

A YggYfUhhUW_Yb`]b`B ØfbVYf[.`8 YVUhhY ØVYf`gWÅfZYfYg`K UZZYbfYWÅ h

8]Y`B ØfbVYf[Yf`B UWÅ f]WÅ hYb`VYf]WÅ hYb`Ua`&\$"\$, "&\$&(`ØVYf
X]Y`Ni bU\ a Y`j cb`A YggYfUhhUW_Yb`i bX`ZcfXYfb`gWÅfZYfYg
K UZZYbfYWÅ h"

B ØfbVYf[` \Uh]b`YhnhYf`NY]h`Y]bY`VYgc f[b]gYffY[YbXY`Ni bU\ a Y
j cb`A YggYfUhhUW_Yb`Yf`YVhž`k Ug`b]WÅ h`bi f`ZØf`X]Y`GhUXhž`gc bXYfb
ZØf`X]Y`[YgUa`hY` ; YgY`gWÅ UZh`U`Ufa`]YfYbX`]gh`8 Yf`ØZZYbh`]WÅ Y
8]g_i fg`ØVYf`G]WÅ Yf\Y]h`i bX`K UZZYbfYWÅ h`k]fX`Xi fWÅ`X]YgY
[Yk U`hhÅh][Yb`J c fZÅ`Y`bYi`VY`YVhi bX`[]Vh`5b`Ugg`ni`]bhYbg]j Yb
8]g_i gg]cbYb`ØVYf`k]f_gUa` Y`A U» bU\ a Yb`ni f`J Yf\]bXYfi b[
gc`WÅ Yf`HUhYb"

⊕`Y]bYf`U_hi Y`Yb`GhY`i b[bU\ a Y`XYf` B ØfbVYf[Yf`B UWÅ f]WÅ hYb
k]fX`Ui Z`X]Y`DfcV`Ya Uh]_` \]b[Yk]YgYbž`XUgg`j]Y`Y`X]YgYf
[Yk U`hhÅh][Yb`HUhYb` \Åi Z][`Ui g`Y]bYa`]a di`g]j Yb`5ZZY`h` \YfUi g
[YgWÅ Y\Yb`"9g`k]fX`VYhcbhž`XUgg`g]WÅ`b]Ya` UbXž`XYf`Y]bY`5hhUW_Y
d`Ubhž`j cb`J YfVchYb`UVgWÅ fYW_Yb` `Åggh`"8]YgY`9]bg]WÅ h`ZØ\ fh`ni
XYf`_ VYf`Y[i b[ž`k]Y`a` Ub`X]Y`5bnU\`XYf`A YbgWÅ Yb`fYXi n]YfYb
_Ubbž`X]Y`]b` \]m][Yb`A ca` YbhYb`ni`Y]bYa` A YggYf`[fY]ZYb`"8 Yf
5bgUhn` \]YfVY]`_ØbbhY`Y]bY`?ca` V]bUh]cb`Ui g`gWÅfZYfYa
K UZZYbfYWÅ h`i bX`k Y]hYfYb`J YfVchYb`gY]b"

; YgYhnYgÅbXYfi b[Yb`i bX`a Y`f`F Yggci fWÅ b
[YZcfXYfh

9]bY`k YgYbh`]WÅ Y` : cfXYfi b[`]b`X]YgYf`8 YVUhhY`]gh`X]Y
Bch`k YbX][_Y]hž`XUg`K UZZYbfYWÅ h`ni`] YfgWÅfZYb`"8]Y` ðYY`]ghž
dchYbn]Y`Y`5b[fY]ZYf`XUj cb`UVni` \U`hYbž`Y]b`A YggYf`VY]`g]WÅ`ni
hfU[Yb`"8]Y`5f[i a` YbhUh]cb`Y]Y[h`Ui Z`XYf`< UbX.` ð`k Yb][Yf

A YbgWXYb`ni f`K UZZY`[fY]ZYb`_`ObbYbž`XYghc`[Yf]b[Yf`X]Y
K U\fgWXY]b`]W_X]hž`XUgg`X]YgY`]b`Y]bYa`i bVYXUW`hYb`A ca Ybh
ni a`9]bgUhn`_ca a h`J cfUi ggYhni b[`ZØf`gc`WXY`Y`bXYfi b[Yb`g]bX
U`YfX]b[g`a Y\f`DYfgcbU`fYggci fW`b`]b`XYb`6Y\`ØfXYb`i bX`Y]b
\`Ø\YfYg`Z]bUbn]Y`Yg`6i X[Yhž`i a`X]YgY`A U» bU\`a Yb`ni
i bhYfghØhnYb`"

8]Y`8]g_i gg]cb`ØVYf`X]YgY`A U» bU\`a Yb`k]fZh`ni [`Y]W`k Y]hYfY
: fU[Yb`Ui Z`K Ug`VYXYi hYh`Y]b`gW`ÅfZYfYg`K UZZYbfYW`h`_cb`_fYh
ZØf`X]Y`; YgY`gW`UZh3`K Yf`gc``X]Y`?cbhfc``Yb`Xi fW`ZØ\`fYb`i bX`k]Y
ghY`h`a Ub`g]W`Yfž`XUgg`X]Yg`YZZ`_h]j`i bX`fYW`hY]h][`YgW`Y\`h3
8]YgY`, VYf`Y[i b[Yb`g]bX`k]W`h][ž`i a`Y]b`fYgdY`_hUV`Yg
; `Y]W`[Yk]W`h`nk]gW`Yb`G]W`Yf\`Y]hi bX`dYfgØb`]W`Yb`: fY]\`Y]hYb
ni`k U\`fYb``8UfØVYf`\]bUi g`_ca a h`XYf`5gdY`_h`\]bni ž`XUgg`gc`WXY
A U» bU\`a Yb`bi f`XUbb`k]f`_gUa`g]bXž`k Ybb`Ui W`X]Y
8i fW`gYhni b[`XYf`; YgYhY`Ui gfY]W`YbX`[Yk Å\`f`Y]ghYh`]gh"

9]b`HfYbXž`XYf`ni a`B UW`XYb`_Yb`Ub`fY[h

8]Y`Ni bU\`a Y`j cb`A YggYfUhhUW`_Yb`]gh`b]W`h`bi f`Y]b`c`_U`Yg
DfcV`Ya ž`gcbXYfb`gd]Y[Y`h`Y]bYb`VYgcf[b]gYffY[YbXYb`HfYbX`]b
j YfgW`]YXYbYb`gh`ÅXh]gW`Yb`; YV]YhYb`k]XYf``5b[Yg]W`hg`XYg
gYi i Y`Yb`i bX`\`Ai g`]W`Yb`?cbZ`_hg`gck]Y`j cb`U`h`Å[`]W`Yb
5i gY]bUbXYfgYhni b[Ybž`X]Y`\`Ai Z][`Yg`_U]YfYbž`]gh`XYf`5i Zfi Z`ni f
J YfVYggYfi b[`XYf`[YgYhni]W`Yb`FU\`a YbVYX]b[i b[Yb`Xf]b[`]W`Yf
XYbb`Y``8Yf`: c_i g`Ui Z`gc`WXY`5i gbU\`a Yg]hi Uh]cbYb`]gh`k]W`h][ž
XU`g]Y`cZi`U`g`5i g[Ub[gdi b`_h`ZØf`]bhYbg]j YfY`8]g_i gg]cbYb`ØVYf
; Yk U`hdf`Aj Ybh]cb`i bX`G]W`Yf\`Y]hgghfUHY[]Yb`X]YbYb`_`ObbYb`"

8]Y` BØfbVYf[Yf`B UW`f]W`hYb`ghY`Yb`ni XYa`X]Y`: fU[Yž`k]Y`a Ub
XYb`gcn]U`Yb`FU\`a Yb`gc`[YghU`hYb`_`Ubbž`XUgg`; Yk U`h`k Yb][Yf
k U\fgWXY]b`]W`k]fX``Df`Aj Ybh]j Y`Dfc[fUa`a Y`_`ØbbhYb`\]Yf`Y]bY
F c``Y`gd]Y`Ybž`]bXYa`g]Y`A YbgWXYb`]b`?cbZ`_hg]hi Uh]cbYb
i bhYfghØhnYb`i bX`U`hYfbUh]j Y`?cbZ`_h`Øgi b[gghfUHY[]Yb`UbV]YhYb`
9g`V`Y]Vh`UVni k UfhYbž`k]Y`Dc`h]_`i bX`; YgY`gW`UZh`Ui Z`X]YgY
<YfUi gZcfXYfi b[Yb`fYU[]YfYb`i bX`k Y`WXY`A U» bU\`a Yb`Yf[f]ZZYb
k YfXYbž`i a`XUg`G]W`Yf\`Y]hg[YZØ`\`XYf`6Øf[Yf`ni`gh`Åf`_Yb`"

K UZZYbfYWX h'i bX '[YgY`gWX UZh]WX Y

J YfUbhk cfhi b[

K Å\fybX'X]Y'8YVUhhY'ØVYf'XUg'K UZZYbfYWX h'i]b'8Yi hgWX`UbX
k Y]hYf\]b']b'j c`Ya ; Ub[Y']ghž'ghY\h'ZYghž'XUgg'Yg'Ui WX'i a
[YgY`gWX UZh]WX Y'J YfUbhk cfhi b['[Y\h"6Øf[Yf'g]bX'Ui Z[Yfi ZYbž
g]WX'U_hj'Ub'XYf'8]g_i gg]cb'ni 'VYhY']][Yb'i bX']\fy'Gh]a a Y'ni
Yf\YVYb"J YfÅbXYfi b[Yb'a ØggYb'b]WX h'bi f'j cb'cVYb'_ca a Ybž
gcbXYfb'Ui WX'Ui g'XYf'N]j]' [YgY`gWX UZh'\YfUi g'[YZcfXYfh'k YfXYb"
8]Y'Ni bU\ a Y'j cb'A YggYfUhhUW_Yb'nY][hž'XUgg'U'hY'5bgÅhny
a Ò[']WX Yfk Y]gY'b]WX h'a Y\ f'Ui gfY]WX Yb'i bX'bYi Y'ÆYYb
bchk YbX]['g]bXž'i a 'X]Y'G]WX Yf\Y]h'U`Yf'6Øf[Yf'ni '[Yk Å\ f'Y]ghYb"

Æg[YgUa h'gc`hY'X]YgYf'HfYbX'b]WX h'i][bcf]Yfh'k YfXYb""8]Y'NY]hž
g]WX'a]h'XYb'hUhgÅWX`]WX Yb'<YfUi gZcfXYfi b[Yb
Ui gY]bUbXYfni gYhnYbž']gh'Yhnh"Bi f'gc'_Ubb'Y]b', VYfhfU[Yb'XYf
J YfUbhk cfhi b['Ui Z'X]Y'f]WX h][Yb'GhY`Yb'i bX'Ægh]hi h]cbYb
[Yk Å\ f'Y]ghYh'k YfXYbž'i a 'Y]bY'bUWX\U'h][Y'@Øgi b['ni 'Z]bXYb"
8Yf': c_i g'a i gg'XUfUi Z`Y][Ybž'X]Y']bX]j]Xi Y`Y'G]WX Yf\Y]h'ni
Yf\Ò\Ybž'k Å\fybX'['Y]WX nY]h]['X]Y' [YgY`gWX UZh]WX Yb'Ghfi _hi fYb
[YdfØž'i bX'Yj Ybhi Y`Ub[YdUggh'k YfXYbž'i a 'ZØf'_ØbZh][Y
; YbYfUh]cbYb'Y]bY'g]WX YfY'l a [YVi b['ni 'gWX UZZYb"

B YVYb'XYf'8]g_i gg]cb'ØVYf'A YggYfUhhUW_Yb'i bX'A U» bU\ a Yb'ni f
J YfVYggYfi b['XYf'G]WX Yf\Y]h'i]b'ghÅXh]gWX Yb'; YV]YhYb'ghY`h'g]WX
X]Y': fU[Yž'k Y`WX Y' [YgY`gWX UZh]WX Yb'i bX'dc`h]gWX Yb
F U\ a YbVYX]b[i b[Yb'X]YgY'5fh'j cb'; Yk U'h'VY[Øbgh][Yb
_ØbbhYb"Æ'j]Y'Yb'GhÅXhYb'8Yi hgWX`UbXg'nY][Yb'GhUh]gh]_Yb'Y]bYb
5bgh]Y['j cb'; Yk U'hj YfVfYWX Ybž'k cni 'Ui WX'A YggYfUhhUW_Yb
[Y\ØfYb""8]Yg'\Uh'ni 'Y]bYf'VfY]hYb'ØZZYbh]WX Yb'8YVUhhY'ØVYf
k UWgYbXY'l bg]WX Yf\Y]h'i bX'a Ò[']WX Y'@Øgi b[gUb gÅhny' [YZØ\fh"

9]b'nYbhfU`Yf'5gdY_h]b'X]YgYf'8]g_i gg]cb']gh'X]Y'K U\fbY\ a i b[
XYf'?f]a]bU']hÅhgfUhY" @Ui h'XYa 'GhUh]gh]gWX Yb'6i bXYgUa h'nY][Yb
X]Y'?f]a]bU']hÅhgnU\`Ybž'XUgg'; Yk U'hj YfVfYWX Yb']b'XYb`YhnhYb
Æ\fyb']b'Y]b][Yb'F Y[]cbYb'Ub[Ygh]Y[Yb'g]bXž'k Ug'ni 'a Y\ f
Yb[ghYb']b'XYf'6Yj Ò_Yfi b['ZØ\fh"8]Yg'gd]Y[Y'h'g]WX'Ui WX']b'XYb
A YX]Yb'k]XYfž'X]Y'ØVYf'VY]bU\Y'hÅ[']WX' bYi Y'J cfZÅ`Y'VYf]WX hYb"

⊕`XYf'6Yf]W\hYfghUhh b[`k YfXYb`cZh'gdY_hU_i `ÀfY'9]bnY`ZÀ`Y
\\Yfj cf[Y\cVYbž'k Ug`X]Y`K U\fbY\`a i b[`j cb` ; Yk U`h]b`XYf
; YgY``gW\UZh`k Y]hYf`j Yfgh`Àf`h"

; YgY``gW\UZh`]W\Y`i bX`d c`]h]gW\Y`F YU_h]c bYb

5i ZX]Y`ghY][YbXY`NU\`j cb`A YggYfUhhUW_Yb` \ UVYb`nU\`fY]W\Y
Gh`XhY`i bX`6i bXYg`ÀbXYf`fYU[]Yfhž`]bXYa`g]Y`df`Àj Ybh]j Y
A U» bU\`a Yb`Yf[f]ZYb` \ UVYb``8 Uni` [Y\`ÖfYb`⊕]h]Uh]j Yb`ni f
J YfVYggYfi b[`XYf`gc n]U`Yb`⊕hY[fU]cb`i bX`Dfc[fUa` a Y`ni f
; Yk U`hd f`Àj Ybh]cbž`X]Y`gdYn]Y``ZÖf`⋈ [YbX`]W\Y`Ybhk]W_Y`h
k i fXYb``C f[Ub]gUh]cbYb`k]Y`XUg`6i bXYga]b]ghYf]i a`ZÖf
: Ua]`Yž`GYb]cfYbž': fUi Yb`i bX`⋈ [YbX`i bhYfghØmYb
j YfgW]YXYbY`Dfc`Y_hYž`X]Y`⋈ [YbX`]W\Y`]b`gc n]U`Yb`6fYbbdi b_hYb
YffY]W\Yb`gc``Yb"

8 Uni` _ca` a Yb`Ui W\`dc`]h]gW\Y`6YghfYVi b[Ybž`XUg`K UZZYb fYW\h
ni`j YfgW`ÀfZYb``⊕j YfgW]YXYbYb`6i bXYg`ÀbXYfb`k i fXYb`VYfY]hg
A U» bU\`a Yb`Yf[f]ZYbž`X]Y`XYb`9fk YfV`i bX`6Yg]hn]j cb`A YggYfb
ghfYb[Yf`fY[i`]YfYb`gc``Yb``8]YgY`F YZcfa Yb`n]Y`Yb`XUfUi Z`UVž`XYb
Ni [Ub[`ni`dchYbn]Y``Yb`HUhk Yf_nYi [Yb`ni`a]b]a]YfYb`i bX`XUa]h
Ui W\ ; Yk U`h]a`ÖZZYbh]W\Yb`F Ui a`ni`fYXi n]YfYb``8]Y`8YVUhY`]gh
`YXcW`_ca`d`YI`i bX`k]fX`cZh]j cb`_cbhfcj YfgYb`A Y]bi b[Yb
VY[`Y]hYhž`X]Y`gck c\`F YW\hY`XYf`6Øf[Yf`U`g`Ui W\
G]W\Yf\Y]hgUgdY_hY`VYhcbYb"

GhfUhY []Yb`ni f` ; Yk U`hd f`Àj Ybh]c b

9]b`YfZc`[j YfgdfYW\YbXYf`5bgUhn`ni f`6Y_`Àa`dZi b[`j cb` ; Yk U`h]gh
X]Y`GW\UZZi b[`g]W\YfYf`F Ui a`!i bX`: fY]nY]hUb[YVchY`ZÖf
⋈ [YbX`]W\Y``8i fW\`[Yn]Y`hYg`5b[YVch]j cb`Gdcfhž
?fYUh]j k cf_g\cdg`i bX`gc n]U`Yf`6YhfYi i b[`_ÖbbYb`DYfgdY_h]j Yb
Ui Z[YVUi hi bX`5[[fYgg]cbYb`UV[YVUi hi k YfXYb``@c`_U`Y
⊕]h]Uh]j Yb`i bX`B; Cg`gd]Y`Yb`\]YfVY]Y]bY`YbhgW\Y]XYbXY`F c``Yž
]bXYa`g]Y`<`ZY`i bX`I bhYfghØmi b[`]b`gW\k]Yf][Yb`@YVYbg`U[Yb
UbV]YhYb"

?ca V]b]Yfh`a]h`Y]bYf`j YfVYggYfhYb`Dc`]nY]df`ÀgYbn`]b`ÖZZYbh]W\Yb

FÀi a Yb`_Ubb`X]Yg`XUni`VY]hfU[Ybž`XUg`G]W\Yf\Y]hg[YZØ\`XYf
A YbgW\Yb`ni`ghÀf_Yb`i bX`dchYbn]Y`Y`; Yk U`hU_hY`ni`j Yf\]bXYfb"
8]Y`Bchk YbX][_Y]h`Y]bYg`YZZ]n]YbhYfYb`G]W\Yf\Y]hg!`i bX
DfÀj Ybh]cbggmghYa g`k]fX`gck c`\`j cb`XYf`Dc`]h]_U`g`Ui W`j cb`XYf
N]j]`[YgY``gW\UZh`Yf_Ubbhi bX`h\Ya Uh]g]Yfh"

8YhU]`g

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