VUfY`i bX'j Yf`YYfYbXY': c`[Yb`\Uh"8Yf`J Yf`i gh
Y]bYg`@YVYbg`]b`gc`W'`d`Òhn`]W'Yf`K Y]gY`Ògh]b`XYf'; Ya Y]bgW'UZh
HfUi Yf`i bX`6YghØfni b[`Ui g"8]Y`6Yf]W'hY`ØVYf`gW'k YfY`i bZ`Y
gcf[Yb`c'ZiZ`f`Y]b`YfbYi hYg`6Yk i gghgY]b`ØVYf`X]Y`B'chk YbX][_Y]h
j cb`5W'hgUa _Y]hi bX`G]W'Yf`Y]h]a `GhfU» Ybj Yf_Y`f"

G]W'Yf`Y]hga U» bU`a Yb`i bX`Df`Àj Yb'h]cb

A]h`XYa `5bgh]Y[`gW'k YfYf`J Yf_Y`fgi bZ`Y`]b`XYb`YmhYb``U`fYb
]gh`Yg'i bYf`Àgg`]W'ž'XUgg`gck c`\`X]Y`6Y`\ÒfXYb`U`g`Ui W'`X]Y': U`fYf
A U» bU`a Yb`Yf[fY]ZYbž'i a `X]Y`G]W'Yf`Y]h]Ui Z`XYb`GhfU» Yb`ni
[Yk `À`f`Y]ghYb" Df`Àj Yb'h]cbgd'fc[fUa `a Yž'fY[Y`a `À»][Y
J Yf_Y`fg_c'b'hc`Yb`i bX`5i Z`_`Àfi b[`ØVYf`g]W'YfY': U`f'fU`h]_Yb
_`ÒbbYb`XUni `VY]hfU[Ybž'gcb`W'Y`HfU[ÒX]Yb`ni `fYXi n]YfYb" `X`Yf
J Yf_Y`fghY]`bY`a Yf`hf`À[h`Y]bY`J YfU'bk c'fhi b[ž'i a `g]W'`i bX
UbXYfY`ni `gW'Ø'hYb"9]bY`j Yfgh`Àf`hY`5i Za Yf_gUa _Y]hi bX

?Ybbhb]ggY`ØVYf`dchYbn]Y`Y` ; YZU\ fYb`]a` GhfU» Ybj Yf_Y\ f`g]bX
YbhgWXY]XYbXž i a` gWk YfY`I bZ`Y`ni` j Yf\]bXYfb`i bX`i a` XUg
@VYb`U`Yf`J Yf_Y\ fghY]`bY\ a` Yf`ni` gWØhnYb"

8Yf`hfU[]gWY`J Yf_Y\ fgi bZU`Ui ZXYf`6' \$\$`k]fZh`b]W`h`b`i`f` : fU[Yb
ni`f`G]WYf\Y]h`]a` GhfU» Ybj Yf_Y\ f`Ui Z`gcbXYfb`Ui W`ni`f`
U`[Ya`Y]bYb`I bZU`ghU]gh]_`]b`8Yi hgW`UbX"; fi bXg`h`n]W`i`[Y`hYb
i bgYfY`GhfU» Yb`U`g`fY`Uhj]`g]WYfž`XYbbcW`nY][Yb`X]Y`NU\`Ybž
XUgg`Yg`bUW`k]Y`j`cf`ni` j]Y`Yb`hØX`]WYb`I bZ`Yb`_ca`a`h`@Ui`h`
XYa`GhU]gh]gWYb`6i bXYgUa`h`k`UfYb`]a``X\`f`&\$&&]b
8Yi hgW`UbX`fi bX`&"- \$\$`A`YbgWYb`VY]`J Yf_Y\ fgi bZ`Yb`hØX`]W
j Yfi b[`ØW`h`9]b` ; fc» hY]`X]YgYf`I bZ`Y`_cbbhY`Xi fW`d`f`Aj`Ybhj`Y
A U» bU\ a` Yb`i bX`a` cXYfbY`J Yf_Y\ fgg]WYf\Y]hg_Ua`dU[bYb
j Yfa`]YXYb`k`YfXYb"8]Y`9]bZØ\fi b[`j`cb`g]WYfYfYb` : U\fnYi`[Yb
i bX`J Yf_Y\ fg]bZfUghfi`_hi`f`j`Yf\`Zh`nk`Uf`ni`Y]bYf`A`]bXYfi b[`XYf
I bZU`nU\`Ybž`XYbbcW`V`Y]VYb`I bZ`Y`k`]Y`X]YgYf`gW`a`Yfn`UZh
df`AgYb`h"

9]b`k`Y]hYfYf` : U`hc`fž`XYf`ni`f` ; YZU\ f`]a` GhfU» Ybj Yf_Y\ f`VY]hf`À[hž
]gh`XUg`a` YbgW`]WY`J Yf\U`hYb"5V`Yb`_i` b[Yb`Xi`fW`Ga`Ufhd\`cbYg
cXYf`A`ØX][`_Y]h`Ua`GhYi`Yf`g]bX`\`Ài`Z][`Y`I`fgUWYb`ZØf`I bZ`Y`Y" `b
Y]bYf`I`a`ZfU[Y`XYg`8Yi hgWYb`J Yf_Y\ fgg]WYf\Y]hgfUhg`[UVYb`" \$
i`XYf`6Y`ZfU[hYb`Ubž`gW`cb`Y]ba`U`Xi`fW`XUg`< UbXm`UV[Y`Yb`_h
k`cfXYb`ni`gY]bž`k`Ug`X]Y`B`chk`YbX][`_Y]hj`cb
5i`Z`Àfi b[g_Ua`dU[bYb`i`bhYfghfY]W`h"8]Y`Dc`]nY]`VYhcbh
fY[Y`a`À»][`ž`k`]Y`k`]W`h][`Y`g`]ghž`g]W`Ub`X]Y`J Yf_Y\ fgfY[Y`b`ni
\U`hYb`i bX`X]Y`Y][`YbY`G]WYf\Y]h`gck`]Y`X]Y`UbXYfYf
J Yf_Y\ fghY]`bY\ a` Yf`ni`VYfØW`g]W`h][`Yb"

5_h]cbYb`ZØf`a`Y\ f`J`Yf_Y\ fgg]WYf\Y]h

⇒ a`5bgW`i`gg`Ub`gc`W`Y`hfU[]gWYb`9fY][`b]ggY`]b]h]YfYb`Gh`X`hY
i bX` ; Ya`Y]bXYb`\`Ài`Z][`A`U» bU\ a` Yb`ni`f`J YfVYggYfi b[`XYf
J Yf_Y\ fgg]WYf\Y]h`GdYn]Y`Ub`I bZU`ghY`Yb`k`YfXYb`\`Ài`Z][
 ; YgW`k`]bX][`_Y]hga`Yggi`b[Yb`Xi`fW`[YZØ\`f`h`i`bX`Yj`Yb`hi`Y`
 ; YgW`k`]bX][`_Y]hgVY[fYbni b[Yb`Ub[YdUggh"J YfgW]YXYbY
Cf[Ub]gU]cbYb`gYhnYb`g]W`ZØf`d`f`Aj`Ybhj`Y`A`U» bU\ a` Yb`Y]bž`i`a
XUg`6Yk`i`gghY]b`ZØf`J Yf_Y\ fgfY[Y`b`ni`gW`ÀfZYb`i`bX`[YZ`À`f`]W`Y

G]hi Uh]cbYb`ni `j Yfa Y]XYb"

9]b`6Y]gd]Y`ZØf`gc`WXY`5_h]cbYb`]gh`X]Y` J]g]cb`NYfc !#h]Uh]j Yž
X]Y`XUfUi Z`UVn]Y`hž`X]Y`NU\`XYf`J Yf_Y\fgi bZÀ`Y`i bX`XYf
J Yf_Y\fgfhYb`Ui Z`bi ``ni `fYXi n]YfYb" J YfgW]YXYbY`GhAXhY`i bX
@AbXYf`\UVYb`VYfY]hg`Dfc[fUa a Y`[YghUfhYhž`X]Y`g]W]Ui ZXYb
5i gVUi `j cb`FUXk Y[Ybž`X]Y`J YfVYggYfi b[`XYf`6Y`Yi W`hi b[`i bX
X]Y`GW`UZZ b[`g]W`YfYfYf` VYfei Yfi b[ga Ò[`]W`_Y]hYb
_c`bnYbhf]YfYb" 8]YgY`A U» bU`a Yb`_ÒbbYb`\Y`ZYbž`X]Y
J Yf_Y\fgg]W`Yf\Y]h`bUW`\U`h][`ni `Yf\Ò\Yb`i bX`GW`AXYb`k]Y`X]Y
VY]`XYa `l bZU``]b`GW`fcVYb`Ui gYb`ni `fYXi n]YfYb"

8YhU]`g

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