

8]Y 'Hcd '%&'K ØfnVi f[GY\Yb gk ØfX][_Y]hYb. '9]b 'i a ZUggYbXYf F Y]gYZØ\ fYf

K ØfnVi f[']gh'Y]bY 'XYf'W Ufa UbhYghYb 'GhÅXhY '8Yi hgW\UbXgž
VY_Ubbh'ZØf' \fY'dfÅW h][Yb 'GW\`ÖggYfž\]ghcf]gWYb
6fØW_Yb 'i bX'a U`Yf]gWYb 'K Y]bVYf[Y''8]YgYf'5fh]_Y`
_c b nYbhf]Yfh'g]W\ 'Ui Z'X]Y 'Hcd '%&'K ØfnVi f[
GY\Yb gk ØfX][_Y]hYbž'X]Y 'YXYb '6Ygi WYf'VY[Y]ghYfb
k YfXYb''%'8]Y'K ØfnVi f[Yf'F Yg]XYbn'8]Y'K ØfnVi f[Yf
F Yg]XYbn']gh'Y]bY 'XYf'dfÅW h][ghYb 'i bX'k]W h][ghYb
GY\Yb gk ØfX][_Y]hYb ']b'K ØfnVi f["'G]Y ']gh'Y]b 'ž k Y`XYg
6UfcW_g'i bX'gd]Y[Y'h'XUg'_i 'hi fY`Y'i bX'\]ghcf]gWY'9fVY
XYf'GhUXh'k]XYf''8]Y'F Yg]XYbn'k i fXY'%- , %j cb'XYf'I B9G7C
ni a 'K Y'h_i 'hi fYfVY'Yf_`Åfhi bX'n]Y\h'Å\`f']W 'HUi gYbXY'j cb
Hci f]ghYb 'Ui g'XYf'[Ub nYb 'K Y'h'Ub''8]Y'F Yg]XYbn'k i fXY'Ui Z
K i bgW\XYg': ØfghV]gW cZg'æ\Ubb'D\']dd': fUbn'j cb
GW\ØbVc fb 'i bX'gY]bYg'6fi XYfg' / Ua d^Y``]d/



8]Y : Yghi b['A Uf]YbVYf[']gh'Y]b 'K U\fnY]WYb 'XYf'GhUXhi bX'nyI [hj cb ']\fYf
'Ub[Yb': YgW]W hY

K ØfnVi f[']gh'Y]bY 'XYf'W Ufa UbhYghYb 'GhÅXhY '8Yi hgW\UbXgž

VY_Ubbh'ZØf']\fY'dfÅW h][Yb'GW`ÒggYfž'\]ghcf]gW Yb'6fØW_Yb'i bX
a U`Yf]gW Yb'K Y]bVYf[Y''8]YgYf'5fh]_Y''_cbnYbhf]Yfh'g]W`Ui ZX]Y
Hcd`%&'K ØfnVi f['GY\Ybgk ØfX][_Y]hYbž'X]Y`YXYb'6Ygi W`Yf
VY[Y]ghYfb'k YfXYb"

%''8]Y`K ØfnVi f[Yf'F Yg]XYbn

8]Y`K ØfnVi f[Yf'F Yg]XYbn]ghY]bY`XYf'dfÅW h][ghYb'i bX
k]W h][ghYb'GY\Ybgk ØfX][_Y]hYb']b'K ØfnVi f["G]Y`]ghY]b'ž k Y`
XYg'6UfcW_g'i bX'gd]Y[Y'h'XUg'_i`hi fY`Y'i bX'\]ghcf]gW Y'9fVY`XYf
GhUXh'k]XYf''8]Y`F Yg]XYbn'k i fXY`%- , %j cb`XYf'l B9G7C`ni a
K Y'h_i`hi fYfVY`Yf_`Àfh'i bX'n]Y\h'À\f`]W`HUi gYbXY`j cb`Hci f]ghYb
Ui g`XYf'[Ubnyb'K Y`h'Ub"



8]Y`K ØfnVi f[Yf'F Yg]XYbnžY]bYg`XYf'dfÅW h][ghYb
6UfcW_gW`ÒggYf'9i fcdUgž'ghY\h'Ub`XYf'Gd]hnY`i bgYfYf'@]ghY`XYf
K ØfnVi f['GY\Ybgk ØfX][_Y]hYb"

8]Y`F Yg]XYbn'k i fXY`Ui Z'K i bgW`XYg': ØfghV]gW c Zg'æ\Ubb'D\']dd
: fUnj cb'GW`ØbVcfb'i bX'gY]bYg'6fi XYfg': f]YXf]W`7Uf'j cb
GW`ØbVcfbž'XYf']\a`bUW Zc`[hYž'YfVUi h''8Yf'6Ui`XUi YfhY`j cb
%+&\$`V]g`%+((i bX`VYhY']][h'k UfYb`Y]b][Y`XYf`VYfØ\ a hYghYb
?ØbghYf'i bX`5fW]hY`_hYb`XYf`XUa U`][Yb`NY]hžXUfi bhYf

6U`h\UgUf`BYi a Ubbž`XYf`U`g`<Ui dhUfW\]hY`_h`Zi b[]YfhYž`i bX
;]cj Ubb]`6Uhh]ghU`H]Ydc`cž`XYf`XUg`VYY]bXfi W_YbXY`8YW_YbZfYg_c
gW\i Z`

6Y]a `6YhfYhYb`XYf`F Yg]XYbn`k YfXYb`G]Y`j cb`XYf
VYY]bXfi W_YbXYb`HfYddYb`Ui g_i ddY`VY[fØ» hž`X]Y`XUg`[fØ» hY
8YW_YbZfYg_c`XYf`K Y`h`VY`YfVYf[h`8Ug`fYg_cž`[Ya U`h] cb
;]cj Ubb]`6Uhh]ghU`H]Ydc`cž`ghY`h`X]Y`j]Yf`XUa U`g`VY`UbbhYb
?cbh]bYb`hY`XUf.`9i fcdUž`5Zf`_Už`5g]Yb`i bX`5a Yf`_U`8]YgYg
A Y]ghYfk Yf`_]ghY]b`5i [YbgW\ a Ui g`i bX`Y]b`VYY]bXfi W_YbXYg
6Y]gd]Y`ZØf`X]Y`_Øbgh`Yf]gW\Y`A Y]ghYfgW\UZh`XYg`%, ``\f\i bXYfhg`

8]Y`F Yg]XYbn`VYghY`h`Ui g`a Y`fYfYb`df`ÅW\h][Yb`F`Åi a Ybž
XUfi bhYf`XYf`K Y]»Y`GUU`ž`XYf`df`ÅW\h][Y`?U]gYfgUU`i bX`XYf
Gd]Y[Y`gUU`8Yf`K Y]»Y`GUU`]gh`VY`Ubbh`ZØf`gY]bY`Ghi W_UfVY]hYbž
X]Y`j cb`5bhc]c`6cgg]`ghUa a Yb`i bX`Y]bYb`Yfj cffU[YbXYb
?cbhfUgh`ni a`Xi b`_Yb`<c`nVcXYb`V]YhYb`8Yf`?U]gYfgUU`]gh`XUg
<YfnghØW`XYf`F Yg]XYbnž`a]h[fc»Yb`K UbX[Ya`Å`XYbž`X]Y`GnYbYb
Ui g`XYf`K ØfnVi f[Yf`i bX`XYf`fØa]gW\Yb`; YgW\]W\hY`XUfghY`Yb`
8Yf`Gd]Y[Y`gUU`]ghY]b`DUfUXYVY]gd]Y`ZØf`F_c_c`!8Yg][bž`a]h
j Yfgd]Y[Y`hYb`K`ÅbXYb`i bX`j Yf[c`XYhYb`J Yfn]Yfi b[Yb`

9]b`k Y]hYfYg`<][\`][\`h`XYf`K ØfnVi f[Yf`F Yg]XYbn`g]bX`X]Y
<cZ[ÅfhYb`8]YgY`k i fXYb`]a`ZfUb`nØg]gW\Yb`i bX`Yb[`]gW\Yb`Gh`
Ub[Y`Y[hi bX`V]YhYb`Y]bY`fi \][Y`C UgY`]ba]hYb`XYf`GhUXh`8]Y
; ÅfhYb`g]bX`k i bXYfgW\Øb`Ub[Y`Y[h`a]higma a Yhf]gW\Yb`A i ghYfbž
Vi bhYb`6`i a YbVYYhYbž`K UggYfZcbh`ÅbYb`i bX`GUbXghY]bZ][i fYb`
`a`Gca a Yf`_ØbbYb`6Ygi W\Yf`]b`XYb`; ÅfhYb`ZUb]YfYbž`X]Y`Zf]gW\Y
@ Zhi[Yb]Y»Yb`i bX`X]Y`VYY]bXfi W_YbXY`5fW\]hY`_hi f`XYf`F Yg]XYbn
VYk i bXYfb`

8]Y`K ØfnVi f[Yf`F Yg]XYbn`]gh`b]W\h`bi f`Y]b`C fh`XYf`GW\Øb`Y]hž
gcbXYfb`Ui W\`Y]b`NYi [b]g`ZØf`X]Y`; YgW\]W\hY`i bX`?i`hi`f`XYf
GhUXh`G]Y`V]YhYhY]bYb`h]YZYb`9]bV`]W`_]b`XUg`@YVYb`i bX`X]Y`?i bgh
XYg`%, ``\f\i bXYfhg`i bX`]ghY]b`UVgc`i hYg`A i gg`ZØf`YXYbž`XYf
K ØfnVi f[`VYgi W\h`

&`8]Y` : Yghi b[`A Uf]YbVYf[

8]Y': Yghi b['A Uf]YbVYf[']gh'Y]bY'k Y]hYfY'\YfUi gfU[YbXY
 GY\Ybgk ØfX][_Y]h]b'K ØfnVi f[ž'X]Y'XYb'6Ygi WXYf'a]h]\fYf
 VYY]bXfi W_YbXYb'5fW]hY_hi f'i bX']\fYf'fY]WXYb'; YgW]W hY
 ZUgn]b]Yfh''5'g'Y]bYg'XYf'a Uf_UbhYghYb'K U\fnY]WXYb'XYf'GhUXh
 h\fc b'h'X]Y': Yghi b['a U'YghÅh]gW'Ui Z'Y]bYa '<Ø[Y'k Ygh]W'XYf
 ðbYbghUXhi bX'V]YhYh'Y]bYb'UhYa VYfUi VYbXYb'6']W_Ui Z
 K ØfnVi f['i bX'XYb'A U]b"



8]Y': Yghi b['A Uf]YbVYf[']gh'Y]b'K U\fnY]WXYb'XYf'GhUXhi bX'nYi [h
 j cb']\fYf''Ub[Yb'; YgW]W hY

8]Y': Yghi b['A Uf]YbVYf['\Uh'Y]bY''Ub[Y'i bX'VYk Y[hY'; YgW]W hY"
 ðfY'I fgdfØb[Y[Y\Yb'Ui ZXUg'Ű\f'+\$('ni fØW_ž'U'g'Ub']\fYf'GHY''Y
 Y]bY'Wf]gh]WXY'?]fWY'Yff]W hYh'k i fXY''a '@Ui ZY'XYf
 Ű\f\i bXYfhY'Ybhk]W_Y'hY'g]W'X]Y'5b`U[Y'ni 'Y]bYf'a ÅW h][Yb
 : Yghi b[ž'X]Y'X]Y'F Yg]XYbn'XYf': ØfghV]gW ÖZ'j cb'K ØfnVi f[
 k i fXY''8]Y': Yghi b['k i fXY'ja '%*' 'i bX'%+' Ű\f\i bXYfh'ni 'Y]bYf
]a dcgUbhYb'5b`U[Y'Ui g[YVUi hž'UVYf'g]Y'Yf'h]a 'nk Y]hYb
 K Y'h_f]Y['Yf\YV']WXY'GWÅXYb'i bX'a i gghY'gc f[ZÅ'h]['fYghUi f]Yfh
 k YfXYb"

<Yi hY'_ØbbYb'6Ygi WXYf'Xi fW'X]Y': Yghi b[ga Ui Yfb'gW'YbXYfb
 i bX'X]Y'i bhYfgW]YX']WXYb'UfW]hY_hcb]gWXYb'Gh]Y'VYk i bXYfbž
 X]Y'X]Y'j YfgW]YXYbYb'9dcWXYb'XYf': Yghi b['k]XYfgd]Y[Y'b''9]b
 <][\][\h]gh'XYf': ØfghYbVUi ž'XYf'Y\Ya U][Y'K c\bg]hn'XYf
 : ØfghV]gW ÖZ''9f'VY\YfVYf[h\Yi hY'XUg'A U]bZfÅb_]gWY'A i gYi a ž

XUg`Y]bY`i a ZUb[fY]WXY`GUa a `i b[`j cb`?i bghi bX
?i bgh\UbXk Yf_`Ui g`XYf`FY[`]cb` : fUb_`Yb`V]YhYh"

9]b`k Y]hYfYg`VYa Yf_`Ybgk YfhYg`A Yf_a U`XYf` : Yghi b[`]gh`XYf`H]YZY
6fi bbYb" `A]h`Y]bYf`H]YZY `j cb`%\$(`A YhYfb` `]gh`Yf`Y]bYf`XYf`h]YZghYb
gY]bYf`5fh]b`8Yi hgW`UbX" `8Yf`6fi bbYb`k i fXY`ja `A]hY`U`hYf
[YVUi h`zi a `X]Y`K UggYfj Yfgcf[i b[`XYf` : Yghi b[`ni `g]WXYfb`zi bX
]gh`V]g` \Yi hY`Yf\U`hYb` [YV`]YVYb"

8]Y` : Yghi b[`A Uf]YbVYf[`]gh`Ui W`VY`Ubbh`Z0f` \fY
k i bXYfgW`0bYb` ; A`fhYb" `8Yf` : 0fghYb[UfhYb`z`XYf`]a `Gh` `Y]bYg
6UfcW_[UfhYbg`Ub[Y`Y[h`]gh`z`V]YhYh`Y]bYb`fi \][Yb`F`0W`ni [gcfh
a]h`UhYa VYfUi VYbXYa `6`]W_`Ui ZX]Y`GhUXhi bX`XYb` : `i gg" `8]Y
HYffUggYb`g]bX`a]h`Vi bhYb`6`i a YbVYYhYb`i bX`XY`cfUh]j Yb
60gW`Yb` [YgW`a 0W`h`i bX`]a `Gca a Yf`Y]b`]XYU`Yf`C fh`Z0f`Y]b
D]W_b]W_"

8]Y` : Yghi b[`A Uf]YbVYf[`]gh`a Y`f`U`g`bi f`Y]bY`VYY]bXfi W`YbXY
\]ghcf]gW`Y`Gh`AhY" `G]Y`]gh`Y]b`YVYbX][Yg`NYi [b]g`XYf` ; YgW]W`hY
K 0fnVi f[g`z`XUg`X]Y`z` \f`i bXYfhY`0VYfXUi Yfh`\Uh" `9]b`6Ygi W`XYf
 : Yghi b[`]gh`Y]b`UVgc`i hYg`A i gg`Z0f` `YXYb`z`XYf`X]Y`fY]W`Y`?i `hi f
i bX`XUg`\]ghcf]gW`Y`9fVY`j cb`K 0fnVi f[`Yb`hXYW`Yb`a 0W`hY" `G]Y
V]YhYh`b]W`h`bi f`Y]bY`ZUgn]b]YfYbXY`F`Y]gY`]b`X]Y`J`Yf[Ub[Yb`Y]h`z
gcbXYfb`Ui W`Y]bY`XYf`VYghYb`5i gg]W`hYb`Ui ZX]Y`GhUXhi bX`\fY
I a [YVi b["

' ` " `8]Y`5`hY`A U]bVf0W`Y

8]Y`5`hY`A U]bVf0W`Y`]gh`Y]b`k Y]hYfYg`i bj Yfn]W`hVUfYg
K U`fnY]W`Yb`]b`K 0fnVi f[`i bX`Y]bY`XYf`VY`]YVhYghYb
GY`Ybgk 0fX][`_Y]hYb`XYf`GhUXh" `G]Y`]gh`X]Y`A`hYghY`6f0W`Y`0VYf
XYb`A U]b`i bX`j YfV]bXYh`X]Y`5`hghUXh`a]h`XYf` : Yghi b[`A Uf]YbVYf["
8]Y`6f0W`Y`]gh`Y]b`DUfUXYVY]gd]Y`Z0f`a]hY`U`hYf`]W`Y
6f0W`YbUfW]hY`_hi f`i bX`Y]b`k i bXYfVUfYf`C fh`zi a `X]Y`a U`Yf]gW`Y
5i gg]W`h`Ui ZX]Y`GhUXhi bX`XYb` : `i gg`ni `[Yb]Y»Yb"



8]Y`GhY]bVfØW_Y`j YfV]bXYh`X]Y`5`hghUXh`a`]h`XYf` : Yghi b[
A Uf]YbVYf[`i bX`]gh[YgAi a hj cb`nk Ò`Z`GhUhi Yb` \Y`][Yf` :][i fYb

8]Y`5`hY`A U]bVfØW_Y`k i fXY`ja` "%&""`ϰ\`f\i bXYfh`YfVUi hi bX`ja
@Ui ZY`XYf`ϰ\`f\i bXYfh`Y`a Y`fa U`gi a [YVUi hi bX`Yfk Y]hYfh`"8]Y
6fØW_Y`ž`X]Y`k]f` \Yi hY`gY`Yb`ž`ghUa a h` \Ui dhg`À`W`]W` Ui g`XYa` "%, "
ϰ\`f\i bXYfh`i bX`]gh`VY`_Ubbh`ZØf`]\`fY`nk Ò`Z`a Uf`_UbhYb`GhUhi Yb
j cb`<Y`][Yb`i bX`DUhf]n]Yfb`ž`X]Y`YbhUb[`XYg`6fØW_Yb`_Ua a g
Ui Z[YghY`h`g]bX`"8]YgY`GhUhi Yb`k i fXYb`ja` `6UfcW`_gh`][YgW`UZZYb
i bX`j Yf`Y`\Yb`XYf`6fØW_Y`Y]bY`VYgcbXYfY`5ha` cgd` \`ÅfY`"

9]b`GdUn]Yf[Ub[`ØVYf`X]Y`5`hY`A U]bVfØW_Y`]gh`Y]b`UVgc`i hYg`A i gg
VY]`Y]bYa` `6Ygi W`]b`K ØfnVi f[("8]Y`5i gg]W`h`Ui Z`X]Y` : Yghi b[
A Uf]YbVYf[ž`X]Y`K ØfnVi f[Yf`F`Yg]XYbn`i bX`XYb`A U]b`]gh`Y]b`ZUW`
UhYa VYfUi VYbX`ž`VYgcbXYfg`VY]`GcbbYbi bhYf[Ub[("8]Y`6fØW_Y`]gh
Ui W`Y]b`VY`]YVhYf`HfYZZdi b`_h`ZØf`9]b` \Y]a`]gW`Y`i bX`6Ygi W`Yf
[`Y]W`Yfa U» Yb`"9g`]gh`ØV`]W`ž`Y]b`Yb` `6fØW_YbgW`cddYb` `ni
hf]b`_Yb`ž`Y]b` ; `Ug` : fUb`_Ybk Y]b`ž`k` \`fYbX`a Ub`X]Y`5i gg]W`h
[Yb]Y» hi bX`XUg`HfY]VYb`Ui Z`XYa` : `i gg`VYcVUW`hYh`"

ϣ`XYf`B`À`Y`XYf`6fØW_Y`VYZ]bXYb`g]W`Y]b][Y`XYf`VYghYb
K Y]bghi VYb`i bX`F`YghUi fUbhg`XYf`GhUXh`ž`]b`XYbYb`G]Y`X]Y`c`_U`Y
?ØW`Y`i bX`bUhØf`]W`XYb`VYfØ`a hYb` : fUb`_Ybk Y]b`dfcV]YfYb
_ØbbYb`"8Yf`6YfY]W`i a`X]Y`6fØW_Y`]gh`VYgcbXYfg`YV` \`UZh

k Å\fybX'XYg'K ØfnVi f[Yf'K Y]bZYghgž'k Ybb'X]Y' [UbnY'GhUXh']b
: Y]Yf'Ui bY']gh"

8]Y'5'hY'A U]bVfØW_Y']gh'a Y\f'U'g'bi f'Y]bY'J YfV]bXi b['nk]gWYb
nk Y]HY]Yb'XYf'GhUXh"G]Y']gh'Y]b''YVYbX][Yg'Gma Vc''ZØf'X]Y
; YgW]W'hY'i bX'?i 'hi f'K ØfnVi f[g'i bX'Y]b'C fhž'Ub'XYa 'a Ub'X]Y
GW.Öb\Y]h'XYf'GhUXh']b'j c''Yb'NØ[Yb'[Yb]Y» Yb'_Ubb''9]b
GdUn]Yf[Ub['ØVYf'X]Y'6fØW_Yž'Y]b'; 'Ug'K Y]b']b'XYf'< UbXž'X]Y
5i gg]W'h'Ui ZX]Y'\]ghcf]gWYb'; YVÅi XY'i bX'XYb'['h]nYfbXYb': 'i gg
'XUg']gh'Y]b'9f'YVb]gž'XUg'a Ub']b'K ØfnVi f['b]W'h]j YfdUggYb
gc''hY"

("'8 Yf'8 ca 'Gh"?']`]Ub

8 Yf'8 ca 'Gh"?']`]Ub']gh'Y]bY'XYf'k]W'h][ghYb
GY\Ybgbk ØfX][_Y]hYb']b'K ØfnVi f['i bX'Y]b'A Y]ghYfk Yf'_XYf
fca Ub]gWYb'i bX'[ch]gWYb'5fW]hY_hi f''5'g'j]Yfh[fØ» hY
fca Ub]gWY'?'fWY']b'8Yi hgW'UbX'\Uh'XYf'8ca 'Y]bY
VYY]bXfi W_YbXY'; fØ» Y'i bX']gh'XUg'[Y]gh]WY'< Yfn'XYf'GhUXh"



8Yf'8ca 'Gh'?']Ub']gh'Y]bY'XYf' [f0» hYb'fca Ub]gWXYb'? Uh\YXfU'Yb]b'8Yi hgW`UbX

8Yf'6Ui 'XYg'\Yi h[Yb'8ca g'VY[Ubb'ja 'J\ f'%' (\$'i bhYf'XYa 6]gWcZ'6fi bc'j cb'K ØfnVi f['i bX'XUi YfhY'ZUgh'Y]b'J\ f\i bXYfh" 8Yf'8ca 'k i fXY'a Y\fa U'g'Xi fW': Yi Yf'VYgW\ÅX][hi bX'k Å\fybX XYg'Nk Y]hYb'K Y'h_f]Y[g'ZUgh'j c``ghÅbX]['nYfghØfhž'UVYf'Yf'k i fXY]a a Yf'k]YXYf'']VYj c''fYghUi f]Yfh'i bX'k]YXYfUi Z[YVUi h''<Yi hY ghY\h'Yf'U'g'NYi [b]g'ZØf'X]Y'6Y\Uff']W_Y]hi bX'XYb'; 'Ui VYb'XYf

A YbgWXYb'j cb'K ØfnVi f["

8Yf'8ca 'Gh'?'`]Ub'gh'bUW'XYa 'f]gWXYb'A ÒbW'?'`]Ub'VYbUbbhž
XYf'ja '+'`đ\fv\i bXYfh'bUW'K ØfnVi f['_Ua ži a 'XUg'7\fv]ghYbhi a
ni 'dfYX][Yb"9fi bX'gY]bY'6Y['Y]hYf'k i fXYb'\]Yf'[Ya UfhYfhž i bX
]\fY'FY`jei]Yb'VYZ]bXYb'g]W'Yi hY']b'XYf'?'`]Ubg[fi Zh]ja '8ca "

⇒ a 'bYfYb'XYg'8ca g'_ÒbbYb'X]Y'6Ygi WXYf'Y]bY'FY]\Y'j cb
_Øbgh'Yf]gWXYb'i bX'UfW]hY_hcb]gWXYb'<][\`][\hg'VYk i bXYfb"
6YgcbXYfg'\Yfj cfni \YVYb'g]bX'XUg'dfÅW]h][Y'fca Ub]gWY'DcfhU`ž
XYf'[ch]gWY'7\cf[YghØ\`ž'XUg'Ui g'XYa '%("'đ\fv\i bXYfh'ghUa a hž
i bX'X]Y'VYY]bXfi W_YbXY'?'`]Ubg_UbnY`ž'Y]b'A Y]ghYfk Yf'_XYf'
6UfcW_nY]h'5i W'X]Y'GW ÒbVcfb_UdY`Yž'X]Y'U'g'; fUVghÅhY'ZØf
X]Y'A]h['YXYf'XYf'Y]bZi ggfY]WYb'GW ÒbVcfb!: Ua]'Y'X]Ybž]gh
Y]bYb'6Ygi W'k Yfh"

9]b'k Y]hYfYg'<][\`][\h'XYg'8ca g']gh'XYf'A Uf]YbXca ž'XYf'Y]bY
VYY]bXfi W_YbXY'GUa a 'i b['j cb'a]hY'U'hYf']WYb'K UbXa U'YfY]Yb
VY\YfVYf[h"8]YgY': fYg_Ybž'X]Y'Ui g'XYa '% "'đ\fv\i bXYfh
ghUa a Ybž'nY][Yb'GnYbYb'Ui g'XYa '@VYb'A Uf]Ug'i bX'g]bX'Y]b
k]W]h][Yg'NYi [b]g'ZØf'X]Y'a]hY'U'hYf']WY'?'i bgh]b'8Yi hgW'UbX"

9]b'6Ygi W'ja '8ca 'Gh'?'`]Ub'gh'b]W'h'bi f'Y]b'VYY]bXfi W_YbXYg
_i `hi fY`Yg'i bX'\]ghcf]gWYg'9f'YVb]gž'gcbXYfb'Ui W'Y]bY
; Y'Y[Yb\Y]hž'Y]bYb'A ca Ybh'XYf'Fi \Y'i bX'6Yg]bbi b[']b'XYf
<Y_h]_XYf'GhUXhini 'Z]bXYb"9[U'ž'cV'G]Y'Y]b': Ub'j cb'; YgW]W]hY
i bX'5fW]hY_hi f'g]bX'cXYf'Y]bZUW'bi f'Y]bYb'CFh'XYf'Gh]'Y
gi WYbž'XYf'8ca 'Gh'?'`]Ub'gh'Y]b'UVgc'i hYg'A i gg'VY]'Y]bYa
6Ygi W']b'K ØfnVi f["

) "'8]Y'BYi a ØbghYf_]fWY

8]Y'BYi a ØbghYf_]fWY]gh'Y]bY'k Y]hYfY'VYY]bXfi W_YbXY
GY\Ybgbk ØfX][_Y]h]b'K ØfnVi f['i bX'Y]b'VYXYi hYbXYf'CFh'XYg
; `Ui VYbg'i bX'XYf'?'i bgh"']Y'VYZ]bXYh]g]W']b'XYf'BA\Y'XYg'8ca g
Gh'?'`]Ub'i bX']gh'VY_Ubbh'ZØf'\fY'VYa Yf_Ybgbk YfhY'5fW]hY_hi f
i bX']\fY'fY]WY'; YgW]W]hY"



8]Y ' ?]fWXY 'k i fXY 'ja ' %%" :ϣ\ f\i bXYfh'YfvUi hi bX 'ja '@Ji ZY 'XYf
 ϣ\ f\i bXYfhY 'a Y\fa U'gi a [YghU'hYh

8]Y ' ; YgW]W hY 'XYf'BYi a ØbghYf_]fWXY '[Y\h'Ui ZXUg' , "
 ϣ\ f\i bXYfh'ni fØW_ž'U'g'\]Yf'Y]b ? 'cghYf' [Y[fØbXYh'k i fXY "'8]Y

\Yi h][Y' ?]fWXY'k i fXY'YXcW\Ui dhgÅW\]W\]a '%%'`đ\ f\i bXYfh
YfVUi hi bX']a '@Ui ZY'XYf'đ\ f\i bXYfhY'a Y\fa U'g'i a [YVUi hi bX
Yfk Y]hYfh''8]Y' ?]fWXY'k i fXY']a 'Nk Y]hYb'K Y'h_f]Y['ghUf_
VYgWÅX][hž_cbbhY'UVYf['ØW_]WXYfk Y]gY'fYghUi f]Yfhi bX']b']\fYf
i fgdfØb[']WYb'GWÅÖb\Y]h'k]YXYf\Yf[YghY''h'k YfXYb"

8]Y'BYi a ØbghYf_]fWXY']gh'Y]b'VYY]bXfi W_YbXYg'6Y]gd]Y''ZØf'X]Y
, VYf[Ub[gUfW\]hY_hi f'nk]gWYb'Fca Ub_]_i bX'; ch]_"6YgcbXYfg
Ui ZÅ`][']gh'X]Y'fchY'GUbXghY]bZUggUXY'a]h']\fYb'Y'Y[UbhYb
6c[YbZYbghYfb'i bX'XYa '\c\Ybžgd]hnYb'Hi fa "'8]Y': UggUXY']gh
a]h'G_i `dhi fYb'j cb'<Y'] [Yb'i bX'UbXYfYb'fY'] []ØgYb':][i fYb
j Yfn]Yfhž'X]Y'Y]bYb']bhYfYggUbhYb'?cbhfUgh'ni f'gW\]W'hYb
GWÅÖb\Y]h'XYf'GhY]ba Ui Yfb'V]YhYb"

⇒ a ' ðbYfYb'XYf'?]fWXY' _ØbbYb'X]Y'6Ygi WXYf'Y]bY'F Y]\Y'j cb
_Øbgh'Yf]gWYb'i bX'UfW\]hY_hcb]gWYb'<][\] [\hg'VYk i bXYfb"
6YgcbXYfg'\Yfj cfni \YVYb']gh'XYf'dfÅW\h][Y'6UfcW_U'hUfž'XYf'j cb
6U'h\UgUf'BYi a Ubb'Yb'k cfZYb'k i fXY''8Yf'5'hUf']gh'a]h'; c'X
j Yfn]Yfhi bX'j cb''YVYbg[fc»Yb'GhUhi Yb'j cb'<Y'] [Yb'i a [YVYbž
X]Y'Y]bY'VYY]bXfi W_YbXY'?i `]ggY'ZØf'X]Y''hi f[]gWYb': Y]Yfb
V]`XYb"

9]b'k Y]hYfYg'<][\] [\h'XYf'BYi a ØbghYf_]fWXY']gh'X]Y
@i gUa [Ufh_UdY''Yž'X]Y'X]Y'; YVY]bY'XYg'< Y'] [Yb' ?]]Ub'i bX
gY]bYf'; YZÅ\fhYb'VY\YfVYf[h''8]Y' ? UdY''Y']gh'Y]b'k]W\h][Yf
D] [Yfcfhi bX'Y]b' Cfh'XYf'J YfY\fi b['ZØf'XYb'< Y'] [Yb' ?]]Ubž'XYf
U'g'Y]bYf'XYf'DUhfcbY'j cb'K ØfnVi f[' []`h"

8]Y'BYi a ØbghYf_]fWXY']gh'b]W\h'bi f'Y]b' Cfh'XYf'GWÅÖb\Y]hi bX
XYg'; `Ui VYbgž'gcbXYfb'Ui W\Y]b'YVYbX][Yg'NYi [b]g'ZØf'X]Y
; YgW\]W'hY'i bX'?i `hi f'j cb'K ØfnVi f["'G]Y'V]YhYh'Y]bYb'h]YZYb
9]b'V']W_]b'X]Y'fY'] []ØgY'HfUX]h]cb'XYf'GhUXhi bX']gh'Y]b'UVgc'i hYg
A i gg'ZØf'YXYbž'XYf'X]Y'gd]f]hi Y''Y'GY]hY'j cb'K ØfnVi f['YbhXYW_Yb
a ÖW'hY"

* "'8 Ug'đ `]i ggd]hU`

8 Ug'đ `]i ggd]hU'']gh'Y]bY'k Y]hYfY'k]W\h][Y'GY\Ybgk ØfX][_Y]h']b

K ØfnVi f[ž'X]Y' b]W h'bi f']\fY'\]ghcf]gWXY'6YXYi hi b[ž'gcbXYfb
Ui W'\fY'Fc''Y'U'g'gcn]U'Y'9]bf]W hi b['i bX'K Y]b[i h'\Yfj cf\YVh"
9g'k i fXY'ja 'š\ f%) +* 'j cb'š' 'ji g'9W hYfž'XYa 'XUa U'] [Yb
: ØfghV]gW cZj cb'K ØfnVi f[ž' [Y[fØbXYh'i bX'X]YbhY'i fgdfØb['W
U'g'<cgd]hU''i bX'5'hYb\Y]a "'<Yi hY']gh'XUg'š' 'ji ggd]hU''Y]bY
a cXYfbY'gcn]U'Y'9]bf]W hi b[ž'X]Y'ja a Yf'bcW'a YX]n]b]gWY
J Yfgcf[i b[ž'DZY[Y'i bX'6YhfYi i b['ZØf'VYXØfZh][Y'A YbgWYb
V]YhYh"



8 Ug'š' 'ji ggd]hU'']gh'a Y'\f'U'g'bi f'Y]b' fUb_Yb\Ui g''9g']gh'Ui W'Y]b
K Y]b[i hž'Y]b'5'hYfg\Y]a 'i bX'Y]bY'GY\Ybgk ØfX][_Y]h

8]Y'VYY]bXfi W_YbXY'VUfcW_Y'5fW]hY_hi f'XYg'š' 'ji ggd]hU'gž'X]Y
j cb'5bhcb]c'DYhf]b]Ybtk cfZYb'k i fXYž'n]Y'h'X]Y'6']W_Y'XYf
6Ygi W'Yf'Ui Zg]W "'8]Y': UggUXY'XYf'<Ui dh[YVÀi XY']gh'j cb'nk Y]
a Ugg]j Yb'HØfa Yb'ZUb_]Yfh'i bX'j Yfa]hY'h'Y]bY'5ha cgd\ÅFY'j cb
K ØfXY'i bX'9'Y[Ubn''æ' ðbYfYb'XYg'?ca d'YI Yg[]Vh'Yg'a Y\ fYfY
æbYb\ÖZY'i bX'; ÅfhYbž'X]Y'XYb'6Ygi W'Yfb'Y]bYb'Ub[YbY\ a Yb
F ØW_ni [gc fh'V]YhYb"

9]b'UVgc'i hYg'<][\'] [\h'XYg'š' 'ji ggd]hU'g']gh'XUg'K Y]b[i hž'XUg'ni
XYb'fYbca a]YfhYghYb'i bX'À'hYghYb']b'XYf'FY[]cb': fUb_Yb
[Y\Øfh''8 Ug'K Y]b[i hi a ZUggh'fi bX'%+\$'<Y_hUf'K Y]bVYf[Yž'X]Y
g]W'Ybh'Ub['XYg'A U]bg'YfghfYW_Ybž'i bX'dfcXi n]Yfh'Y]b][Y'XYf
VYghYb'K Y]bY'XYf'FY[]cbž'XUfi bhYf'XYf'VYfØ\ a hY'K ØfnVi f[Yf
GhY]b''6Y]Y]bYf': Ø\fi b['Xi fW'XUg'K Y]b[i h'ÖbbYb'6Ygi W'Yf
a Y\ f'ØVYf'X]Y'K Y]bdfcXi _h]cb'YfZU\ fYb'i bX'bUhØf']W'Y]b][Y'XYf
YI nY''YbhYb'K Y]bY'j Yf_cghYb"

8 Ug'š' 'ji ggd]hU''VY\YfVYf[h'Ui W'Y]bY'VYY]bXfi W_YbXY

GUa a `i b[`j cb`?i bghi bX`?i `hi f[ØhYfbž`XUfi bhYf` ; Ya À`XYž
G_i `dhi fYb`i bX`\]ghcf]gWXY`A ÒVY`"9]b`VYgcbXYfYg`<][\`][\h`]gh
X]Y`VUfcW_Y`6]V`]ch\Y_ž`X]Y`fi bX`%\$"\$\$\$`6ÀbXY`i a ZUgghi bX
Y]bY`XYf`[fÒ» hYb`6]V`]ch\Y_Yb`]b`K ØfnVi f[`]gh"

9]b`6Ygi W`]a `ž`]i ggd]hU`]gh`Y]bY`ZUgn]b]YfYbXY`F`Y]gY`]b`X]Y
; YgW]W`hYž`?i `hi f`i bX`HfUX]h]cb`j cb`K ØfnVi f[``8]Y`?ca V]bUh]cb
Ui g`VYY]bXfi W_YbXYf`5fW]hY`_hi fž`\]ghcf]gWXYf`6YXYi hi b[`i bX
XYf`A Ò[`]W_Y]hž`Y]b][Y`XYf`VYghYb`K Y]bY`XYf`F`Y][cb`ni
[Yb]Y» Ybž`a UW`h`XUg`ž`]i ggd]hU`ni `Y]bYa `i bj Yf[Ygg`]W`Yb
9f`YVb]g`ZØf`YXYbž`XYf`K ØfnVi f[`VYgi W`h"

+ ``8 Yf`K ØfnVi f[Yf`F]b[dUf_

8 Yf`K ØfnVi f[Yf`F]b[dUf_]gh`Y]b`[fØbYg`ž`k Y`]ba]hYb`XYf`GhUXh
i bX`Y]b`dYfZY`_hYf`Cfhž`i a `XYf`<Y_h]_`XYg`GhUXh`YVYbg`ni
YbhZ]Y\Yb``9f`i a []Vh`X]Y`5`hghUXh]`cb`K ØfnVi f[`k]Y`Y]b`[fØbYf
; ØfhY`i bX`V]YhYh`XYb`6Ygi W`Yfb`Y]bY`fi \][Y`i bX`YbhgdUbbYbXY
I a [YVi b["



8 Yf`K ØfnVi f[Yf`F]b[dUf_]gh`Y]bY`[fØbY`C UgY`a]hYb`]b`XYf`GhUXh
i bX`]XYU`ZØf`Y]bYb`YbhgdUbbhYb`GdUn]Yf[Ub[

8 Yf`F]b[dUf_`k i fXY`]a `%- ``ž\`f`i bXYfh`Ub[Y`Y[hi bX`k Uf
i fgd fØb[`]W`HY]`XYf`GhUXh]`YfhY]X][i b[gUb`U[Yb``B UW`XYa `X]YgY
: i b_h]cb`cVgc`Yh`k i fXYž`YbhgW]YXYb`g]W`X]Y`GhUXh]`ÀhYf`XUZØfž
XYb`6YfY]W`]b`Y]bYb`ÒZZYbh`]W`Yb`DUf_`i a ni k UbXY`b``<Yi hY`]gh

XYf'F]b[dUf_']bY' [f0bY'C UgY'a]h'k i bXYfgWk 0b'Ub[Y'Y[hYb
K Y[Ybž'X]Y'ni a 'GdUn]YfYb[Y\Ybž'x [[Yb'cXYf'Y]bZUWk 'bi f'ni a
9bhgdUbbYb'Y]b'UXYb"

8Yf'DUf_'gh]b'j YfgWk]YXYbY'6YfY]WkY'i bhYfhY]'hž'X]Y'Yk Y]g']\fYb
Y][YbYb'7\UfU_hYf'\UVYb""9g[]Vh'XYb'FcgYb[UfhYbž'XYf'a
Gca a Yf'Y]b'A Yf'j cb': UfVYb'i bX'80žhYb'V]YhYhž'XYb
'UdUb]gWkYb'; UfhYb'a]h'gY]bYb'gcf[ZÅ'h]['[YghU'hYhYb
@UbXgWkUžhYb'i bX'XYa 'fi \][Yb'HY]Wkž'i bX'XYb
GWka YhhYf']b[g[UfhYbž'XYf'Y]bY'J]Y'nU\''j cb'DZUbnyb
VY\YfVYf[hž'X]Y'GWka YhhYf']b[Y'Ubn]Y\Yb"

9]bY'6YgcbXYf\Y]h'XYg'F]b[dUf_g']gh'X]Y'J]Y'nU\''Ub'8Yb_a Å'Yfb
i bX'GhUhi Ybž'X]Y'G]Y'Ui Z=FYa 'K Y['Xi fWk'XYb'DUf_'Z]bXYb
_0bbYb""8]YgY'?i bghk Yf_Y'g]bX'b]Wk'h'bi f'gWk 0b'Ubni gY\Ybž
gcbXYfb'YfnÅ\Yb'Ui Wk'; YgWk]WkhYb'Ui g'XYf'; YgWk]WkhY'i bX
'?i 'hi f'K 0fnVi f[g"

9]b'k Y]hYfYg'<][\][\h'XYg'DUf_g']gh'XYf'5i gg]Wkhghi fa ž'XYf'Y]bYb
UhYa VYfUi VYbXYb'6']W_'Ui ZX]Y'GhUXhi bX'X]Y'i a 'Y][YbXY
@UbXgWkUžh'V]YhYh""5b'_UfYb'HU[Yb'_0bbYb'G]Y'j cb'\]Yf'Ui g
gc[Uf'X]Y': Yghi b['A Uf]YbVYf['i bX'X]Y'5'hY'A U]bVf0W_Y'gY\Yb"

8Yf'K 0fnVi f[Yf'F]b[dUf_'gh'a Y\f'U'g'bi f'Y]b'Cfh'ni a
9bhgdUbbYb'i bX'; Yb]Y»Yb'XYf'B Uhi f""9f']gh'Y]b'Cfhž'XYf'X]Y
'; YgWk]WkhY'i bX'?i 'hi f'j cb'K 0fnVi f['k]XYfgd]Y[Y'hi bX'XYb
6Ygi WkYfb'Y]bYb'Y]bn][Ufh][Yb'9]bV']W_'b'XUg'@YVYb']b'X]YgYf
ZUgn]b]YfYbXYb'GhUXh'V]YhYh""C V'G]Y'Y]bYb'Cfh'ni a '9bhgdUbbYb
gi WkYbž'Y]bY'x [[]b[fi bXY'XfY\Yb'k c''Yb'cXYf'Y]bZUWk 'bi f'X]Y
GWk 0b\Y]h'XYf'B Uhi f[Yb]Y»Yb'a 0WkhYbž'XYf'F]b[dUf_'gh'Y]b
A i gg'VY]Y]bYa '6Ygi Wk'j]b'K 0fnVi f["

, ""8 Ug'A i gYi a 'Ua '8ca

8Ug'A i gYi a 'Ua '8ca 'j]b'K 0fnVi f['gh'Y]b'?i bgha i gYi a 'j cb
VYgcbXYfYa 'F Ub['i bX'Y]b'UVgc'i hYg'A i gg'Z0f'YXYb
'?i bgh']YV\UVYf""9g'VYZ]bXYh'g]Wk'j]b'i ba]hhY'VUfYf'BÅ\Y'ni a '8ca
Gh'?'j]Ub'i bX']gh'Y]bY'XYf'Z0\YfYbXYb'_i 'hi fY''Yb'9]bf]Wkhi b[Yb



8 Ug`A i gYi a `Ua `8ca `]gh`Y]b`A i gg`ZØf`?i bgh`]YV\ UVYf

8 Ug`A i gYi a `k i fXY`ja `\f`&\$\$` `YfÒZbYhi bX`VY\YfVYf[h`Y]bY
VYY]bXfi W_YbXY`GUa a `i b[`j cb`?i bghk Yf_Ybž`X]Y`g]W\ØVYf`nk Y]
\fhUi gYbXY`YfghfYW_Yb``8]Y`GUa a `i b[`i a ZUggh`a Y`f`U`g`+\$\$
K Yf_Y`Ui g`XYb`6YfY]WYb`A U`YfY]ž`G_i `dhi fž; fUZ]_i bX
HYI h`_i bgh``8UVY]`Y[h`XYf`GWk Yfdi b_h`Ui ZfY`][]ØgYf`?i bgh`i bX
XYb`K YW`gY`k]f_i b[Yb`nk]gWYb`?i bgh`i bX`; YgY`gW`UZh`ja
@Ji ZY`XYf`; YgW`]W`hY"

9]b`<][\`][\h`XYg`A i gYi a g`]gh`X]Y`GUa a `i b[`a]hY`U`hYf`]WYf
?i bghž`X]Y`Y]bY`FY]\Y`j cb`\YfUi gfU[YbXYb`K Yf_Yb`VY]b\U`hYhž
XUfi bhYf`G_i `dhi fYbž`5`hUfV]`XYfi bX`?]fWYbgW`ÀmY``6YgcbXYfg
\Yfj cfni \YVYb`]gh`XUg` K ØfnVi f[Yf`9j Ub[Y`]Uf ž`Y]b`d`f`W`h][
j Yfn]YfhYg`A Ubi g_f]dhiUi g`XYa `%"`\f\i bXYfh"

8 Ug`A i gYi a `Ua `8ca `]gh`YXcW`b]W`h`bi f`Ui Z`U`hY`?i bgh
gdYn]U`]g]Yfh``9g`d`f`À`g`Y`b`h]Y`fh`Ui W`Y`Y]bY`VYY]bXfi W_YbXY
GUa a `i b[`j cb`a cXYfbYf`i bX`nY]h[YbØgg]gWYf`?i bgh`K Yf_Y
j cb`?Øbgh`Yfb`k]Y`9a]`B`c`XYž`9fbgh`6Uf`UW`ž``gYd`\`6Yi mg`i bX
; Yf\UfX`F]W`hYf`g]bX`YVYbgc`j YfhfYhYb`k]Y`5fVY]hYb`j cb
Ui ZghfYVYbXYb`?Øbgh`Yfb"

8 Ug`A i gYi a `Ua `8ca `]gh`b]W`h`bi f`ZØf`gY]bY`\\Yfj cffU[YbXY
GUa a `i b[`VY`_Ubbhž`gcbXYfb`Ui W`ZØf`gY]bY`UbgdFYW`YbXY
5fW`]hY`_hi f`"8Yf`a cXYfbYž`]W`hXi fW`Zi hYhY`6Ui `V`XYh`Y]bYb
ZUgn]b]YfYbXYb`?cbhfUgh`ni `XYb`\\]ghcf]gW`Yb` ; YV`Ai XYb`]b`XYf
I a [YVi b[`i bX`V]YhYh`XYb`dYfZY`_hYb`F U`a Yb`ZØf`X]Y
?i bghk Yf`_Y"

9]b`6Ygi W`]a `A i gYi a `Ua `8ca `]gh`Y]b`_i `hi fY`Yg`9f`YVb]g`XYf
VYgcbXYfYb`5fh`9g`V]YhYh`XYb`6Ygi W`Yfb`X]Y`A Ø[`]W`_Y]hž`Y]bY
ZUgn]b]YfYbXY`FY]gY`Xi fW`X]Y` ; YgW`]W`hY`XYf`?i bgh`ni
i bhYfbY`a Yb`i bX`XUVY]`h]YZ]b`X]Y`_i `hi fY`Y`Y`Yb]h`h`j cb
K ØfnVi f[`Y]bni hUi W`Yb`"C`V`G]Y`Y]b`Y]XYbgW`UZh]W`Yf
?i bgh]YV`\\UVYf`g]bX`cXYf`Y]bZUW``bi f`Y]b`hYfYggY`Ub
; YgW`]W`hY`i bX`?i `hi f`\\UVYbž`XUg`A i gYi a `Ua `8ca `]gh`Y]b
UVgc`i hYg`A i gg`VY]`Y]bYa `6Ygi W`]b`K ØfnVi f["

- "8]Y`? Udi n]bYfghfU» Y`i bX`X]Y`K ØfnVi f[Yf
K Y]b[ØhYf

8]Y`? Udi n]bYfghfU» Y`]b`K ØfnVi f[`]gh`b]W`h`bi f`Y]bY`a U`Yf]gW`Y
GhfU» Y`]a `<YfnYb`XYf`GhUXhž`g]Y`]gh`Ui W`XUg`Hcf`ni `Y]b][Yb`XYf
VYghYb`K Y]b[ØhYfb`XYf`FY[]cb`"8Yf`K Y]bVUi `\\Uh]b`K ØfnVi f[
Y]bY`Ub[Y`HfUX]h]cb`i bX`X]Y`GhUXh]gh`VY`_Ubbh`ZØf`]`fY
\\Yfj cffU[YbXYb`K Y]» k Y]bYž`]bgVYgcbXYfY`XYb`G]j UbYf"



8]Y`? Udi n]bYfghfU» Y`]gh`X]Y`À`hYghY`K Y]bghfU» Y` : fUb_Ybg

8]Y`? Udi n]bYfghfU» Y`]gh`Y]bY`XYf`À`hYghYb`GhfU» Yb`]b`K ØfnVi f[
i bX`nY]Wk bYh`g]Wk`Xi fWk`]\fY`]\ghcf]gWk Yb` ; YVÀi XY`i bX
Wk Ufa UbhYb`K Y]b`c_U`Y`Ui g" G]Y`ZØ\fh`ni a`?`ÀddY`Yž`Y]bYf
K U`ZU\fhg_]fWk Y`a]h`Y]bYf`VYY]bXfi W_YbXYb`5i gg]Wk h`Ui Z`X]Y
GhUXhi bX`XYb`A U]b"

9bhUb[`XYf`? Udi n]bYfghfU» Y`i bX`]b`]\fYf`bÀ`YfYb`l a [YVi b[
VYZ]bXYb`g]Wk`a Y`fYfY`K Y]b[ØhYfž`X]Y`ni f`K Y]bfc i hY`K ØfnVi f[
[Y\ÖfYb" G]Y`V]YhYb`K Y]bdfcVYb`Ub`i bX`cZi`UVYb`g]Y`Ui Wk
FYghUi fUbhg`cXYf`K Y]bghi VYbž`]b`XYbYb`G]Y`c_U`Y`GdYn]U`]h`hYb
ni gUa a Yb`a]h`XYb`K Y]bYb`[Yb]Y» Yb`_ÖbbYb"

Ni`XYb`VY_UbbhYghYb`K Y]b[ØhYfb`]b`XYf`l a [YVi b[[Y\ÖfYb`XUg
K Y]b[i h`Ua`GhY]b`i bX`XUg`6Øf[Yfgd]hU`K Y]b[i hž`VY]XY`g]bX`ZØf
]\fY`cWk Yfh][Yb`K Y]bY`VY_Ubbh" 8 Ug`K Y]b[i h`Ua`GhY]bž`XUg
g]Wk`Ui Z`XYb`<`Àb[Yb`XYg`K ØfnVi f[Yf`GhY]b`VYZ]bXYhž`V]YhYh
VYY]bXfi W_YbXYb`5i gg]Wk hYb`Ui Z`X]Y`GhUXhi bX`XYb`A U]b" 6Y]
Y]bYf` : Ø\fi b[]_ÖbbYb`G]Y`a Y`f`ØVYf`XYb`K Y]bVUi`YfZU\Yb`i bX
bUhØf`]Wk`X]Y`K Y]bY`dfcV]YfYb" 8 Ug`6Øf[Yfgd]hU`K Y]b[i h`]gh
Y]bYg`XYf`À`hYghYb`i bX`[fØ» hYb`K Y]b[ØhYf`]b`8Yi hgWk`UbX`i bX`]gh
VY_Ubbh`ZØf`gY]bY`Yfj`cffU[YbXYb`G]j`UbYf"

8]Y' ? Udi n]bYfghfU» Y' i bX'X]Y'K Y]b[ØhYf'j cb'K ØfnVi f['g]bX'Y]b
UVgc'ì hYg'A i gg'ZØf'YXYb'K Y]b']YV\ UVYf" 'G]Y'V]YhYb'X]Y
A Ò[']W\ _Y]hž'Y]b][Y'XYf'VYghYb'K Y]bY'XYf'FY[]cb'ni 'dfcV]YfYb
i bX' ['Y]W\ nY]h]['X]Y'a U'Yf]gW\Y'GW\ Òb\Y]hi bX'\]ghc f]gW\Y
5ha cgd\ ÆFY'XYf'GhUXh'ni '[Yb]Y» Yb" '9[U'ž'cV'G]Y'Y]b' ? YbbYf'cXYf
Y]bZUW\ 'bi f'Y]b'; Yb]Y» Yf'g]bXž'X]Y' ? Udi n]bYfghfU» Y' i bX'X]Y
K Y]b[ØhYf'j cb'K ØfnVi f['V]YhYb'Y]b' i bj Yf[Ygg']W\Yg'9f'YVb]g"

%\$ " '8 Ug' A U]bZfÀb_]gW\ Y' A i gYi a

8 Ug' A U]bZfÀb_]gW\ Y' A i gYi a ']b'K ØfnVi f[']gh'Y]bY'XYf
k]W\h][ghYb' _i 'hi fY''Yb'9]bf]W\hi b[Yb'XYf'GhUXh'i bX'Y]b
UVgc'ì hYg'A i gg'ZØf'YXYbž'XYf'g]W\ 'ZØf'X]Y'; YgW\]W\hY'ì bX' ? i 'hi f
XYf'FY[]cb']bhYfYgg]Yfh" '9g'VYZ]bXYh'g]W\ ']b'XYf': Yghi b[
A Uf]YbVYf[ž'Y]bYa 'VYY]bXfi W_YbXYb'6Ui k Yf_ž'XUg'Y]bYb
gdY_hU_i 'ÆfYb'6']W_ 'Ui Z'X]Y'GhUXh'V]YhYh"



8 Ug' A U]bZfÀb_]gW\ Y' A i gYi a 'VY\YfVYf[h'Y]bY' i a ZUb[fY]W\Y
GUa a 'i b['j cb' ? i bghi bX' < UbXk Yf_ 'Ui g'XYf'FY[]cbž'XUfi bhYf
X]Y' k Y'hk Y]h[fÒ» hY'GUa a 'i b['j cb'K Yf_Yb'XYg'K ØfnVi f[Yf
6]'X\Ui Yfg'H]'a Ub'F]Ya YbgW\ bY]XYf"

8 Ug'A i gYi a 'k i fXY'%,) - '[Y[f0bXYhi bX'\Uh'gY]hXYa 'gY]bY
GUa a 'i b['ghYh]['Yfk Y]hYfh"<Yi hY'i a ZUggh'Yg'a Y\ f'U'g'() "\$\$\$
CVY_hYž'X]Y'X]Y'fY]WXY'; YgW]WXY'i bX'?i 'hi f': fUb_Ybg'j ca
5'hYfhi a 'V]g'ni f'; Y[Ybk Ufh'Xc_i a Ybh]YfYb"

9]b'<][\'][\h'XYg'A i gYi a g']gh'X]Y'GUa a 'i b['j cb'ZfAb_]gWYa
'?i bgh\UbXk Yf_ž'X]Y'Y]bY'VYY]bXfi W_YbXY'5i gk U\''Ub'?YfUa]_ž
; 'Ugž'A YhU''UfVY]hYb'i bX'HYI h']Yb'i a ZUggh"6YgcbXYfg
VYa Yf_Ybgk Yfh]gh'X]Y'GUa a 'i b['j cb': UmYbWb'Ui g'XYf
VYf0\ a hYb'K 0fnVi f[Yf'A Ubi ZU_hi f"

9]b'k Y]hYfYf'GWk Yfdi b_h'XYg'A i gYi a g']gh'X]Y'GUa a 'i b['j cb
'?i bgh'i bX'G_i 'dhi fYb"'G]Y'i a ZUggh'K Yf_Y'j cb'XYf'F ca Ub]_V]g
ni f'A cXYfbY'i bX'VY]b\U'hYh'A Y]ghYfk Yf_Y'j cb'?0bghYfb'k]Y
H]a Ub'F]Ya YbgWbY]XYf'i bX'6U'h\UgUf'B Yi a Ubb"9]b'<][\'][\h
]gh'X]Y'GUa a 'i b['j cb'F]Ya YbgWbY]XYf!<c'ngWb]hmYfY]Ybž'X]Y
ni 'XYb'[f0» hYb'i bX'VYXYi hYbXghYb']\fYf'5fh'nA\h"

8 Ug'A U]bZfAb_]gWY'A i gYi a 'VY\YfVYf[h'Ui W'Y]bY
i a ZUb[fY]WY'UfW'Ac'c[]gWY'GUa a 'i b[ž'X]Y': i bXY'Ui g'XYf
[Ubnyb'FY[]cb'i a ZUggh"G]Y'fY]W'hj cb'XYf'GhY]bnY]h'V]g'ni a
A]hY'U'hYf'i bX'[]Vh'Y]bYb'ZUgn]b]YfYbXYb'9]bV']W_]b'X]Y
; YgW]WXY'XYf'FY[]cb"

8 Ug'A U]bZfAb_]gWY'A i gYi a ']gh'b]W'h'bi f'Y]b'Ch'XYg'@YfbYbg
i bX'XYf'9bhXYW_i b[ž'gcbXYfb'Ui W'Y]b'Ch'XYf'6Y[Y[bi b['i bX
XYg'5i ghUi gWg" 'A]h'gY]bYb'j]Y'Z'Ah][Yb'5i gghY''i b[Yb'i bX
J YfUbghU'hi b[Yb'hfA[h'Yg'XUni 'VY]ž'XUg'_i 'hi fY''Y'9fVY': fUb_Ybg
'VYbX]['ni 'U'hYb'i bX'Y]bYa 'VfY]hYb'Di V']_i a 'ni [Ab[']W'ni
a UWYb"9]b'6Ygi W'ja 'A U]bZfAb_]gWYb'A i gYi a ']gh'Y]bY
ZUgn]b]YfYbXY'FY]gY'Xi fW'X]Y'; YgW]WXY'i bX'?i 'hi f': fUb_Ybg
i bX'Y]b'UVgc'i hYg'A i gg'VY]Y]bYa '6Ygi W'ja]b'K 0fnVi f["

%%"8 Yf'K 0fnVi f[Yf'K Y]\bUW hga Uf_h

9]b'6Ygi W'XYg'K 0fnVi f[Yf'K Y]\bUW hga Uf_hg']gh'Y]b'UVgc'i hYg
A i gg'Z0f'YXYbž'XYf'X]Y'GhUXh'k A\ fYbX'XYf': YghhU[gnY]h'VYgi W'h'
8]YgYf'hfUX]h]cbY''Y'K Y]\bUW hga Uf_hž'Y]bYf'XYf'À'hYghYb']b

8 Yi hgW\`UbXžj Yfk UbXY`h`X]Y` ðbYbghUXh]b`Y]b`K]bhYfk i bXYf`UbX
i bX`V]YhYh`Y]b`Y`Y]bn][Ufh][Y`A]gW\i b[`Ui g`ZYgh]W\Yf`5ha cgd\`ÄfYž
fY[]cbU`Yb`@YW`YfY]Yb`i bX`\UbX[YZYfh][hYb`; YgW\Yb_]XYyb"



8 Yf`K ØfnVi f[Yf`K Y]\bUW\hga Uf`h`]gh`Y]bYf`XYf`gW\ØbghYb`]b
K Y]\bUW\hga Äf`hY`]b`8 Yi hgW\`UbX

8 Yf`K ØfnVi f[Yf`K Y]\bUW\hga Uf`h`Z]bXYh]b`XYf`FY[Y`j cb`9bXY
Bcj Ya VYf`V]g`_i fn`j cf`K Y]\bUW\hYb`ghUhn`GY]bY`< Ui dhUhhfU`_h]cb
]gh`XYf`VYY]bXfi W`YbXY`K Y]\bUW\hgVUi a žXYf`YXYg`Y\`f`Ui ZXYa
A Uf`hd`Uhn`Ui Z[YghY`h`k]fX`i bX`XYggYb`Zi b`Y`bXY`@]W\hYf`X]Y
ZYgh]W\Y`5ha cgd\`ÄfY`bcW\j YfghÄf`Yb"

A Y\`f`U`g`%\$\$`GhÄbXY`j YfhY`Yb`g]W\`ØVYf`XYb`A Uf`hd`Uhn`i bX`X]Y
Ub[fYbnYbXYb`GhfU»Yb`<]Yf`_ØbbYb`G]Y`Y]bY`J]Y`nU\`j cb
\UbX[YZYfh][hYb`5fh]_Y`b`Z]bXYbž`j cb`hfUX]h]cbY`Ya
K Y]\bUW\hggW\ a i W`_i bX`<c`ngW\ b]hnYfY]Yb`V]g`\]b`ni
\UbX[Yghf]W`hYb`GW\U`g`i bX`?YfUa]`"J]Y`Y`XYf`GhÄbXY`V]YhYb
Ui W`_i`]bUf]gW\Y`GdYn]U`hÄhYb`Ubž`XUfi bhYf`ZfÄb_]gW\Y
6fUhk ØfghYž`@YV`_i W\Ybž`[YVfUbbhY`A UbXY`b`i bX`bUhØf]W\`XYb
i bj Yfn]W\hVUfYb`; `Ø\k Y]b"

9]b`VYgcbXYfYg`<][\`][\h`XYg`K ØfnVi f[Yf`K Y]\bUW\hga Uf`hg`]gh
XUg` K Y]\bUW\hgXcfZ ž`XUg`Ui ZXYa `ðbYb\cZXYg`FUh\Ui gYg

Ui Z[YVUi h'k]fX" 'b'X]YgYa 'WUfa UbhYb'8cfZ'Ui g'<c'n\ØhYb
Z]bXYb'G]Y'Y]bY'J]Y'nU\`j cb'GhÅbXYbž'X]Y'\UbX[YZYfh][hY
; YgWXYb_Y'i bX'@YW_YfY]Yb'UbV]YhYb""9g'[]Vh'Ui W'Y]bY
'VYbYbg[fc»Y'f]ddY'i bX'Y]bY'A]b]Uhi f!9]gYbVU\bž'X]Y'VYgcbXYfg
VY]'Øb[YfYb'6Ygi WXYfb'VY'YVh'gh"

8Yf'K ØfnVi f[Yf'K Y]\bUW'hga Uf_h']gh'b]W'h'bi f'Y]b'C fh'ni a
9]b_Ui ZYb'i bX'GW'Ya a Ybž'gcbXYfb'Ui W'Y]b'C fh'XYf'6Y[Y[bi b[
i bX'XYg': Y]Yfbg"A]h'gY]bYa 'j]Y'ZÅ'h][Yb'Dfc[fUa a 'Ub'@]j Y!
A i g]_ž'7\cfUi Zhf]hYb'i bX'?]bXYfU_h]j]hÅhYb'V]YhYh'Yf'Yhk Ug'ZØf
'XYb'; YgW'a UW'_i bX'YXYg'5'hYf"

9]b'6Ygi W'XYg'K ØfnVi f[Yf'K Y]\bUW'hga Uf_hg']gh'Y]bY
k i bXYfVUfY'A Ø['W'_Y]hž'X]Y'ZYgh]WY'5ha cgd\ÅfY'ni '[Yb]Y» Yb
i bX']b'X]Y'HfUX]h]cbYb'i bX'6fÅi W'Y'XYf'FY[]cb'Y]bni hUi WXYb"A]h
gY]bYf'WUfa UbhYb'5ha cgd\ÅfYž'XYf'[fc»Yb'5i gk U\`Ub'GhÅbXYb
i bX'XYa 'UVk YW'g'i b[gfY]WXYb'Dfc[fUa a 'gh'XYf'K ØfnVi f[Yf
K Y]\bUW'hga Uf_h'Y]b'<][\'][\h'XYf': YghhU[gnY]h'i]b'K ØfnVi f["

%&"'8 Ug'? ÅddY`Y

8 Ug'? ÅddY`Yž'cZZ]n]Y""U`g'K U`ZU\fhg_]fWY'A Uf]Å'<Y]a gi W'i b[
VY_Ubbhž']gh'Y]bY'XYf'VY_UbbhYghYb'GY\Ybgk ØfX][_Y]hYb']b
K ØfnVi f['i bX'Y]b'C fh]j cb'[fc»Yf'fY']][]ØgYf'6YXYi hi b[""9g''Y[h
Ui ZY]bYa ' <Ø[Y''Ui Z'XYf'UbXYfYb'GY]hY'XYg'A U]bg'i bX'V]YhYh
Y]bYb'UhYa VYfUi VYbXYb'6`]W'_Ui Z'X]Y'GhUXhi bX'X]Y'i a 'j]Y[YbXY
@UbXgWUZh"



8]Y' ?]fWXYž'X]Y]a '%, "'ϰ\ f\i bXYfh'YfVUi h'k i fXYž']gh'VY_Ubbh'ZØf
]\fY'Y]bn][Ufh][Y'5fW]hY_hi f'i bX'X]Y'VYY]bXfi W_YbXYb': fYg_Yb
i bX'G_i `dhi fYb']a 'ϰbYfYb

8 Ug? ÄddY'Y'k i fXY']a '%, "'ϰ\ f\i bXYfh'j ca 'VYfØ\ a hYb
6Ui a Y]ghYf'6U'h\UgUf'BYi a Ubb'Ybhk cfZYb'i bX'[YVUi h''9g']gh
Y]bY'XYf'k Yb][Yb'K U`ZU\fhg_]fWXYb']b'8Yi hgW\`UbXž'X]Y']a 'Gh]
XYg'6UfcW_Yff]W\hYh'k i fXYbž'i bX'gY]bY'5fW]hY_hi f']gh'YVYbgc
VYY]bXfi W_YbX'k]Y'gY]bY'@U[Y"

8 Yf'K Y['ni f'?]fWXY'ZØ\fh'ØVYf'&(+ 'Ghi ZYbž'X]Y' <Y)][Yb
Gh]Y[Yb ž'X]Y']b'5b'Y\bi b['Ub'X]Y' GWU`U`GUbWU']b'F ca '[YVUi h
k i fXYb''8]Y'Ghi ZYb'g]bX']b'XfY]'5VgW\ b]hY' i bhYfhY]'hž'X]Y'Y'k Y]'g
X]Y'DUgg]cb'7\ f]gh]ž'X]Y'g]YVYb': fYi XYb'A Uf]Ybg'i bX'X]Y'g]YVYb
GWa YfnYb'A Uf]Ybg'XUfghY''Yb"

⇒ ϰbYfYb'XYg? ÄddY'Y'VYY]bXfi W_Yb'X]Y'dfÅW\h][Y'5i gghUhi b[
i bX'X]Y'fY]WXY'J Yfn]Yfi b["'6YgcbXYfg'\Yfj cfni \YVYb']gh'XUg
8YW_YbZfYg_c']a 'nYbhfU'Yb'?i ddY'fUi a ž'XUg'X]Y'<Y]a gi W\i b[
A Uf]Ybg'XUfghY''h''9]b'k Y]hYfYg'<][\'] [\h']gh'XYf'<cW\U'hUfž'XYf
j cb'Y]bYf'G_i `dhi f'XYf'<Y]a gi W\i b['A Uf]Ybg'[Y_fØbh'k]fX"

8 Ug? ÄddY'Y']gh'b]W\h'bi f'Y]b' C fh'XYf'5bXUW\hž'gcbXYfb'Ui W\Y']b
VY']YVhYf' C fh'ZØf'? cbnYfhY' i bX'_i 'hi fY''Y'J YfUbgU'hi b[Yb''GY]bY

\Yfj cffU[YbXY'5_i gh]_i bX'gY]bY'VYY]bXfi W_YbXY'5ha cgd\ÄfY
a UWXYb'Yg'ni 'Y]bYa 'jXYU'Yb'C fh'ZØf'a i g]_U'gWXY'8UfV]Yhi b[Yb"

9]b'6Ygi Wk'ja '?ÄddY'Y'gh'Y]bY'ZUgn]b]YfYbXY'FY]gY'j]b'X]Y
fY'] []ÖgY'i bX'_i 'hi fY''Y'; YgWk]Wk'hY'j cb'K ØfnVi f["'A]h'gY]bYf
VYY]bXfi W_YbXYb'5fWk]hY_hi fž'gY]bYf'fY]WkYb'5i gghUhi b['i bX
gY]bYf'UhYa VYfUi VYbXYb'@U[Y'gh'Yg'Y]bY'XYf'Hcd!
GY\Yb'gk ØfX][_Y]hYb'j]b'K ØfnVi f['i bX'Y]b'UVgc'i hYg'A i gg'ZØf
YXYb'6Ygi WkYf'XYf'GhUXh"

: Un]h

K ØfnVi f['j]gh'Y]bY'GhUXhž'X]Y'; YgWk]Wk'hY'ž'i 'hi f'i bX'bUhØf']WkY
GWkÖb\Y]h]b'g]Wk'j YfY]bh"'J cb'dfÄWk]h[Yb'GWk'ÖggYfb'i bX'?'fWkYb
V]g'\]b'ni 'a U'Yf]gWkYb'k Y]bVYf[Yb'i bX''YVYbX][Yb'A Äf_hYb'
X]Y'J]Y'ZU'h'XYf'K ØfnVi f['GY\Yb'gk ØfX][_Y]hYb'k]fX'G]Y'g]WkYf']Wk
VY[Y]ghYfb"'>XY'X]YgYf'5h'fU_h]cbYb'\Uh]\fYb'Y][YbYb'7\Ufa Y
i bX'YfnÄ'h'Y]bY'UbXYfY'; YgWk]Wk'hY'ØVYf'X]Y'fY]WkY
J Yf[Ub[Yb\Y]h'i bX'XUg'di 'g]YfYbXY' [Y[Ybk Äfh][Y'@YVYb'XYf
GhUXh"'i bUV\Äb[] ['XUj cbž'cV'G]Y'Y]b'; YgWk]Wk'hg]bhYfYgg]YfhYfž
Y]b'?'i bgh]YV\UVYfž'Y]b'B Uhi f']YV\UVYf'cXYf'Y]b'K Y]bZUb'g]bXž]b
K ØfnVi f['Z]bXYb'G]Y'g]WkYf']Wk'Yhk Ugž'XUg'ÄfYb'ÆhYfYggYb
Ybhgd]f]Wk'h"'5'gcž'dUW_Yb'G]Y'ÄfY'?cZYf'i bX'a UWXYb'G]Y'g]Wk
VYfY]h'ZØf'Y]bY'i bj Yf[Ygg]WkY'FY]gY'j]b'X]YgY'WkUfa UbhY
ZfÄb_]gWkY'GhUXh"

8YhU]`g

6Ygi WkYb'G]Y'i bg'Ui Z.'Y]bY!fY]gY"XY