



CVEN3203

5dd`]YX'; YchYWXb]Wg`UbX`9b[]bYYf]b[`; Yc`c[m

HYfa `CbY` `##`&\$&%

GWcc`cZ7]j]`UbX`9b[]fcba YbU`9b[]bYYf]b[`##` I BGK ``9b[]bYYf]b[



7ci fgY`Cj Yfj]Yk

GHJZZ7cbHJW`8YHU`g

7cbj Ybcfg

B Ua Y	9a U]	5j U]`UV]]m	@cWU]cb	D\cbY
8f`?i fh8ci [`Ug	_"Xci [`Ug4 i bkg "YXi "Ui	H67 `]b`WUgg	79`) \$*	-',) `) \$(*

@YW`i fYfg

B Ua Y	9a U]	5j U]`UV]]m	@cWU]cb	D\cbY
8f`6UVU_	V"glU\VcXU[\4 i bkg "YXi "Ui	H67 `]b`WUgg	79`) \$+	
G\U\VcXU[_`Ub				

GW`cc``7cbHJW`bZcfa Uh]cb

[9b\[\]bYYf\]b\[`Gh XYbhGi ddcfhGYfj \]Wg](#) :-`H\Y`Bi WYi g`!`Ybfc`a Yb]z`dfc[fYgg]cb`WXYW_gz`WUg\`fYei Yghz
W`i fgY`]ggi Yg`cf`dfc[fUa !fY`UH`X`ei Yf]Yg`

[9b\[\]bYYf\]b\[`bXi gf\]U`HfU\]b\]b\[`:-`bXi gf\]U`HfU\]b\]b\[`ei Ygh\]cbg`](#)

[I_BGK `Gh Xm5VfcUX](#) :-`gh XmUVfcUX`gh XYbhYbei]f]Yg`fZc`f]bVci bX`gh XYb]gk`

[I_BGK `9I WU\]b\]Y](#) :-`gh XYbhYI WU]b[Y`Ybei]f]Yg`fZc`f]bVci bX`gh XYb]gk`

[I_BGK `:i h fY`Gh XYb\]g](#) :-`dchYbh]U`gh XYbhYbei]f]Yg`Y["`UXa]gg]cbgz`ZYg`z`dfc[fUa g`z`WYX]h]fUbgZYf`

D\cbY`

fZ`*%&E`-' ,) ` ,) \$\$:-`Bi WYi g`Gh XYbh<i V`

fZ`*%&E`-' ,) `+*% :-`9b[]bYYf]b[`bXi gf]U`HfU]b]b[`

fZ`*%&E`-' ,) ` "%+- :-`I_BGK `Gh Xm5VfcUX`UbX`I_BGK `9I WU]b[Y`fZc`f]bVci bX`gh XYb]gk`

7 ci fgY'8YHJ]`g

7 fYX]hDc]bHg '*`

Gi a a UfmicZ`hY'7 ci fgY

H\]g`Wci fgY`Wcj Yfg`hk c`ja dcfHUbhUFYUg`cZ[YchVWb]WU`Yb[]bYYf]b[. [Yc`c[mUbX`Udd`]YX`[YchVWb]Wg`
H\Y`[Yc`c[mgYW]cb`Wcj Yfg`hY`YUfH`UbX`]Hg`Zcfa Uhc`bZ`fc`W`hmdYg/hY]f`VY\Uj]ci f`UbX`dfcdYfH]Yg`UbX
gi Vgi fZUW`a`Udd]b["H\Y`hcd]Wg`]b`hY`Udd`]YX`[YchVWb]Wg`]bWi XY. hYcfYH]WU`UbX`dfYgi a`dhj`Y`VYUf]b[
WUdUW]hmcZg`U`ck`Zci bXUhc`bgZ`U`ck UV`Y`gYHhYa YbhUbX`Zci bXUhc`bg`cb`gUbX`UbX`WU`mZ`UH`FU`YUfH
dfYggi fYgZ`fYH]b]b[`k`U`XYg][bZ`g]b[`Y`UI`]U`mUbX`UH`FU`m`c`UXYX`d`]Yg`UbX`d`]Y`[fci dgZ`YI`WUj`Uhc`b`UbX
XYk`UH`f]b["

7 ci fgY'5]a g

h]g`Ub`U]a`c`Z`h]g`Wci fgY`h`Y`d`XYj`Y`cd`h`Y`Zc`ck`]b[[fUXi`UH`U`Hf]Vi`hYg`Hc`[]j`Y

gh`XYbHg`U`gc`]X`[fUgd`c`Z`h`Y`h`YcfmUbX`dfUW]W`cZ[YchVWb]WU`Yb[]bYYf]b[z`UbX`h`c`VY`ZJa`]]Uf`k`]h`h`Y
VUgYg`c`Z`fYgYUfW`h`c`Z`f`h`Y`f`XYj`Y`cd`]Hg`h`V`bc`c`[m`b`UXX]h`cbZ`[fUXi`UH`g`g`lci`X`VY`UV`Y`h`c`Udd`mi`h`Ycfm
h`
dfUW]W`]b`ZJa`]]Uf`UbX`i`bZJa`]]Uf`g]h`Uhc`bg/

Hc`gh]a`i`UH`h`Y`]b`h`Y`W`i`U`W`f]cg]hmcZ`gh`XYbHg`gc`h`Uh`h`Y`mk`]`VY`a`chj`UH`X`h`c`i`bXY`fU`_Y`]bXY`dY`bXY`bh
fYZYW]j`Y`YUfb]b[`Ug`U`]Z`cb[`g_]`/

Hc`h`UW`gh`XYbHg`ck`h`c`XY`Z`b`Y`Z`Ub`U`mgY`UbX`gc`j`Y`dfc`V`Ya`g`WYUf`m`UbX`c`[]WU`m`UbX`]b`Xc]b[`gc`VY
UV`Y`h`c`Z`b`X`Z`Yj`U`i`UH`Z`]b`h`f`d`f`Y`h`UbX`W`c`UH`]b`Zcfa`Uhc`b/

Hc`XYj`Y`cd`]bXY`dY`bXY`bhW]h]WU`h`ci`[`h`k`]h]b`gh`XYbHg`gc`h`Uh`k`Y`b`b`Y`W`ggUf`m`h`Y`mk`]`VY`UV`Y`h`c`
W`U`Y`b[`Y`W`fY`bh`_bck`YX`[`Y`UbX`h]b`_]b[/

Hc`Yb`Wci`fU`[`Y`dfc`UW]j`Y`VY`Uj`]ci`f`]b`gh`XYbHg`UbX`h`c`[]j`Y`h`Ya`h`Y`Uggc`W]UH`X`Y`b`f`Y`d`f`Y`b`Yi`f]U`g_]`g`
bY`W`ggUf`m/

Hc`dfca`ch`U`fYgd`Y`W`h`k`]h]b`gh`XYbHg`Zc`f]bX]j`]Xi`U`i`a`Ub`f][`h`g`UbX`X][b]mZ`dUf]h]W`Uf`mk`Y`b`]h`f`Y`UH`g`
h`c`a`Ya`VY`fg`c`Z`h`Y`di`V`]Wcf`c`h`Y`f`d`Y`cd`Y`k`c`k`]`VY`UZZ`W]X`V`mi`h`Y`dfc`Y`W`g`h`Uh`h`Y`mi`XYg][b`UbX
YI`YW`h`/

Hc`Zc`gh`f`Y`ZY`W]j`Y`g`Y`Za`UbU`[`Ya`Y`bhg_]`g/

Hc`bi`fhi`fY`h`Y`g_]`g`f`Yei`]fYX`Zc`f`Y`ZY`W]j`Y`Y`UX`Y`fg`]d`]bWi`X]b[`Ub`UV`]m]h`c`a`UbU`[`Y`UbX`XY`]j`Y`f`dfc`Y`W`gZ`
Ub`i`bXY`fgh`UbX]b[`c`Z`h`Y`gc`W]U`X`mb`Ua`]Wg`cZ`[fci`d`d`Y`f`Zcfa`UbW`Z`U`f`Y`d`Y`f`c`]fY`c`Z`dfc`W`ggYg`Zc`f`h`Y`
Y`ZY`W]j`Y`a`UbU`[`Ya`Y`bh`c`Z`[fci`dgZ`UbX`h`Y`UV`]m]h`c`j`U`i`Y`X]j`Y`fgY`VUW_]fci`bXg`UbX`cd]b]cbg`UbX`Z`bW]cb
Y`ZY`W]j`Y`m]b`a`i`h]X]gW]d`]bUf`mi`h`Ua`g/UbX

Hc`]a`dUf]h`gci`bX`h`k`cf_]b[`g_]`g"

7 ci fgY`@YUfb]b[`Ci`h`c`a`Yg

5ZY`f`gi`W`W`ggZ`m`W`c`a`d`Y`h]b[`h]g`W`ci`fgY`Z`m`ci`g`l`ci`X`VY`UV`Y`h`c`.

5XX]h]cbU`7ci fgY`#Zcfa Uh]cb

; YchVWb]WU`9b[]bYYf]b[]g`hY`ghi XmcZhY`VY\Uj]ci f`cZgc]žfcW`UbX`[fci bXk UHf`i bXYf`Yb[]bYYfYX Ybj]fcb`a Ybhg`"A cghYb[]bYYf]b[]gfi Wfi fYg`k]`"jYj]hUV`m\Uj Y`gca Y`gcfhcZ]bhYfUW]cb`k]h`hY`[fci bX gi fZUW`"; YchVWb]WU`9b[]bYYfg`UHY`a dhrc`XYgW]VY`UbX`#c`f`a cXY`h`g]bhYfUW]cb`h`c`UWV`Yj Y`U`gUZ`UbX YZ]VYbhXYg][b"

Gc`Zfž`mci `Uj Y`ghi X]YX`7J`9B`' &\$&`Gc]`A YWVUb]Mg`"H\YfYz`cYž`Vmbck`mci`g`lci`X`i bXYfghUbX`h`Y VUg]WYb[]bYYf]b[]WUgg]Z]W]h]cb`cZgc]/\ck`gc]`VY\Uj Yg`i bXYf]a dcgYX`ghfYggYg`UbX`ghU]bg/UbX`\ck [fci bXk UHf`Zck g`h`fci [\`gc]`UbX`]hg`YZYVh]cb`Yb[]bYYfYX`ghfi Wfi fYg`"H\YfY`UfY`h`c`a`U]b`UfYUg`h`Uh mci `Uj Y`bchVčj YfYX`h`Uhk]`VY`UXXfYggYX`]b`h`g`Vči fgY` fBŁ<ck`h`c`fY`UH`h`Y`fYU`!k`cfX`[Yc`c[]WU`Ybj]fcb`a Ybhrc`mci`f`_bck`YX[Y`cZ`WUgg]fcca`'gc]/UbX fBŁ<ck`h`c`Vč`a`V]bY`mci`f`W`ffYbh`_bck`YX[Y`UbX`DUfhfBŁ`h`c`dYfZcfa`U`; YchVWb]WU`9b[]bYYf]b[]XYg][b"

DUfhfBŁ`9b[]bYYf]b[]; Yc`c[m

5; YchVWb]WU`9b[]bYYf`a`i`gh`Uj`Y`Ub`i`bXYfghUbX]b[]bchcb`mcZYb[]bYYf]b[]df]bW]d`Yg`Vi`hU`gc`cZ [Yc`c[mUbX`h`Y`]b`YfYbhj`Uf]UV]`]mUbX`VX`U`Yb[Yg`]h`Ug`Zc`f`Yb[]bYYf]b[]`"H\`g`Vč`i`fgY`k`]"`HY`UW`mci`U` VUg]Wi`bXYfghUbX]b[]cZ[Yc`c[m]bWi`X]b[]\ck`[YchVWb]WU`a`UHf]U`g`UfY`Zc`fa`YXž`k`h`Uh`h`Y`f` VUfUWV]f]gh]Vg`UfY`UbX`\ck`h`c`XYgW]VY`h`Ya`i`g]b[]Yb[]bYYf]b[]UbX`[Yc`c[]WU`h`Y`fa`g`"h`k`]"`UH`Ya`dhrc []j`Y`mci`g`ca`Y`i`bXYfghUbX]b[]cZ`h`Y`VX`U`Yb[Yg`U[Yc`c[]WU`Ybj]fcb`a`Yb`h`a`Um`Uj`Y`Zc`f`U`dUfh]W`Uf` Yb[]bYYf]b[]dfc`Y`W`i`5`h`h`Y`Y`b`X`c`Z`h`Y`Vč`i`fgY`mci`g`lci`X`ž`Zc`f`Ubmg]h`Y`UbX`Yb[]bYYf]b[]dfc`Y`W`ž`VY`UV`Y`h`c` Y]h`Y`f`fUŁ`XYj`Y`cd`U`dfY`]a`]bUfmi[YchVWb]WU`a`cXY`Zc`f`h`Y`g]h`h`Uh`W`b`VY`i`gYX`Zc`f`XYg][b`c`f`fVŁ`VY` UV`Y`h`c`X]gW`gg`a`cfY`Vč`a`d`YI`[Yc`c[mk]h`9b[]bYYf]b[]; Yc`c[]gh`h`c`U[U]b`Vč`a`Y`i`d`k`]h`U`gi`]hUV`Y [YchVWb]WU`a`cXY`"

DUfhfBŁ`5dd`]YX`; YchVWb]Wg

H\]g`dUfhcZ`h`Y`Vč`i`fgY`fYdfYgYbhg`h`Y`Z]bU`ghU[Y`cZU; YchVWb]WU`dfc`Y`W`i`h`k`]"`f`Yei`]fY`mci`h`c`gh`Xm` h`Y`Vč`bj`Yb]h]cb`U`a`Y`h`c`Xg`Zc`f`h`Y`XYg][b`UbX`UbU`mg]g`cZVč`a`a`cb[YchVWb]WU`Vč`bgfi`W]cbg]b`Wi`X]b[g`U`ck`UbX`XYd`fd]YŁ`Zci`bXU]h]cbg`UbX`fYU]b]b[]k`U`g`":`cf`a`UbmcZ`mci`ž`h`]g`k`]"`VY`mci`f`Z]bU`Vč`i`fgY`]b [YchVWb]WU`9b[]bYYf]b[]UbX`k`Y`cdY`mci`[U]b`Ub`UddfYV]U]h]cb`cZgca`Y`cZ`h`Y`Vč`a`d`YI`]h]Yg`cZ [YchVWb]WU`9b[]bYYf]b[]"

H\cgYž`bc`Xci`Vh`UHfUW]j`Y`UbX`\[\`m]b`h`]"[Ybhgh`XYbhgž`cc`_]b[]Zc`f`U`XYa`UbX]b[]UbX`VX`U`Yb[]b[]m`h` j`YfmgU]h]gZ]b[]WUfYf`k`]"`cVj`]ci`g`mk`]g`h`c`di`fgi`Y; YchVWb]WU`9b[]bYYf]b[]Z`f`h`Y`f`k`Y`\Uj`Y`U`bi`a`VYf` cZ; YchVWb]WU`Y`Y`W]j`Yg`]b`Z]bU`m`Y`Uf`h`Uhk`]"`YI`h`Y`b`X`mci`f`_bck`YX[Y`Yj`Yb`Z`f`h`Y`f`]b`h`c`UfYUg`]"`Y` UXj`UbW`X`gc]`a`YWVUb]Mg`/Udd`]W]h]cbg`cZVč`a`di`h`f`g]a`i`U]h]cb`h`VW`b]ei`Yg`h`c`[YchVWb]WU`Yb[]bYYf]b[]dfc`V`Ya`g/[fci`bX`]a`dfcj`Ya`YbhUbX`h`Y`XYg][b`cZ`dUj`Ya`Ybhgž`h`bbY`g`UbX`g`cdYg`"7`ca`Y`UbX`hU`_`h`c`i`g`]Z` mci`k`Ubhrc`_bck`a`cfY`"

5g`U[fUXi`UH`; YchVWb]WU`9b[]bYYfž`mci`a`][\`hYi`dYVh`h`c`k`cf`_cb`dfc`Y`W`g`Ug`X]j`Yfg]Z]YX`Ug`Vi`]X]b[UbX`Vf]X[Y`Zci`bXU]h]cb`XYg][b`XUa`XYg][b`UbX`Vč`bgfi`W]cb/fcUX`dUj`Ya`YbhXYg][b`g`cdY`ghUV]`]m` UbU`mg]g`UbX`ghUV]`]gU]h]cb/UbX`h`bbY`UbX`a`]bY`XYg][b`"A`cgh]m]WU`m`mci`k`]"`Xc`U`dUfh]h`a`Y`Vč`i`fgY`k`cf`_`a`Ugh`fg`k`]h`i`g`UZ]f`k`cf`_]b[]Zc`f`U`m`Y`Uf`cf`h`c`h`c`gi`dd`Ya`Ybhrc`mci`f`_bck`YX[Y`fU`bX`dfcj`]XY`Ub`YI`W`gY` Zc`f`mci`f`][\`VX`Uf[Y]ci`h`U`h`Ł`"Gca`Y`cZ`mci`a`UmYj`Yb`k`]g`h`c`Xc`U`D`8`f]Z]bhYfYgh`X`Vč`a`Y`UbX`hU`_`k`]h` i`g`Ubmi]h`a`Yž`k`Y`\Uj`Y`c`hg`cZdfc`Y`W`g`VX`c`Ufg`]dg`Uj`U]UV`YŁ`"

5ggYgga Ybh

a Uf_g"G][b]Z\WJbhdUfhU`Wta d`Yh]cbž`U`Za Uf_g"

A Uf_]b[`k]`cVW f`Xi f]b[`YUW`k cf_g\cd"

5ggYgga Ybh&. ; Yc`c[mE i]n

GHUfhXUHY. `&- #`\$` #&\$&%\$*.\$\$.DA

@Yb[h. `%\ci f%) `a]bg

8YHJ]`g.

; Yc`c[mei]n`k]`VY`WcgYX`Vcc_`UbX`k]`HYghi bXYfgHUbX]b[`cZH\Y`[Yc`c[mWta dcbYbhcZH\Y`Wti fgY"

5XX]h]cbU`XYHJ]`g.

F Y`YUgY`UbX`gi Va]gg]cb`cZH\Y`ei]n`k]`VY`j]U`A ccX`Y`"A Uf_g`UFY`YI dYW`YX`hc`VY`fYhi fbYX`k]h]b`" k YY_g`cZgi Va]gg]cb"

F Ygci fWg

DfYgW]VYX F Ygci fWg

gUa d`b[`cZg]fYg`k]h`dchYbhU`mWcbHJa]bUfX`gc]`!`Bcb!j c`Ufj`Y`UbX`gYa]!j c`Ufj`Y`Wta dci bXg

]D\cbY`fUbX`chYf`U`a cghUg`ga Ufhd\cbYgk

H\YfY`UfY`bi a Yfci g`Uddg`VY]b[`XYj Y`cdYX`Zcfj Uf]ci g`ga Ufhd\cbYg"5hH`Y`a ca Ybfz`hYfY`UfY`cb`mU
\UbXZ `XYj Y`cdYX`Zcf[Yc`c[mi`hU`hUfY`ZfY`"A UbmicZ`hY`cbYg`Zcf)

Gi Va]gg]cb 'cZ'5ggYgga YbhiHUg_g

D`YUgY`fYZf`h`h`Y`A ccX`Y`dU[`Y`cZ`h`Y`W`i fgY`Z`f`Z` f`h`Y`f`[`i]XUbW`'cb`UggYgga YbhiGi Va]gg]cb"

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

6Yk UFY`5b`Ugg][ba YbhUUh]bWm XYg`d`U[]Uf]gYX`a UHf]U`k]`fYW]j Y`U`\$i : U]žUbX`gh XYbfg`k \c
d`U[]Uf]gY`a UmZU]`hY`Vci fgY`Gh XYbfg`k \c`d`U[]Uf]gY`UfY`U`gc`]UV`Y`hc`X]gW]d`]bUfmiUW]cbž]bWm X]b[
YI Wm g]cb`Zca`Ybfc`a Ybh`

D`U[]Uf]ga`]g`hY`i gY`cZUbchYf`dYfgcb`g`k cf`_`cf`]XYUg`Ug`]ZhYmk YfY`mci f`ck`b`K \Yb`]h]g`bYW]ggUfmcf
XYg]fUV`Y`hc`i gY`chYf`dYcd`Y`g`a UHf]U`mci`g`lci`X`UXYeI UH`mUW]bck`YX[Y`k \cgY`k cfXg`cf`]XYUg`hYm
UfY`UbX`k \YfY`mci`Zci`bX`hYa`f[]j]b[`hY`Vca`d`YH`fYZYfYbW`XYH]`gž]bWm X]b[`dU[Y`bi`a`VYffg]H`H`Y
@YUfb]b[`7YbHfY`dfcj]XYg`Z`fH`Yf`]bZcfa`U]cb`cb`k \UhVcbgh]h`hYg`D`U[]Uf]ga`Uh`

[\hdg. #gh XYbhi bgk "YXi "Ui #d`U\[\]Uf\]ga`](#)

5ddYbX]l . '9b[]bYYfg'5i ghfU`U'f95E'DfcZYgg]cbU`'9b[]bYYf'7ca dYhYbWm
 GHUbXUfX

Dfc[fUa ' bHYbXYX '@YUfb]b['Ci hWta Yg	
? bck `YX[Y'UbX'g_]`VUgY	
D9%"%7 ca dfY\Ybg]j YzhYcfmVUgYX'i bXYfghUbX]b['cZhY'i bXYfd]bb]b['bUh fU`UbX d\mg]WU`gWYbWg'UbX'hY'Yb[]bYYf]b['Z bXUa YbHU'g'Udd`]WUV'Y'hc'hY'Yb[]bYYf]b['X]gWd`]bY	
D9%"&'7 cbWdh U`i bXYfghUbX]b['cZhY'a UhYa Uh]Wg'z'bi a Yf]WU`UbU'mg]g'ghUhgh]Wg'z'UbX Wta di h'f'UbX']bZ'fa Uh]cb'gWYbWg'k \]W' i bXYfd]b'hY'Yb[]bYYf]b['X]gWd`]bY	
D9%" " ' b!XYdh'i bXYfghUbX]b['cZgdYWU`]ghVcX]Yg'cZ_bck `YX[Y'k]h]b'hY'Yb[]bYYf]b[X]gWd`]bY	
D9%"('8]gWfba YbhcZ_bck `YX[Y'XYj Y`cda YbhUbX'fYgYUfW'X]fYW]cbg'k]h]b'hY Yb[]bYYf]b['X]gWd`]bY	
D9%") ? bck `YX[Y'cZYb[]bYYf]b['XYg][b'dfUW]W'UbX'Wc'bhYi h U`ZUW'c'fg]a dUW]b['hY Yb[]bYYf]b['X]gWd`]bY	
D9%"* 'i bXYfghUbX]b['cZhY'gWc'dYz'df]bWd`Yg'z'bcfa g'z'UW'W'ci bHUV`]h]Yg'UbX'Vci bXg'cZ gi ghU]bUV'Y'Yb[]bYYf]b['dfUW]W']b'hY'gdYW]ZWX]gWd`]bY	
9b[]bYYf]b['Udd`]WU]h]cb'UV`]jm	
D9%"%5dd`]WU]h]cb'cZYghUV`]g\YX'Yb[]bYYf]b['a Yh'cXg'hc'Wta d'YI'Yb[]bYYf]b['dfcV'Ya gc`]b[
D9%"&'&: 'i YbhUdd`]WU]h]cb'cZYb[]bYYf]b['h'W]b]ei Yg'z'hc'c'g'UbX'fYgci fW'g	
D9%" " '5dd`]WU]h]cb'cZgmg'hYa Uh]WYb[]bYYf]b['gmb'hYg]g'UbX'XYg][b'dfcW'ggYg	
D9%"('5dd`]WU]h]cb'cZgmg'hYa Uh]WUdd'fcUW'Yg'hc'hY'Wc'bxI W'UbX'a UbU[Ya YbhcZYb[]bYYf]b[dfc'YW'g	
DfcZYgg]cbU`UbX'dYfgcbU`Uhf]Vi hYg	
D9' "%9h]WU`Wc'bxI W'UbX'dfcZYgg]cbU`UW'W'ci bHUV`]jm	