



UEST6001

F YghcfUhj Y '9Wc`c []Yg. 'DYfa UW `hi fy 'Df]bW]d`Yg/
DfUW]W

HYfa `Hk c`##`&\$&%

7 ci fgY`Cj Yfj]Yk

GhJZZ'7 cbhJWw'8YhU]`g

7cbj Ybcfg

B Ua Y	9a U]`	5j U]`UV]`]m	@cW]h]cb	D\cbY
>UW`i]'6Yg[fcj Y	^vYg[fcj Y4 i bgk "YXi "Ui	6mUddc]bra Ybh Xi f]b[`W`bgi `h]h]cb `ci fg`fK`YXbYgXUm (.' \$`da `-').' \$`da Ł" -b`dYfgcb`cf`cb`]bY"	H67	B5

GW`cc``7cbhJWw`bZcfa U]h]cb

GW`cc``cZ<i a Ub]h]Yg`UbX`@Jb[i U[Yg

@cW]h]cb.`GW`cc``C Z]W`žA cfj Yb`6fck b`6i]X]b[ž`@Yj Y``&ž&),

CdYb]b[`<ci fg.`A cbXUm! : f]XUmž`- Ua `!) da

D\cbY.`ž`*%&`-' ,) `* , %

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9a U] : [\U`4 i bgk "YXi "Ui](#)

7 ci fgY'8YHJ)`g

7 fYX]hDc]bHg`*`

Gi a a UfmicZhY'7 ci fgY

H\]g`Wci fgY`k]`b]fcXi W`Zci bXU]cbU`WcbWdHg`cZhY`Yh]Mg`UbX`df]bW]d`Yg`cZdYfa UW`hi fYzU
fY[YbYfU]j`Y`gmg]Ya g`UddfcUW`Zci bXYX`]b`5i gfU`]U`UbX`[`cVU`]b`]a dUW`#`h]g`Wci fgYz`mci`k]`[U]b
WcbZXYbW`]b`dYfa UW`hi fY`fYg]c]fU]j`Y`ZUa`Yk`cf`_g`UbX`a`Yh]cXc`c[]Yg`]b`hY`Wcb]h]I`hg`cZYbj`]fcb`a`Yb]U`
a`UbU[Ya`Yb]z`YUXYfg\`]dZ`UbX`gi`g]U]b]UV`]]m`DYfa UW`hi fY`XYg][b`gYY`_g`hc`fYWcb]bYW]dYcd`Y`k]h
YWc`c[]W`d`fcW]ggYgZ`]b]h]f]fY`U]h]cbg\`]dgZ`UbX`]b]h]fYdYbXYbW`cZ`]] b[`h]b[g`UbX`hc`]b]h]f`fU]h`h]YgY
_bck`YX[Yg`hc`h]bX`hc`YWc]gmg]Ya`g`]b`k`Umg`h]U]h]W]fY`Zc`f`h]Y`9`U]f]h]Z`W]fY`Zc`f`dYcd`Yz`UbX`i`gY`U`Z]f`g`U]fY
cZfYgci`fW]g`DYfa UW`hi fY`U]g`Ub`]a`dc]f]U]b]h]fY`hc`d`Um]b`h]Y`fUd]X`h]fU]bg]h]cb`hc`nYfc`W]fVcb`cf`bYh
bY[U]h]j`Y`W]fVcb`h]fci`[\`fYg]c]fU]j`Y`UbX`fY[YbYfU]j`Y`YWc`c[]W`Z`gcW]U`z`UbX`W`hi fU`d`fU]h]W]g`H\Y
Wci fgY`k]`\U]Y`U`ZcW`g`cb`]a`d`Ya`Yb]b[`dYfa UW`hi fY`gc`i`h]cbgZ`XYa`cbg]fU]b[\`ck`h]Yc]fm`YU]fYX
Xi`f]b[`gYa`]b]U]fg`Udd`]Yg`hc`fYU`k`cfX`gmg]Ya`g`#`gi`W]W]ggZ`m`Wc`a`d`Y]h]b[`h]g`Wci fgYz`mci`k]`XYj`Y`cd
Udd`]YX`g`_`g`hc`XYg][b`UbX`]a`d`Ya`Yb]i`fV]U]b`#`gi`Vi`fV]U]b`dYfa UW`hi fY`gc`i`h]cbg`UbX`mci`k]`YU]fb`U
dYfa UW`hi fY`XYg][b`W]f]h]Z`W]h]h`"

7 ci fgY`@YUfb]b[`Ci hWca Yg

%`9i`d`U]b`YWc`c[]W`U`bX`gcW]U`Wc`a`dcbYb]hg`cZdYfa UW`hi fY
&`#`XYb]h]Zm`l`ck`dYfa UW`hi fY`Yh]Mg`UbX`df]bW]d`Yg`]b]Zcfa`XYg][b`Zc`f`fYWcb]bYW]b[\`i`a`U]bg`k`]h]#U]g
"bU]h`fY`"k` \]Y`d]fc]j]X]b[`U]Vi`bX]UbW`
'`8Ya`cbg]fU]h`h]Y`Z`bX]Ua`Yb]U]g`cZ]YWc]gmg]Ya`g]f]i`W]h`fY`UbX`Z`bW]h]cb
(`#`h]f`fU]h`h]Y`_Y]m]d]f]b]W]d`Yg`cZk`U]h]f]z`gc]Z`W]a`U]h]Z`h]fY]gZ`d`Ub]hg`UbX`gcW]U`dYfa UW`hi fY
)`5dd`m]dYfa UW`hi fY`XYg][b`a`Yh]cXc`c[m]h]c`Ybj`]fcb`a`Yb]h]UbX`gcW]Y]h]m]g]h]U]h]cbg`UbX`gY]h]b[g

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

HYUW]b[`G]fU]h[]Yg`Zc`f`#`GH`*`\$`\$`%`Yb[U[Y`h]k`c`Zc`fa`U]hg.

%`#`W]U]gg`gYa`]b]U]fg`]b`dYfa UW`hi fY`XYg][b`\`Y`d`mci`XYj`Y`cd`Ub`i`bXYf]g]h]UbX]b[`cZdYfa UW`hi fY`Yh]Mg
UbX`df]bW]d`Yg`?`Ym]h]Yc]fY]h]W]W`WcbW]d]hg`fY[U]fX]b[`k`U]h]f]z`gc]Z`W]a`U]h]Z`h]fY]gZ`d`Ub]hgZ`gY]XgZ`UbX`gcW]Y]m
U]a`YX`U]h]XYj`Y`cd]b[`_bck`YX[Y`cZ]b]U]h`fU`d`U]h]f]b]g`k`]]`b]Zcfa`XYg][b`?`Ym]h]Yc]fY]h]W]XYg][b`WcbW]d]hg
U]fY`Wci`dYX`k`]h`Y]Ua`d`Yg`cZdYfa UW`hi fY`]b`U]W]h]cb`"

&`F`YgYU]fW]!gYfj`]W]!`YU]fb]b[`Z]Y`X`g]h`Xm]gYa`]b]U]fg`]b]fcXi`W`mci`hc`j`U]f]ci`g`dYfa UW`hi fY`g]h]g`]b]W]i`X]b[
ga`U`i`fV]U]b`d]fcdY]f]YgZ`gi`Vi`fV]U]b`g]h]YgZ`UbX`Wc`a`a`i`b]m]i]UbX`i`fV]U]b`Z]U]fa`g`W]U]Y`g]h]Yg`Mci`k`]]`VY`Y]dY]W]W]X
hc`d`U]f]h]W]d`U]h]`]b`d`fU]h]W]U`Y]dYf]Yb]W`Ug`d`U]f]h]cZ]Ub`Yb]Yf[m]Y]i`W]X]Ub[Y`hc`Wc`a`dYbg]U]h`U]bX`W`g]hcX]U]bg`Zc`f
h]Y]f`h]a`Y`H\Y`Z]Y`X`Wc`a`dcbYb]h]g`XYg][bYX`hc`Udd`m]UbX`Vi`]X`i`dcb`h]Y`h]Yc]fm]UbX`WcbW]d]hg`Wc`j`YfYX
Xi`f]b[`h]Y`]b]W]U]gg`Wc`a`dcbYb]h]cZ]h]Y`Wci`fgY`"

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
G]h'UbU`mg]g'UbX`WcbWdh XYg][b`	' \$i	\$* # \$ + # & \$ & % % % \$ \$ ' DA	%ž' &ž'
8Yg][b'UbX`ja d`Ya YbHU]cb fYdcfh) \$i	\$' # \$, # & \$ & % % % \$ \$ ' DA	%ž' &ž' ž (
8Yg][b`dYgYbHU]cb`	& \$i	Bch5dd`]WUVY	%ž' &ž' ž (ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'G]h'UbU`mg]g'UbX`WcbWdhXYg][b

GhUfhXUH. Bch5dd`]WUVY

@Yb[h. %žžžž'k cfXg'fbch]bW X]b['UHUW a YbhgŁd'i g'WcbWdhXYg][b'Xfuk]b[

8YHU]`g.

Gh XYbhg'k]`WccgY'Ub'i fVUbžgi Vi fVUb'cf'fi fU`g]h' h.YmUFY'dUfh]W`Uf'm]bh'fYghX#WcbYWYX'hc'UbX
k]`Wta d`Yh'U'g]h'UbU`mg]g'UbX`WcbWdhXYg][b'f' d'hc' %žžžž'k cfXg'ž'XYg][bŁ'H\]g'g]h'k]`VY'h.Y
gi VYWicZhY'a U'cfXYg][b'UggYgga Ybh'

5ggYgga Ybh' . '8Yg][b'dfYgYbhU]cb

@Yb[h. 'B5

8YhU]g.

H\Y`ZbU`k YY_`cZhY`Wci fgY`k]`U`ck `ghi XYbhg`hc`dfYgYbhH\Y]f`XYg][b`hc`h\Y`WUgg" `H\Y`dfYgYbhU]cb
g\ci `X`hU`Y`Ufci bX`' \$`a`]bi`h`g"

⊖`UXX]h]cb`hc`a` Uf_g`žei` Ygh]cbg`UbX`ZYXVUW`k`]`VY`[`]j` Yb`Zc`ck`]b[`h\Y`dfYgYbhU]cb"

Hi`fb]h]b`gYh]b[.`H\]g`]g`bchiU`Hi`fb]h]b`Ugg][`ba`Ybh

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

Mci f_YmfYUX]b[g`UbX`chYf`a UHf]U`g`k]`VY`Uj U]UV`Y`j]U`mci f`A ccX`Y`g]H"

F YWca a YbXYX`F Ygci fWg

Mci `UfY`YI dYWYX`hc`a U_Y`[ccX`i gY`cZ`hY`fYUX]b[g`dfcj]XYX`Zc`f`hY`Wci fgYž`UbX`hc`fYUX`VYmcbX`hcgY

<YdVi fb`Gdf]b[gžJ]W`.A Y``cXcfU`Di V`g\]b[ž&\$\$%

[H\Y`hfUbg\]h\]cb`. `hc`U`gi`gfU\]bUV`Y`UbX`↑ghk`cfX](#)

: ``9``HfU]bYf

7 UbhYfVi fnžB "G"K "``9bj]fcVcc_žW&\$\$%

7ci fgY`9j U`i Uh]cb`UbX`8Yj Y`cda Ybh

H\]g`]g`U`bYk`W`i fgYž`WYUHYX`Ug`dUfhcZH`Y`Uf[Yf`fyj]g]cb`cZH`Y`A UghYf`cZ9bj]fcba YbhU`A UbU[Ya Ybh
dfc[fUa`Ui bWYX`]b`&\$\$%`DUghYI dYf]YbW`UbX`gh XYbhZYXVUW`cb`hY`I B GK`cb`]bY`gi fj Ymhc`
a m9I dYf]YbW`]bX]WUHYg`hY`ja`dcfU`bVW`cZgh XYbhg`Xc]b[`WcgY`UbX`WfYZ`fYUX]b[`cZH`Y`k YY`m
Ugg][bYX`fYUX]b[g`VY`Zc`fY`U`hY`bX]b[`gYa`]bUfgž`Yb[U[YX`gh XYbh`dUfh]W`dU]cb`]b`WUgg`X]gW`gg]cbg
UbX`Z`Y`X`hf]dgž`UbX`cZgh XYbh]bXYdYbXYbh`fYgYUfVX`"

Gi Va]gg]cb'cZ5ggYgga YbhiHUg_g

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

Ẓmci YbWci bHyf'U'dfcV'Ya 'k \Yb'UHyYa dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiH'fci [\ 'Hi fb]h]bž'd'YUgY
Hy'Yd\cbY'9I HyfbU'Gi ddcfhcb'- ' ,) " ' ' %cf'Ya U] 'HyYa 'cb'YI HyfbU'Hy'hygi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY', .\$\$Ua '—%\$. \$\$da 'cb'k YY_XUmg'UbX'-. .\$\$Ua '—') .\$\$da 'cb'k YY_YbXg'f1 *) 'XUmg'U'mYUfL" Ẓmci
UfY'i bUV'Y'hc'gi Va]hmc i f'Ugg][ba YbhiXi Y'hc'U'Zi 'hk]h'Hi fb]h]b'mci 'a UmiUdd'mZcf'Ub'YI Hybg]cbž'Vi hmc i
a i ghfYhU]b'mci f'h]W'Yhbi a VYf'Z'ca '9I HyfbU'Gi ddcfhfU'cb['k]h'Ubmich'Yf'fY'Yj UbhXcW a Yb'gk'hc
]bWi XY'Ug'Yj]XYbW'hc'gi ddcfhmc i f'YI Hybg]cb'Udd'jW]h]cb" Ẓmci 'Ya U]'9I HyfbU'Gi ddcfhmc i 'k]`

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D`U[]Uf]ga `]g`i`g]b[`h`Y`k`c`f`X`g`c`f`]X`Y`U`g`c`Z`c`h`Y`f`g`i`U`b`X`d`f`Y`g`Y`b`h]b[`h`Y`a` `U`g`m`c`i`f`c`k`b`" `#`W`U`b`h`U`_`Y`a` `U`b`m`
Z`c`f`a`g`Z`Z`c`a` `X`Y`]V`Y`f`U`H`Y` `W`X`Y`U`H]b[`h`c`U`W`W`Y`X`Y`b`h`U`m`i`W`c`d`m]b[`Z`c`a` `U`g`c`i`f`W`k`]h`c`i`h`U`W`b`c`k` `Y`X[`Y`a` `Y`b`h`

- i bXYfghUbx'mci f'f][\hg'UbX'fYgdcbg]V]h]Yg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wc'dmf][\hž' BGK 'Gh XYbh7cXY'cZ7cbXi W'Ubx'5Ww'dhUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wm
- VY'Uk UfY'cZh'Y'ghUbxUfXg'cZVY\Uj]ci f'YI dYW'X'cZYj Yfmcby']b'h'Y'I BGK 'Wca a i b]m
- 'cWJh'gYfj]Wg'UbX'j]bZcfa Uh'cb'UVci hl BGK 'UbX'I BGK '@VfUfm

Gca Y'cZh'YgY'UfYUg'k]''VY'ZJa]]Uf'hc'mci ž'ch'Yfg'k]''VY'byk "'; U]b]b['U'gc'X'i bXYfghUbx]b['cZU''h'Y fY'UH'X'UgdYW'g'cZ9@G9'k]''\Y'd'mci 'a U_Y'h'Y'a cghcZmci f'gh X]Yg'Uhl BGK ""

[\hd. #gj V'YWf i \]XYg" \]VfUfm'i bgk "YXi "Ui #' \]gY#JVci h' \]gY](#)

5 WUXYa]WbZcfa Uh]cb

: cfYggYbh]U`gh XYbh]bZcfa Uh]cb fY`Uh]b[`tc.

- fYei Yghg`Zcf`YI H`bg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
- I BGK `<YU`h`UbX`GUZY`midc`]WYg/
- YI Ua]bUh]cb`dfcW`Xi fYg/
- gdYW]U`W`bg]XYfUh]cb`]b`hY`Yj YbhicZ]`bYgg`cf`a]gUXj Ybh fY/
- gh XYbhYei]mUbX`X]gUV`]m/
- UbX`c`hYf`YggYbh]U`UWUXYa]W]bZcfa Uh]cbz`gYY

[\ftdg.#k k k "Uftg"i bgk "YXi "Ui #W ffYbh\]gh XYbh\]UWUXYa \]W\]bZcfa Uh\]cb#dfchW`g`\[i \]XY`\]bYg#](#)

⇒ U[Y`7 fYX]h

6mi>UWèi]`6Yg[fcj Y`"Gi bf]gY`]b`K c`cb[cb["

7F ⇒ CG

7F ⇒ CG`Dfcj]XYf`7cXY.`\$\$\$- ;

5W_bck `YX[Ya YbhicZ7ci bhfm

K Y`UW_bck `YX[Y`hY`6YXY[U`dYcd`Y`k `c`UfY`hY`fUX]h]cbU`W`ghcX]Ubg`cZ`hY`UbXg`cb`k `]W`I BGK
? Ybg]b[hcb`W]a di g`]g`cW]hYX"