

K Ufi a ''i b[Y': fUi Yb'6fUbXYbVi f['bUWX XYf'GWXi 'Y'XYb'FØW_Yb'_Y\fYb

=a a Yf'a Y\f'^1 b[Y': fUi Yb'j Yf`UggYb'6fUbXYbVi f['bUW\'XYf GW\i`Yž'k Ug'ni 'Y]bYa 'A AbbYfØVYfgW\i gg'ZØ\fh"'9l dYfhYb UbU`mg]YfYb'l fgUW\Yb'i bX': c`[Yb"

±0.6fUbXYbVi f['ØVYfghY][h'X]Y'5bnU\`'^1 b[Yf'A ÀbbYf'X]Y'XYf

1 b[Yb': fUi Ybž'Y]bY'ghUh]gh]gWXY'5bca U`]Yž'X]Y'k Y]hfY]WXYbXY

: c`[Yb'ZØf'X]Y'FY[]cb'\UVYb'_ObbhY"'@Ui h'XYb'U_hi Y``ghYb

6Yj O`_Yfi b[gXUhYb'XYg'5a hg'ZØf'GhUh]gh]_'6Yf`]b!6fUbXYbVi f[
g]bX']b'XYf'5`hYfg[fi ddY'XYf'%, !'V]g'&-!À\f][Yb'Ui Z'%\$\$': fUi Yb

%%) 'A ÀbbYf'[Y_ca a Yb"'8]YgY'NU\`Yb'k i fXYb'9bXY'`YhmhYb

*\J\fYg'YfZUggh'i bX'VY`Y[Ybž'XUgg'j cb'%' \$")' +'1 b[Yb'A ÀbbYfb

`YX][`]WX'%%' "(+''1 b[Y': fUi Yb']a '@UbX'`YVYb"

8]YgY'I b[`Y]W\Y]h']gh'_Y]b'bYi Yg'D\Àbca Yb"'6YfY]hg'VY]'XYf
NÀ\`i b[']a '\\f'&_Ua 'XYf'A ÀbbYfØVYfgW\i gg'Ubg'@]W\hž'k Ug
X]Y': fU[Y'Ui Zk]fZhž'k Ufi a 'Yg'gdYn]Y``'VY]''\ b[Yb'9fk UW\gYbYb'gc
Ui g[YdfÀ[h']gh"'8Yf'bUhØf`]W\Y', VYfgW\i gg'Ub'a Àbb`]W\Yb
BYi [YVcfYbYbž'XYf'k Y`hk Y]h'VYghY\hž'_ObbhY'XUZØf'bi f']b
[Yf]b[Ya 'A U» Y'j YfUbhk cfh`]W\'gY]b"'8Ybb']b'XYf'GW\i `nY]h'nY][h
g]W\'Y]b'j Yf[`Y]W\VUfYg'J Yf\À`hb]g'j cb'\doo' b[Yb'i bX'A ÀXW\Yb"'9fgh
]a '5bgW\`i ggž'k Ybb'j]Y`Y''\ b[Y'A YbgW\Yb'j cf'XYf'9bhgW\Y]Xi b[
ghY\Ybž'k c'g]Y'`YVYb'cXYf'UfVY]hYb'a OW\hYbž'j YfÀbXYfh'g]W\'X]Y
GhUh]gh]_'g][b]Z]_Ubh"

I fgUWX Yb i b X I a nØ[Y

8]Y'a]h'XYf'5Vk UbXYfi b[''' b[Yf': fUi Yb'j YfVi bXYbYb': U_hcfYbg]bX'j]Y`ZÀ`h]["': cfgW\Yf'i bX'Gcn]c`c[Yb'\UVYb'ZYgh[YghY``hž'XUggj]Y`Y': fUi Yb'bUW\'XYf'GW\i `Y']b'i fVUbYfY'FY[]cbYb'n]Y\Ybž'k c

g]Y VYggYfY ? Uff]YfYW UbW b i bX Y]b VfY]hYfYg 5b[YVch Ubgcn]U Yb 6]bXi b[Yb Z]bXYb" ** bgVYgcbXYfY 6Yf]b i bX < Ua Vi f[g]bX VY] X]YgYb : fUi Yb gY\f VY]YVh" 8]Y Gcn]c c[]b ? Uh'U GU ca c j ca 'K]ggYbgW UZhgnYbhfi a 'ZØf Gcn]U `ZcfgW i b[']b '6Yf]b \YVh\Yfj cfž XUgg Y]b YbhgW Y]XYbXYf; fi bX 'ZØf X]Y '5Vk UbXYfi b[\\ài Z][X]Y 'VYfi Z]W Yb 'DYfgdY_h]j Yb 'g]bX": fUi Yb 'UfVY]hYb 'c Zh]b 8]Ybgh Y]ghi b[gVYfi ZYbž k]Y 'DZY[Y cXYf]b '?]hUgž i bX 'gY\Yb 'g]W XU\Yf 'VY] 'XYb ; Y\à`hYfb]a 'C ghYb i bX 'K YghYb '8 Yi hgW `UbXg [fc > Yb I bhYfgW]YXYb [Y[YbØVYfž k Ug Y]bYb I a ni ['UhhfU_h]j Yf YfgW Y]bYb '`àggh"

6fUbXYbVi f[']gh'\]YfVY]'b]W\h'U``Y]b/'À\b`]W\Y'HfYbXg'nY][Yb'g]W\]b'U``Yb'bYi Yb'6i bXYg`ÀbXYfb"'GhUh]gh]_Yf'\UVYb'ZYgh[YghY``hž XUgg'a Y\f': fUi Yb'U`g'A ÀbbYf'Ui g'X]YgYb'FY[]cbYb'UVk UbXYfbž k Ug'XYb'A ÀbbYfØVYfgW\i gg'Yf_`Àfh"'I fVUb]g]YfhYg'@YVYb'i bX VYggYfY'JYfX]Ybgha Ò[`]W_Y]hYb']b'k YghXYi hgW\Yb'GhÀXhYb gW\Y]bYb'YbhgW\Y]XYbXY: U_hcfYb'ZØf'X]YgYb'HfYbX'ni 'gY]b"

6YgcbXYfgʻUi ZZU``YbXʻ]ghʻX]YʻG]hi Uh]cbʻ]bʻY]bnY`bYbʻ@UbX_fY]gYbž k cʻX]YʻI bhYfgWk]YXYʻ]bʻXYfʻ; YgWk`YWkhYfj YfhY]`i b[ʻghUf_
j Uf]]YfYb"ʻ=bʻXYfʻDf][b]hnʻVY]gd]Y`gk Y]gYʻZ]bXYbʻg]WkʻnU\`Yba À»][
XYi h`]Wkʻa Y\fʻA AbbYfžʻa]hʻY]bYa ʻJ Yf\A`hb]gʻj cbʻ%"&-* ʻA AbbYfb
Ui Zʻ%"\$\$\$ʻ: fUi Yb"ʻ8Ya ʻ[Y[YbØVYfʻghY\h'X]Yʻ_fY]gZfY]YʻGhUXh
: fUb_Z fhʻfC XYfŁž'X]Yʻbi fʻY]bYbʻa]b]a UʻYbʻA AbbYfØVYfgWki gg
Ui Zk Y]gh"

GhAXh]gWXY'jg"``AbX`]WXY'; YV]YhY

9]bY`]bhYfYggUbhY`6YcVUW\hi b[`]ghžXUgg`Yg`]b`))`6fUbXYbVi f[Yf; Ya Y]bXYbž'Y]bgW\`]Y»`]W\`DchgXUa ž'a Y\f'\1 b[Y': fUi Yb`U`g A ÀbbYf'[]Vh"`Gcn]c`c[]b`?Uh\U`GU`ca c`Yf_`Àfhž'XUgg`X]YgY

I bhYfgW\]YXY`cZh`]b`GhÀXhYb`ni `Z]bXYb`g]bXž`k c`: fUi Yb hYbXYbn]Y```ØVYf`\O\YfY`6]`Xi b[gUVgW\`ØggY`j YfZØ[Yb/]b ghÀXh]gW\Yb`I a [YVi b[Yb`[]Vh`Yg`cZh`gdYn]U`]g]YfhY`5fVY]hgd`ÀhnYž X]Y`ZØf`g]Y`VYggYf`[YY][bYh`g]bX"

8]Y'6]`Xi b[gY]bf]Wk hi b[Yb'i bX'5fVY]hga Ò[`]Wk_Y]hYbž'X]Y'ZØf
¹ b[Y': Ua]`]Yb'k]Wk h]['g]bXž'k i fXYb'gY]h'XYf'K]YXYfj YfY]b][i b[]b'`ÀbX`]WkYfYb'; YV]YhYb'cZha U`g'ni gUa a Yb[Y'Y[h"'8]Y
5bn]Y\i b[g_fUZh'ghÀXh]gWkYf'FY[]cbYb'_ÒbbhY'g]Wk'XU\Yf'k Y]hYf j YfghÀf_Ybž'k Ybb'X]YgY'Ghfi _hi fYb']b'``ÀbX`]WkYb'; YV]YhYb'b]Wkh j YfVYggYfh'k YfXYb"

A]h'XYf'5Vk UbXYfi b[''h b[Yf': fUi Yb'_ObbhY'6fUbXYbVi f['j cf Y]bYf'XYa c[fUZ]gW\Yb'<YfUi gZcfXYfi b['ghY\Ybž'X]Y'Yg'ni VYk À`h][Yb'[]`hž'XYbb'Y]bY'Ui g[Yk c[YbY'; YgW\`YW\hYfj YfhY]`i b[]gh'YggYbh]Y``'ZØf'Y]bY'[Ygi bXY'9bhk]W_`i b['XYf'FY[]cb"'9g'V`Y]Vh ni `\cZZYbž'XUgg'Xi fW\'[Yn]Y`hY'A U» bU\a Yb'X]Y'`ÀbX`]W\Yb; YV]YhY'ZØf'h b[Y': fUi Yb'UhhfU_h]j Yf'k YfXYb'_ObbYb"

8 Ya c[fUZ]gWX Y HfYbXg]b 6fUbXYbVi f[

@Ui h'XYa '@UbXYgUa h'ZØf'GhUh]gh]_'6Yf`]b!6fUbXYbVi f['k]fX'V]g ni a '\(\) f'&\(\) '\(\) 'ZcfhXUi YfbXYf'F\(\) W_[Ub['XYf'6Yj O`_Yfi b[']b '\(\) bX`]WXYb'FY[]cbYb'dfc[bcgh]n]Yfh\(\) k \(\) A\\(\) fYbX']b'Gh\(\) XhYb'a]h JYfVYggYfi b['XYf'k]fhgWXUZh`]WXYb'DYfgdY_h]j Yb'Y]b'Ni k UWXg Yfk UfhYh'k]fX"'8]YgY'HfYbXg'_ObbhYb'X]Y'VYfY]hg'VYghY\YbXYb

I b[`Y]W\\Y]hYb`nk]gW\Yb`i fVUbYb`i bX``ÀbX`]W\Yb'; YV]YhYb k Y]hYf'j YfghÀf_Yb`i bX`ni `Y]bYa '_c``Y_h]j Yb`J Yf`i gh'j cb''l b[Yb : fUi Yb`]b``ÀbX`]W\Yb'?fY]qYb`ZØ\fYb"

; YgY``gW\UZh`]W\Y`=a d`]_Uh]cbYb`XYg A ÀbbYfØVYfgW\i ggYg

8 Yf'Ub\U`hYbXY'A ÀbbYfØVYfgW\i gg']b'6fUbXYbVi f['\Uhk Y]hfY]W\YbXY'gcn]U`Y'?cbgYei YbnYb"'9]b'i bUi g[Yk c[YbYg; YgW\`YW\hYfj Yf\A`hb]g'_Ubb'X]Y'8 mbUa]_']bbYf\U`V'j cb; Ya Y]bgW\UZhYb'VYY]bZi ggYbž']bgVYgcbXYfY']a '<]bV`]W_'Ui Z
DUfhbYfgW\UZhYb'i bX': Ua]`]Yb[fØbXi b[Yb"'\DFY[]cbYb'a]h
Y]bYa '\c\Yb'A ÀbbYfØVYfgW\i gg'VYghY\h'XUg'F]g]_cž'XUgg
[YgY``gW\UZh`]W\Y'GdUbbi b[Yb'ni bY\a Ybž'XU'A ÀbbYf
a Ò[`]W\Yfk Y]gY'GW\k]Yf][_Y]hYb'\UVYbž'Y]bYb'DUfhbYf'ni 'Z]bXYbž
k Ug'g]W\'i b[Øbgh]['Ui Z'X]Y'`c_U`Y'; Ya Y]bgW\UZh'Ui gk]f_Yb'_Ubb"

8]Y'Gcn]c`c[]b'?Uh'U'GU`ca c'k Y]gh'XUfUi Z'\]bž'XUgg'Y]b
i bUi g[Yk c[YbYg'; YgW\`YW\hYfj Yf\À`hb]g'Ui W\`k]fhgW\UZh`]W\Y
5i gk]f_i b[Yb'\UVYb'_Ubb"'A]h'k Yb][Yf': fUi Yb']b'Y]bYf'FY[]cb
_Ubb'X]Y'BUW\ZfU[Y'bUW\'8]Ybgh'Y]ghi b[Ybž'X]Y'hfUX]h]cbY``'j cb
: fUi Yb']b'5bgdfi W\'[Ybca a Yb'k YfXYb' k]Y'?]bXYfVYhfYi i b[
cXYf'6]`Xi b[gUb[YVchY' ni fØW_[Y\Ybž'k Ug'g]W\'bY[Uh]j 'Ui Z'X]Y
@YVYbgei U`]hÀh'ZØf'U``Y'6Yk c\bYf'Ui gk]f_Yb'_ObbhY"

I a 'X]YgYb'?cbgYei YbnYb'Ybh[Y[Ybni k]f_Ybž'_ÒbbhY'Ygbchk YbX]['gY]bž'GhfUhY[]Yb'ni f'J YfVYggYfi b['XYf'5hhfU_h]j]hÀh 'ÀbX`]WXYf'; Y[YbXYb'ZØf'1 b[Y'A YbgWXYb'ni 'Ybhk]W_Y`b"'8 Uni nÀ\`Yb'VYggYfY'5fVY]hgVYX]b[i b[Ybž'Y]b'UhhfU_h]j YfYg: fY]nY]hUb[YVch'gck]Y'X]Y'GWXUZZi b['j cb'9]bf]WXhi b[Ybž'X]Y'1 b[Y': Ua]`]Yb'UbgdfYWXYb"

6]`Xi b['i bX'VYfi Z`]W\Y'7\Ub\\b

9]b'k YgYbh`]W\Yf': U_hcf'ZØf'X]Y'5Vk UbXYfi b[''\1 b[Yf': fUi Yb'Ui g 6fUbXYbVi f[']gh'XYf'Ni [Ub['ni '\6]`Xi b['i bX'VYfi Z]W\Yb 7\UbW'b'': fUi Yb'j YfZc`[Yb'ni bY\a YbX'\Ò\YfY

6]`Xi b[gUVgW\`ØggY`i bX`VYbÒh][Yb`9hUV`]ggYa Ybhgž'X]Y
gdYn]U`]g]YfhY`VYfi Z]W\Y`9bhk]W_`i b[`V]YhYb"`8]Y`GhUh]gh]_`nY][hž
XUgg`XYf`5bhY]``Ub`: fUi Ybž'X]Y`<cW\gW\i`UVgW\`ØggY`Yf`Ub[Ybž
ghYh][`ghY][hž'k cVY]`\Ò\Yf`[YV]`XYhY`: fUi Yb`Y\Yf`[YbY][h`g]bXž`]b
ghÀXh]gW\Y`; YV]YhY`ni `n]Y\Ybž'k c`j]Y`ZÀ`h][YfY`?Uff]YfYcdh]cbYb
i bX`VYqqYfY`; Y\À`hYf`j YfZØ[VUf`q]bX"

±0.5 b V Y h f U W h 'X Y g g Y b '_O b b h Y 'Y] b Y '[Y n] Y `h Y ': O f X Y f i b ['j c b 6] `X i b [g Y] b f] W h i b [Y b 'i b X '6 Y f i Z g d f c [f U a a Y b '] b '6 f U b X Y b V i f [X U n i 'V Y] h f U [Y b Z ' A b [Y ': f U i Y b '] a '6 i b X Y g `U b X 'n i '\ U `h Y b " ±0 | h | U h | j Y b Z ' X | Y 'g | W `U i Z A Y b h c f] b [! D f c [f U a a Y 'Z Ø f ': f U i Y b _ c b n Y b h f] Y f Y b 'c X Y f 'X] Y ' ±0 h Y [f U h] c b '] b 'H Y W \ b c ` c [] Y b 'i b X 'G H 9 A ! 6 Y f Z Y 'i b h Y f g h Ø h n Y b Z 'n Y] [Y b 'j] Y `j Y f g d f Y W X Y b X Y '5 b g À h n Y 'n i f 6 Y _ A a d Z b ['X Y f 5 V k U b X Y f i b | "

8 Y hU]`g

6Ygi WXYb G]Y i bg Ui Z. a Y]b!VYf`]b bYh