

7ci fgY`Cj Yfj]Yk

`GHUZZ7cbhUW`i8YHJ`g`

`7cbj Ybcfg`

B Ua Y	9a U`	5j U]UV]]m	@cW]hcb	D\cbY
GYUb`7\Yb[gYUb"W 4 i bgk "YXi "Ui	H\i fgXUm%\$!%&	A 6` &+,	Z`*%&`-' ,) &' %(`

`Hi hcfg`

B Ua Y	9a U`	5j U]UV]]m	@cW]hcb	D\cbY
5a mL]Ucl]b[`K Ub[]]Ucl]b["k Ub[4 i bgk "YXi "Ui			
5`]gU`H]Ub	n' ' (\$& , +4 i bgk "YXi "Ui			
F YVYW`DUffYXYg B]Yh	f"dUfYXYgb]Yh4 i bgk "YXi "Ui			
9`YbU`A]\U]]_	Y"a]\U]]_4 i bgk "YXi "Ui			
M] Y`]bY`D]`Yf	n' ' ((%\$%4 i bgk "YXi "Ui			
F cgU`>cc`M b`M]b[`c`n`Ub[4 i bgk "YXi "Ui			
HYhgi mU`C _UXU	\U`4 i bgk "YXi "Ui			
5`UbU`G]a dgcb	n' \$(- &(+4 i bgk "YXi "Ui			
Gi nUb`D]dYf	g`d]dYf4 i bgk "YXi "Ui			

cf][]bU`cf`WfhjZYX`WdmcZU`a YX]W`WfhjZWUHY`cf`ch`Yf`Zcfa`cZUddfcdf]UH`Yj]XYbW`"

5`7ci fgY`5i hcf]ma UmYI W gY`U`gh XYbhZca`WUggYg`cf`UW]j]hYg`Zcf`i d`hc`cbY`a cbh`"<ck Yj YfZ`hYm
a UmUgg][b`UXX]h]cbU`UbX#f`U`H`fbU]j Y`hUg_g`hc`Ybgi fY`Wca d`]UbVW`"5`7ci fgY`5i hcf]mWcbg]XYf]b[`h`Y
[fU]h]b[`cZUVgYbW`a i ghVY`gU]hgZYX`U`gh XYbhk]`gh`VY`UV`Y`hc`a YYh`h`Y`W`i fgY`g`YUfb]b[`ci h`Wca Yg
UbX#f`j c`i a Y`cZ`YUfb]b["5`gh XYbhgYY_]b[`Uddfcj U`hc`VY`UVgYbhZcfa`cfY`h`Ub`cbY`a cbh`a i ghUdd`m
]b`k`f]h]b[`hc`h`Y`8YUb`UbX`dfcj]XY`U`cf][]bU`cf`WfhjZYX`gi ddcf]h]b[`XcW`a YbhU]cb"

: cf`a cfY`]bZcfa U]cb`UVci h`h`Y`UH`Y`bX`UbW`dfc`hc`Wc`g`]b`h`Y` : UW`h`mcZ5f`g`UbX`GcW]U`
GW]YbWg. [\hfdg.##k k k "Ufng"i bkg "YXi "Ui #W ffYbhghi XYbng#UWUXYa \]W\]bZcfa U\]cb#dfc`hc`Wc`g!\[i \]XY`\]bYg#](#)

5WUXYa]W]bZcfa U]cb`

: cf`YggYbh]U`gh XYbh]bZcfa U]cb`fY`U]b[`hc`f`Yei Yg]g`Zcf`YI`h`bg]cb/fYj]Yk`cZa`Uf_g/cW]W`dU]cbU`h`YU`h`
UbX`gUZ`h`m`YI`Ua`]bU]cb`dfc`W`Xi`fYg/gd`Y`W]U`Wc`bg]XYfU]cb`]b`h`Y`Yj`Ybh`cZ]`b`Ygg`cf`a`]gUXj`Ybh`fY/
gh`XYbh`Yei`]m`UbX`X]gUV`]m`UbX`ch`Yf`YggYbh]U`UWUXYa]W]bZcfa U]cb`z
gYY`[\hfdg.##k k k "Ufng"i bkg "YXi "Ui #W ffYbhghi XYbng#UWUXYa \]W\]bZcfa U\]cb#dfc`hc`Wc`g!\[i \]XY`\]bYg#](#)

7ci fgY'8YHJ]`g

7fYX]hDc]bHg`*`

Gi a a UfmicZ\hY'7ci fgY

H\]g`Wci fgY'dfcj]XYg'mci`k]h`h`Y`h`YcfYh]WU`_bck`YX[Y`UbX'dfUW]WU`YI dYf]YbW`fYei]fYX`Zc'f'dfcZ]gg]cb
hfUbg'Uh]cb`]b`h`Y`gdYW]U`]gYX`UfYUg`cZHYWbc`c[mž'gW]YbW]ž'a YX]W]bY`UbX`Uk`"Mci`k`]"XYj`Y`cd`UbX`Udd`m
i`b]j`YfgU`UbX`Ub[i`U[Y!gdYW]Z]WdfcV`Ya`!gc`j`]b[`h`W`b]ei`Yg`h`c`c`j`YfW`a`Y`hfUbg'Uh]cb`WU`Yb[Yg`]b`Vch
`Ub[i`U[Yg`"H\Y`Wci fgY`Z]Ua`Yg`gdYW]U`]gYX`hfUbg'Uh]cb`k`]h`]b`Ub`]b`h`fb`Uh]cb`U`dYfgdYW]j`Y`k`]h`Ya`d\Ug]g
cb`h`Y`W`h]b[!YX[Y`h`W`bc`c[]Yg`Ya`VYXXYX`]b`h`Y`Ub[i`U[Y`gYfj`]W]g`]bXi`ghfmcZ]hXUm`

5h`h`Y`W`b`Wi`g]cb`c`Z`h`]g`W`ci fgY`h`Y`gh`XYbhk`]"`VY`UV`Y`h`c`

%`UbU`mgY`]"b[i`]gh]WZ]Uhi`fYg`h`Uh]a`dcgY`hfUbg'Uh]cb`X]Z]W`h]Yg`]b`gdYW]U`]gYX`hfUbg'Uh]cb
&`Zc`fa`i`U`h`Y`hfUbg'Uh]cb`ghfU`h`[]Yg`h`c`W`b`Z]X]Ybhm]hfUbg'Uh`a`i`h]a`YX]U`W`b`h`Y`b]b]b`Vch`"Ub[i`U[Y`
X]fYW]h]cbg
'`" `↑`gh]Zmi]hfUbg'Uh]cb`W`c]W]g`VUgYX`cb`h`Ycfm]UbX`fYgYUfW
(`"XYj`Y`cd`dfUW]WU`g_]`g`]b`h`W`b]WU`k`f]h]b[`k`]h`U`Z`W`g`cb`h`fa`]bc`c[mia`UbU[Ya`Ybh]UbX`YX]h]b[
)`" i`gY`W`b`h`Y`h`U`_bck`YX[Y`h`c`gi`W]W]ggZ`"mi]hfUbg'Uh`gdYW]U`]gYX`W`b`h`Y`b]b]b`h`Y`Ub[i`U[Y`gYfj`]W]g`
]bXi`ghf`m`

HYUW]b[`G]hU`h`[]Yg`

@YW]h`fYg`UbX`Ub[i`U[Y!gdYW]Z]W]h`h`c]f]U`g`UfY`h`Uj`[\hVm]UW]X]Ya`]Wgh]UZZ`UbX`dfcZ]gg]cbU`hfUbg'Uh]c]fg`]b`h`Y`
gdYW]U`]gYX`UfYUg`W`c]j`YfYX`]b`h`Y`W`ci fgY`Z]b]W]X]b[ž`h`W`b]WU`ž`gW]Yb]h]Z]W]ž'a YX]WU`ž`UbX`Y[U`Xca`U]bg`"
@YW]h`fYg`dfcj]XY`h`YcfYh]WU`UbX`]bXi`ghf`m`_bck`YX[Y`UbX`]XYb]h]Zmi`b]j`YfgU`Z]Uhi`fYg`cZgdYW]U`]gYX`
hfUbg'Uh]cb`"@Ub[i`U[Y!gdYW]Z]W]h`h`c]f]U`g`YbUV`Y`gh`XYbh]h`c`Udd`mi]h]g`_bck`YX[Y`]b`c`f`X`Y`f`h`c`XYj`Y`cd`h`Y]f`
hfUbg'Uh]cb`g_]`g`Zc`f`h`Y]f`Ub[i`U[Y`dU]f`"H\]g`W`c`a`V]b]U]h]cb`Ybgi`fYg`h`YcfYh]WU`_bck`YX[Y`]g`dU]fYX`k`]h`
]b`Zc`fa`YX`UbX`↑`gh]Z]YX`dfcZ]gg]cbU`dfUW]WU`U`h`h`Y`"[\`Ygh]gh]UbXUfX`cZb]U]h]cbU`UbX`]b`h`fb`Uh]cb`U`
gh]UbXUfXg`Zc`f`h`Y`dfcZ]gg]cb`"

ZYXVUW_dfcj]XYX'cb'ei]n']h'a g:k]h'Ub'cfU`X]gW'gg]cb]b'h'Y'gi VgYei Ybh`YW`fY"

5ggYgga Ybh(. 'J]XYc'fYZYW]cb

GhUfhXU`k YY_`%\$

8YhU]`g. '5`%\$!a]bi h']bX]j]Xi U`j]XYc'fYZYW]cb`]b_YX'hc'U`W'cgYb'gdYW]U`]gYX'hfUbg`Uh]cb`WfYYf'dfcZ`Y`]b
h'Y`Ub[i U[Y'gYfj]W'g]bXi g'fm`bX]j]Xi U`k f]h'Yb'ZYXVUW`k]`VY'dfcj]XYX'cb'h'Y'Ugg][ba Ybhk]h' [fci d!
VUgYX'cfU`ZYXVUW`Xi f]b['h'Y'gi VgYei Ybh`YW`fY`H\]g`]g'h'Y`Z]bU`UggYgga YbhUg`Zcf`U`h'YbXUbW`
di fdcgYg"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gh XYbng`UfY`YI dYW`X`hc`di h`h`Y`f`b`Ua`Yg`UbX`gh`XYbhbi`a`VYfg`cb`Yj`YfmdU[`Y`c`Z`h`Y`f`Ugg][`ba`Ybng`"

Hi fb]h]b`Gi Va]gg]cb

≠mci`YbWci`bHYf`U`dfcV`Ya`k`Yb`U`h`Ya`dh]b[`hc`gi`Va`]hirci`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]h]b`z`d`Y`UgY`
h`Y`d`cb`Y`9I`h`fb`U`Gi`ddcfh`cb`-`,`),`"``"``%`cf`Ya`U`h`Ya`cb`[YI`h`fb`U`h`h`gi`ddcfh`i`bgk`"YXi`"Ui`"](#)Gi`ddcfh`
`ci`fg`UfY`,`.\$\$Ua`-`%\$.`\$\$da`cb`k`YY`X`Umg`UbX`-`.\$\$Ua`-`).`\$\$da`cb`k`YY`YbXg`f`l`*)`X`Umg`U`m`Y`Uf`l`≠mci`
UfY`i`b`UV`Y`hc`gi`Va`]hirci`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]h]b`mci`a`Um`Udd`m`z`f`Ub`YI`h`bg]cb`z`Vi`hirci`
a`i`gh`f`Y`h`U]b`mci`f`h`W`Y`h`bi`a`VYf`Z`ca`9I`h`fb`U`Gi`ddcfh`f`U`cb[`k`]h`Ub`m`c`h`Y`f`f`Y`j`Ub`h`X`c`W`a`Y`b`h`g`l`hc`
]dU`XYb`b`mci`]b`U]`)"`"``%`

- K cf_`gi Va]hYX`%\$`hc`%-`XUmg`UZhYf`h`Y`gh]di`UH`X`XYUX`]bY`k`]`VY`UggYggYX`UbX`ZYXVUW`dfcj`]XYX`Vi`hU`a`Uf`_`cZnYfc`k`]`VY`fYW`fXYX`"Z`h`Y`k`cf`_`k`ci`X`\\Uj`Y`fYW`]j`YX`U`dUgg`a`Uf`_`Vi`hZcf`h`Y`UH`bYgg`UbX`h`Y`k`cf`_`]g`U`W`a`di`gcfm`W`i`fgY`W`a`dcbYbh`f`i`fX`Y`fYei`]fYa`YbhZ`U`gh`XYbhk`]`VY`XYYa`YX`h`\\Uj`Y`a`Yh`h`UhfYei`]fYa`Ybh`
- K cf_`gi Va]hYX`&\$`c`f`a`c`f`Y`XUmg`UZhYf`h`Y`gh]di`UH`X`XYUX`]bY`k`]`bchVY`UW`W`d`h`X`Z`c`f`UggYgga`Ybh`UbX`k`]`fYW`]j`Y`bc`ZYXVUW`z`a`Uf`_`c`f`[`fUXY`"Z`h`Y`UggYgga`Ybh`Ug`_`]g`U`W`a`di`gcfm`W`a`dcbYbh`c`Z`h`Y`W`i`fgY`U`gh`XYbhk`]`fYW`]j`Y`Ub`l`bgUhgZUW`c`fm`:`U`]`f`l`:`k`[`fUXY`Ug`U`fYgi`h`c`Z`i`bgUhgZUW`c`fmdYfZ`c`a`UbW`]b`Ub`YggYbh]U`W`a`dcbYbh`c`Z`h`Y`W`i`fgY`"

H\]g`]bZ`c`f`a`U`h`c`b`]g`U`gc`Uj`U]UV`Y`Uh`

[\h`d`g`#`k`k`k`"Uf`g`"i`b`g`k`"Y`X`i`"U`i`#`W`f`f`Y`b`h`g`h`i`X`Y`b`g`#`J`W`X`Y`a`\]`W`\]b`Z`c`f`a`U`h`c`b`#`d`f`c`h`W`c`g`!`i`\]`X`Y`\]b`Y`g`#`](#)

GdYW]U`7`c`b`g`]X`Y`f`U`h`c`b`5`d`d`]W`h`c`b`g`

Mci`W`b`U`d`d`m`Z`c`f`g`d`Y`W`]U`W`c`b`g`]X`Y`f`U`h`c`b`k`\\Y`b`]`b`Y`g`g`c`f`c`h`Y`f`W`]f`W`a`g`h`U`b`W`g`]b`h`f`Z`Y`f`k`]h`m`c`i`f`UggYgga`Ybh`d`Y`f`Z`c`f`a`UbW`"

G]W`b`Y`g`g`z`a`]g`U`X`j`Y`b`h`i`f`Y`c`f`c`h`Y`f`W`]f`W`a`g`h`U`b`W`g`V`Y`m`c`b`X`m`c`i`f`W`c`b`f`c`a`Um`

f`D`f`Y`j`Y`b`h`m`c`i`Z`c`a`W`c`a`d`Y`h`b`[`U`W`c`i`fgY`f`Y`ei`]f`Ya`Y`b`h`z`

f`?`Y`Y`d`m`c`i`Z`c`a`U`h`Y`b`X`]b`[`U`b`U`g`g`Y`g`g`U`V`Y`U`W`h`j`]m`z`

f`G`h`c`d`m`c`i`g`i`Va`]h`]b`[`U`g`g`Y`g`g`U`V`Y`k`cf`_`Z`c`f`U`W`c`i`fgY`z`

f`G`][`b`]W`b`h`i`m`U`Z`Y`W`h`m`c`i`f`d`Y`f`Z`c`f`a`UbW`]b`U`g`g`Y`g`g`U`V`Y`k`cf`_`z`V`Y`]h`U`Z`c`f`a`U`Y`b`X`!`c`Z`g`Y`a`Y`g`h`f`Y`I`U`a`]b`U`h`c`b`z`U`W`U`g`g`h`Y`g`h`z`U`U`V`c`f`U`h`c`f`m`h`Y`g`h`z`U`g`Y`a`]b`U`f`d`f`Y`g`Y`b`h`U`h`c`b`c`f`U`b`m`c`h`Y`f`Z`c`f`a`c`Z`U`g`g`Y`g`g`a`Y`b`h`

:`c`f`Z`f`h`Y`f`X`Y`h`U`]g`]b`f`Y`U`h`c`b`h`c`G`d`Y`W`]U`7`c`b`g`]X`Y`f`U`h`c`b`]b`W`i`X`]b`[`"K`\\Y`b`h`c`5`d`d`m`z`"<`c`k`h`c`5`d`d`m`U`b`X`"G`i`d`d`c`f`h`b`[`8`c`W`a`Y`b`h`U`h`c`b`"d`Y`U`g`Y`f`Y`Z`f`h`c`h`Y`G`d`Y`W`]U`7`c`b`g`]X`Y`f`U`h`c`b`k`Y`V`g`h`Y`."

[\h`d`g`#`g`h`i`X`Y`b`h`i`b`g`k`"Y`X`i`"U`i`#`g`d`Y`W`\]U`W`c`b`g`\]X`Y`f`U`h`c`b`](#)

5 WUXYa]W<c bYghmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i g]b[`h`Y`k cfXg`cf`]XYUg`cZch`Yfg`UbX`dfYgYb]b[`h`Ya `Ug`mci f`ck b" `h`WUb`hU`Y`a Ubm
Zcfa gž`Zca `XY`]VYfUHY`WXYU]b[`h`c`UWV]XYbU`mW`cdm]b[`Zca `U`gci fW`k`]h`ci hUW_bck`YX[Ya Yb]h`

I BGK `[fci dg`d`U[]Uf]ga `]b]h`c`h`Y`Zc`ck]b[`WUHY[cf]Yg.

7cdm]b[.`i`g]b[`h`Y`gUa Y`cf`]Yfmg]a`]Uf`k`cfXg`h`c`h`Y`cf][]bU`h`I`hcf`]XYU`k`]h`ci hUW_bck`YX[]b[`h`Y
gci fW`cf`]g]b[`ei`ch]h]cb`a`Uf_g`"H\]g`U`gc`Udd`]Yg`h`c`]a`U[Ygž`Ufh`UbX`XYg][]b`dfc`YWgž`Ug`k`Y`Ug
dfYgYb]h]cbg`k`YfY`gca`YcbY`dfYgYb]h]`Ubc`h`Y`f`g`]XYUg`cf`k`cfXg`k`]h`ci hW`YX]h`

hUddfcdf]UHY`dUfUd`fUg]b[.`7`U`b[]b[`U`ZYk`k`cfXg`UbX`d`fUgYg`k`\]Y`a`cghmiFYh]b]b[`h`Y`cf][]bU`



F Ygci fWg

DfYgW]VYX F Ygci fWg