

H7@'dfÄgYbh]Yfh']bbcj Uh]j Y'HYW bc`c[ ]Yb  
Ui Z'XYf' ð 5'&\$&( 'ZØf'Y]b'ga UfhYfYg'@YVYb

H7@Ybh\Ø`h'Ui Z'XYf' ð 5'&\$&( 'bbcj Uh]j Y'HYW bc`c[ ]Yb'i bX  
DfcXi \_hY'ZØf'Y]b']bhY`][ YbhYfYgž'[ YgØbXYfYg'Ni \Ui gY"  
9bhXYW\_Yb'G]Y'X]Y'<][ \'][\ hg°

6Yf']b'fchg#DFBYk gk ]fYŁ

H7@'9`YWhfcb]Wg'\Uh'Ui Z'XYf' ð 5'&\$&( 'b'6Yf']b'Y]bY  
VYY]bXfi W\_YbXY'DfcXi \_hdU`YhhY'j cf[ YghY`hž'X]Y']bbcj Uh]j Y  
HYW bc`c[ ]Yb'j YfY]bhž'i a'XUg'hÄ[ 'WY'@YVYb']bhY`][ YbhYf'i bX  
[ YgØbXYf'ni '[ YghU'hYb"'ð'X]YgYa' ð\`f'ZY]YfhY'X]Y' ð 5'\f  
%\$#!Ä`f][ Yg'6Ygh\Ybž'i bX'H7@'bi hnhY'X]Y'; Y'Y[ Yb\Y]hž'i a'`a ]h  
Y]bYf'5i gghY`i b[ 'j cb'ZUgh" "\$\$\$'E i UXfUha YhYfb'Y]bYb'bYi Yb  
FY\_cfX'ZØf'XUg'i bhYfbY\`a Yb'Ui Zni ghY`Yb"

H7@\Uh]g]W\U`g'Y]bYf'XYf'D]cb]YfY'ja'6YfY]W'XYf  
I bhYf\U`hi b[ gY'Y\_hfcb]\_YhUV`]Yfhi bX'V]YhYh'Y]b'i a ZUb[ fY]WYg  
DcfhZc`cž'XUg'j cb': YfbgY\Yfb'V]g'\]b'ni'']bhY`][ YbhYb  
<Ui g\U`hg[ YfÄhYb'fY]W'h"

ðbbcj Uh]j Y': YfbgY\Yf'ZØf'hUh\_fÄZh][ Y  
7]bYUghYb

6YgcbXYfg'Ui ZÄ`][ 'gh'XYf'H7@L%%<'DfYa ]i a'E 8!A ]b] '@98!  
: YfbgY\Yfž'XYf'a ]h'XYf']bbcj Uh]j Yb'5`!8ca U]b'<U`c'7cbhfc'!  
HYW bc`c[ ]Y'Ui g[ YghUhhY'h]gh''8 ]YgYg'A cXY`ghY`h'Y]bYb  
VYXYi hYbXYb': cfhgWf]hh]b'XYf'6]Xe i U'hÄh'XUf''9]b'k Y]hYfYg  
<][ \'][\ h]gh'XYf'H7@L - ) ) 'A UI ž'XYf'a ]h'%%) 'Nc`U`g[ fÖ» hYf'E 8!  
A ]b]!@98!: YfbgY\Yf'k Y'hk Y]h[ ]'h''8]YgY'; YfÄhY'gYhnYb'bYi Y  
A U» ghÄVY'ZØf'XUg'<ca Y'9bhYfhU]ba Ybhi bX'V]YhYb'Y]b

i bj Yf[ `Y]W`]WYg: YfbgY\Yf`YVb]g"

Ni gÄhn`]W` \UhH7@X]Y`BLH: F5A9`HJ!GYf]Y`Ub[ Y\_ØbX][ hž`X]Y  
X][ ]hU`Y`?i bghi bX`i bhYf\U`hi b[ `fYj c`i h]cb]YfYb`gc`""`<]Yfni `nÄ`h  
X]Y`Dfc!JYfg]cbž`X]Y`]b`Ni gUa a YbUfVY]h`a ]h`XYf`fYbca a ]YfhYb  
5i X]ca Uf\_Y`6Ub[ /`C`i ZgYb`Ybhk ]W\_Y`h`k i fXY""; Ya Y]bgUa  
V]YhYb`X]YgY`DfcXi \_hY`Y]bY`a i `h]gYbgcf]gWY`9fZU\fi b[ ž`X]Y`ØVYf  
XUg`V`c»Y`GY\Yb`\]bUi g[ Y`h"

8]Y`Gci bXVUfg`E , ) <`i bX`E +) <ž`Ui g[ YghUhhY`h`a ]h`XYf  
dUhYbh]YfhYb`F5M85BN!HYW`bc`c[ ]Yž`Yfk Y]hYfb`XUg`DcfhZc`]c`i bX  
j YfgdfYW`Yb`Y]b`Yfgh`Ugg][ Yg`<Y]a \_]bcYf`YVb]g"

: cfhgW`f]hh`]W`Y`A cV]`]hÄ`h`i bX`? cbbY`\_h]j ]hÄ`h

≠`XYf`Ga Ufhd\cbY!GdUfhY`Vf]b[ h`H7@X]Y`; YfÄ`hY`) \$`DFC  
BLHD5D9F`); `i bX`) \$`BLHD5D9F`); `Ui Z`XYb`A Uf`hž`X]Y`a ]h`XYf  
Ui [ YbgW`cbYbXYb`BLHD5D9F`" "\$!HYW`bc`c[ ]Y`Ui g[ YghUhhY`h`g]bX`  
8]YgY`; YfÄ`hY`g]bX`XUfUi Z`Ui g[ Y`Y[ hž`Y]bY`j YfVYggYfhY  
Bi hnYfYfZU\fi b[ `ni `V]YhYb`i bX`X]Y`5i [ Yb`ni `Yb`h`UghYb`  
9f[ ÄbnYbX`XUni `V]YhYh`XUg`bYi `Y]b[ YZØ\fhY`H7@H56`%%; Yb`&  
HUV`Yhj YfVYggYfhY`A i `h]hUg\_]b[ !: i b`\_h]cbYb"

⇒ `5i hca cV]`gY`\_hcf`\UhH7@]bbcj Uh]j Y`@Øgi b[ Yb`j cf[ YghY`hž  
XUfi bhYf`@Øgi b[ Yb`ni f`≠bhY[ fU]cb`]bhY`][ YbhYf`7cW\_d]hg""8]YgY  
GmghY`a Y`n]Y`Yb`XUfUi Z`UVž`XUg`; U\YfY`YVb]g`ni `j YfVYggYfb`i bX  
V]YhYb`Y]bY`\_]bcÄ`b`]W`Y`E i U`]hÄ`h`X]fY`\_h]a `: U\fnYi [ "

6YgcbXYfg`VYa Yf\_Ybgk Yfh`]gh`X]Y`FUmBYc`5]f`&G`LF!6f]`Yž`X]Y  
Y]b`\YfUi gfU[ YbXYg`j ]gi Y`Yg`9f`YVb]g`a ]h`Y]bYa `]bbcj Uh]j Yb  
5i X]cgmghY`a `\_ca V]b]Yfh`8]Yg`nY][ hž`k ]Y`H7@HYW`bc`c[ ]Y`b]W`h  
bi f`ni f`i bhYf\U`hi b[ ž`gcbXYfb`Ui W`ni f`j YfVYggYfi b[ `XYg  
5`hU[ g`Y]bgYhnh"

; Ygi bX`Y]hgZØfXYfbXY`< Ui g\U`hg[ YfÄ`hY`ZØf  
YXYb`HU[

H7@\UhiUi W\ja`6YfY]W\<Ui g\U`hg[ YfÅhY`b]W\h[ YgdUfhi bX  
; YfÅhY`j cf[ YghY`hžX]Y`gck c\`YbYf[ ]YZZ]n]YbhU`g`Ui W  
[ Ygi bX\Y]hgZØfXYfbX`g]bX"8]Y: fYg\B` "\$`?`a UUb`U[ Y`ni a  
6Y]gd]Y`bi hnh]bhY`][ YbhY`:]`hYfhYW\bc`c[ ]Ybž`i a`X]Y`F Ui a`i Zhni  
fY]b][ Ybž`k Å\fybX`XUg`H7@6fYYnY`B`&`\$`a`]h`Y]bYa  
ZcfhgW\fh]W\Yb`9bYf[ ]Yj Yfk U`hi b[ ggmghYa`Ui g[ YghUhhY`h]gh"

8Yg`K`Y]hYfYb`dfÅgYbh]Yfh`H7@Y]b`bYi Yg`Ga`Ufh`<chY`GmghYa`ž  
XUg`a`U»[ YgW\by]XYfhY`@Øgi b[ Yb`ZØf`X]Y`5bZcfXYfi b[ Yb`j`cb  
<chY`\_i bXYb`V]YhY`hi bX`bU\h`cg]b`VYghY\YbXY`GmghYa`Y  
]bhY[ f]Yfh`k`YfXYb`\_Ubb"5V[ Yfi bXYh`k`]fX`X]Yg`Xi fW\`Y]bY`J`]Y`nU\`  
j`cb`€H!U\_h]j`Yb`<Ui g\U`hg[ YfÅhYbž`X]Y`\_ØbZh][`j`YfZØ[ VUf`gY]b  
gc`Yb"

8]Y`A`!GYf]Y`a`]h: `UW\V]`XgW\]fa`Ybž`X]Y`j`ca`H`J`F`Y]b`UbX  
nYfh]Z]n]Yfh]g]bXž`V]YhY`h: i b\_h]cbYbž`X]Y`X]Y: Ygi bX\Y]h`XYf`5i [ Yb  
VY]a`:]`YfbgY\\_cbgi a`i bhYfghØhnYbž`]bXYa`g]Y: `]a`a`Yfb  
a`]b]a`]YfYb`i bX`XYb`5bhY]`XYg`V`Ui Yb`@]W\hg`fYXi`n]YfYb"

?`UfY`J`]g]cbYb`ZØf`Y]bY`bUW\`U`h][`Y`Ni`\_i`bZh

H7@\Uhi`ni`XYa`Y]bY`]bhY[ f]YfhY`Ga`Ufh!<ca`Y!9bYf[ ]Y`Øgi b[  
Ybhk`]W\_Y`hžX]Y`Gc`Ufa`cXi`Yž`9bYf[ ]YgdY]W\Yf`i`bX  
<Ui g\U`hg[ YfÅhY`]b`Y]bYf`Y]bn][ Yb`D`UhhZc`fa`j`YfY]bh"8Ua`]h`gc`  
Bi`hnYfb`\Y`Zyb`k`YfXYbž`\fyb`9bYf[ ]Yj`YfvfUi`W\`ni`ØVYfk`UW\Yb  
i`bX`[`Y]W\`nY]h][`?`cghYb`ni`gYb`\_Yb"

8Ug`9b[ U[ Ya`Ybh]`cb`H7@ZØf`B`UW\`U`h][`\_Y]h`k`]fX`Xi`fW\`X]Y  
9]bZØ\fi b[ `XYf`C`B`9`H7@9G;`Ghc`fm]`YfghÅf`\_hžX]Y`XUg  
I`bhYfbY\`a`Yb`U`g`Y]bYb`j`YfUbhk`cfhi b[ gVYk`i`gghYb`5\_hYi`f`]b`XYf  
[ `cVU`Yb`@]YZf`\_YhY`nY][`h"9]b`<Ø`Ydi`b\_h`XYf`≡`5`&`\$`&(`k`Uf`X]Y  
DfÅgYbhUh]cb`XYg`Gdcfh]\_cbY`8Uj`]X`J`]`Už`XYf`X]Y`J`Yfv]bXi b[`j`cb  
HYW\bc`c[ ]Y`i`bX`Gdcfh`fYdfÅgYbh]Yfh`i`bX`Y]bYb`F`Ui`a`ZØf`↑`b[ Y  
≠hYfYgg]YfhY`gW\`UZh"

A`]h`Y]bYa`ghUf`\_Yb: c`\_i`g`Ui`Z[ `cVU`Y`@c`\_U`]g]Yfi b[ `i`bX  
ghfUhy[ ]gW\Y`DUf`hbYfgW\UZhYb`]b`XYf`Gdc`fhk`Y`h`ghY`h`H7@g]W\Yfž  
XUgg`HYW\bc`c[ ]Y`b]W\`h`bi`f`≠bcj`Uh]cbž`gc`bXYfb`Ui`W\

; Ya Y]bgW\UZhi bX`Ni gUa a YbUfVY]hZ0fXYfh"

5`g`< YfghY`Yfz`XYf`]b`0VYf`%\* \$`A`Àf`\_hYb`U[ ]Yfhz`nY][ h`H7`@z`XUgg`Yg  
Y]bY`Z0\fybXY`F c``Y`]a`HYW\bc`c[ ]YgY`\_hcf`gd]Y`hž`]bXYa`Yg  
\_cbh]bi ]Yf`]W`]bbcj Uh]j Y`DfcXi`\_hY`Yb`hk ]W\_Y`hž`X]Y`XUg`hÅ[ `]W\Y  
@YVYb`VYfY]W\Yfb`i bX`XUa ]h`U`hYfbUh]j Y`@0gi b[ Yb`Z0f`Y]b  
ga UfhYfYg`i bX`[ Yg0bXYfYg`@YVYb`UbV]YhYb"

8YhU]`g

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