



LING5001

GYWcbX'@Ub[i U[Y'5Vei]g]h]cb

HYfa `Cby`#`&\$%-

GWcc`cZ< i a Ub]h]Yg'UbX'@Ub[i U[Yg`#` I BGK `5ftg'UbX'GcWU`GWYbWg

7 ci fgY`Cj Yfj]Yk

`GHUZZ7cbhUWhi8YHJ]`g`

`7cbj Ybcfg`

B Ua Y	9a U]`	5j U]`UV]`]m	@cWWhcb	D\cbY
>Ua Yg`@YY	^Ua Yg`"YY4 i bgk "YXi "Ui	K YXbYgXUm%%\$\$ Ua `!`%&.\$\$.da	&&*`A cfj Yb 6fck b`6i]X]b[- ' ,) !%* , %

GW\cc``7cbhUWhi`bZcfa Uh]cb

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

@cWWhcb. `GW\cc``C Z]WZ`A cfj Yb`6fck b`6i]X]b[ž`@Yj Y``&ž&),

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

D\cbY. `Ž`*%&`- ' ,) `!%* , %

: U! . `Ž`*%&`- ' ,) `; , +\$)

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

7ci fgY'8YHJ]`g

7fYX]hDc]bhtg`*`

Gi a a UfmicZ\hY'7ci fgY

Gi VYWh5fYU.`@]b[i]gh]Vg

H\]g`Wci fgY`ZcW`gYg`cb`UWci]g]hcb`hUhU_Yg`d`UW`]b`]bghfi`WYX`gYH]b[g`UbX`Wcbg]XYfg`Vch`W`X`UbX`
UXi`hgYWcbX`Ub[i U[Y`UWci]g]hcb`"Mci`k`]`YI`d`cfY`fYgYUfW`UbX`Udd`m`h`Ycf]Yg`cZgYWcbX`Ub[i U[Y`
UWci]g]hcb`hc`]bghfi`WYX`WcbhYI`hg`"Mci`k`]`YI`d`cfY`U`j`Uf]YmicZ\hYcf]Yg`UbX`a`Ubmj`Uf]UV`Yg`gi`W`Ug`
]bX]j`Xi`U`X]ZYfYbW`g`z`h`Uh]bZi`YbVW`]bghfi`WYX`gYWcbX`Ub[i U[Y`UWci]g]hcb`Vch`Ug`U`dfcW`gg`UbX`Ug`U`
dfcXi`W`Mci`k`]`YI`Ua`]bY`bchcb`m`h`Y`gYWcbX`Ub[i U[Y`UWci]g]hcb`cZ9b[]g\`Vi`hcZchYf`Ub[i U[Y`Ug`
k`Y`"Mci`k`]`Wca`Y`hc`i`bXYfgU`bX`h`Y`ZJW`fcg`h`Uh]bZi`YbVW`h`Y`fci`h`UbX`fU`h`cZUWci]g]hcb`Ug`k`Y`"Ug`
h`cgY`h`UhUZZYW`U`"YUfbYffg`i`h`a`U`h`U`h]ba`Yb`h`

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

%`9I`d`U]b`h`Y`j`Uf]ci`g`dfcW`ggYg`UbX`dfcXi`W`g`cZ]bghfi`WYX`gYWcbX`Ub[i U[Y`UWci]g]hcb`
&`A`U`_`Y`i`gY`cZUddfcdf]U`h`h`fa`]bc`c[m`hc`X]gW`gg`_`Ym`VcbW`d`hg`]b`]bghfi`WYX`gYWcbX`Ub[i U[Y`
UWci]g]hcb`
'`" `b`h`f`d`f`Y`h`f`Y`g`Y`U`f`W`Z`]b`X`]b[g`UbX`Udd`m`h`Ya`hc`]bghfi`W`]cbU`WcbhYI`hg`
(`" `5ggYgg`h`Y`a`Yf]hg`cZj`Uf]ci`g`UddfcUW`Yg`hc`fYgYUfW`]b[]bghfi`WYX`gYWcbX`Ub[i U[Y`UWci]g]hcb`"

HYUW]b[`GhfU`h[]Yg`

G`Y`W`c`b`X`"U`b[i U[Y`U`W`c`i`]g]h`c`b`]g`U`_`Y`m`U`f`Y`U`"c`Z`5`d`d`]Y`X`@]b[i]gh]Vg`"H\]g`Wci fgY`ZcW`gYg`cb`UWci]g]hcb`h`Uh`
h`U`_`Y`g`d`U`W`"b`]bghfi`WYX`gYH]b[g`UbX`Wcbg]XYfg`Vch`W`X`UbX`UXi`hgYWcbX`Ub[i U[Y`UWci]g]hcb`"

H\Y`Wci fgY`Zcfa`Uh]g`h`Uh`cZU`gYa`]bUf`]b`k`\]W`d`f`Y`d`U`f`U`h`c`b`d`f`c`f`hc`U`h`Y`b`X]b[`WUgg`]g`YggYb]U`hc`
a`Y`Ub]b[Z`"m`X]gW`gg]b[`Wci fgY`WcbhYb`h`G`h`X`Y`b`hg`U`f`Y`U`gg][`b`Y`X`k`Y`Y`_`m`f`Y`U`X]b[g`h`Uh`Zc`fa`h`Y`V`U`g]g`c`Z`
W`U`gg`X]gW`gg]cb`"H\Y`h`Y`g`h`g`Y`f`j`Y`hc`\`U`j`Y`g`h`X`Y`b`hg`g`m`b`h`Y`g]n`Y`U`b`X`Y`j`U`i`U`h`Wci fgY`WcbhYb`h`H\Y`
d`f`Y`g`Y`b`h`U`h`c`b`g]a`i`U`h`Y`g`U`d`f`c`Z`Y`gg]cbU`WcbZ`Y`f`b`W`d`f`Y`g`Y`b`h`U`h`c`b`"H\Y`Z]bU`YggUm`U`ck`g`g`h`i`X`Y`b`hg`hc`
YI`d`cfY`Ub]ggi`Y`c`Z`d`Y`fg`cbU`]b`h`Y`f`Y`g`h`"

5 hYbXUbW F Yei]fYa Ybhg

5 hYbXUbW cZgYa]bUfg]g'a UbXUhcfm]b'h]g'Wci fgY" l bYI W gYX UVgYbW Fca 'a cfY h'Ub'&\$i 'cZ gYa]bUfg'k]'fYgi 'h]b'hY'Uk UfX'U'ZU]'[fUXY"

h'gYa]bUfg'mci 'k]'UWj] Y'mYb[U[Y'k]h 'WcfY'Wci fgY'WcbhYbhzYbUV]b['mci 'hc'UhtU]b'7 @C '%"

7 ci fgY GWX YXi `Y

[J \]Yk WUgg'hja YhUVY](#)

H]a YhUV`Y`

8UhY	HmdY	7cbhYbh
K YY_% '% : YVfi Ufm! & : YVfi Ufm	GYa]bUf	%'' hfcXi W]cb . Cj Yfj]Yk &"'7 \UdhYf'%"@Ub[i U[Y '@YUfb]b[']b'9Ufm 7 \]X\ccX ' "'F YgYUfWk fYUX]b['% . ("'5Wj]]m 8UH'5bU'mg]g
K YY_& '&) : YVfi Ufm! ' A UfW	GYa]bUf	8]gW gg]cb %''7 \UdhYf'%"@Ub[i U[Y '@YUfb]b[']b'9Ufm 7 \]X\ccX &"'F YgYUfWk fYUX]b['% . Cj Yfj]Yk ' "'7 \UdhYf'&"GYWcbX'@Ub[i U[Y '@YUfb]b[("'F YgYUfWk fYUX]b['& . 5Wj]]m) "'8UH'5bU'mg]g

<p>K YY_'. ('A UfWx '! '%\$ A UfWx</p>	<p>GYa]bUf</p>	<p>8]gW gg]cb %''7 \UdhYf' &" GYWt bX' @Ub[i U[Y' @YUfb]b[&" F YgYUfWx 'fYUX]b[' & . . C j Yfj]Yk ' ''7 \UdhYf' (''9I d`U]b]b['GYWt bX' @Ub[i U[Y @YUfb]b[(''F YgYUfWx 'fYUX]b['' . . 5W]j]fm) ''8 UfU' UbU`mg]g</p>
<p>K YY_ (: '%%A UfWx '! '%+ A UfWx</p>	<p>GYa]bUf</p>	<p>8]gW gg]cb %''7 \UdhYf' (''9I d`U]b]b['GYWt bX' @Ub[i U[Y @YUfb]b[&" F YgYUfWx 'fYUX]b['' . . C j Yfj]Yk ' ''7 \UdhYf') 'C VgYfj]b['@YUfb]b['UbX' HYUWx]b[']b hY' GYWt bX' @Ub[i U[Y '7 `Uggfcc a (''F YgYUfWx 'fYUX]b['(. . 5W]j]fm ' ''8 UfU' UbU`mg]g . . 5ggYgga YbhUgg][bYX' Zcf'k YY_)</p>
<p>K YY_) . : '% 'A UfWx '! '&(A UfWx</p>	<p>5ggYgga Ybh</p>	<p>B c `ZJWw `hc `ZJWw ` \ci fg" H\Y' UggYgga Ybh]g `Xi Y K YXbYgXUmihY' &\$h `cZA UfWx `Vm) . \$\$ `d" a ''7 cj Yfg 7 \UdhYfg %z & `UbX' (`UbX' F YgYUfWx `F YUX]b[g' %d' "</p>
<p>K YY_* . : '&' 'A UfWx '! " % A UfWx</p>	<p>GYa]bUf</p>	<p>8]gW gg]cb %''7 \UdhYf') 'C VgYfj]b['@YUfb]b['UbX' HYUWx]b[']b</p>

		<p>h\Y`GYWŁbX`@Ub[i U[Y`7`Uggfcca</p> <p>&""F YgYUfWŁ`fYUX]b[`(`</p> <p>.</p> <p>Cj Yfj`]Yk</p> <p>'""7`UdhYf`*""G]l`dfcdcGU`g`Zcf`gYWŁbX`Ub[i U[Y`hYUWŁ]b[</p> <p>("F YgYUfWŁ`fYUX]b[`)</p> <p>.</p> <p>5Włj`]fm</p> <p>8 UfU`UbU`mg]g</p> <p>.</p> <p>5ggYgga`Ybh</p> <p>C fU`dfYgYbUł]cb""5gg][b`h\Y`łcd]WcZłY`dfYgYbUł]cb""8i`Y`K`YY`_`+`"</p>
<p>K`YY`_`+`.%5df]`!`+`5df]`</p>	<p>GYa`]bUf</p>	<p>8i`Y`"C fU`DFYgYbUł]cb""A`i`ghVY`i`d`cUXYX`łc`A`ccX`Y`df]cf`łc`&.`\$\$`d`a`""cb`5df]`""z`&`\$`%`"</p> <p>.</p> <p>8]gW`gg]gcb</p> <p>%""7`UdhYf`*""G]l`dfcdcGU`g`Zcf`gYWŁbX`Ub[i U[Y`hYUWŁ]b[</p> <p>&""F YgYUfWŁ`fYUX]b[`)</p> <p>.</p> <p>Cj Yfj`]Yk</p> <p>'""F YgYUfWŁ`fYUX]b[`*`</p> <p>("F YgYUfWŁ`fYUX]b[`+`</p> <p>.</p> <p>5Włj`]fm</p> <p>)""8 UfU`UbU`mg]g`</p>

		5ggYgga Ybh 5gg][b'HYgh&"8i Y'%\$'5df]"
K YY_ ; . ; '5df]'! '%('5df]'	5ggYgga Ybh	B c' ZJW' hc' ZJW' \ci fg" 5ggYgga YbhfHYgh&L'g' Xi Y Vm) .\$\$'d"a "'cb'%\$'5df]"
K YY_ - . '%) '5df]'! '&% 5df]'		

F Ygci fWg

DfYgWf]VYX`F Ygci fWg`

- 6cc_`-<ck`@Ub[i U[Yg`5fY`@YUfbYXZ` (h`9X]hcb"
- F YgYUfW`fYUX]b[g`"Mc i`k`j`"fYW]j`Y`U`V]c[fUd`micZ`hY`fYUX]b[g`"H\YmUFY`ci`fbU`Ufh]WYg`Uj`U]UV`Y`cb`]bY`h`fci`[\`I`BGK`@]VfUfm"

F YWca a YbXYX`F Ygci fWg

BchUj U]UV`Y

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

A m9l dYf]YbW`fYgdcbgYg`UfY`h`Y`df]a`Ufmgci`fW`cZgh`XYbhZYXVUW`hc`h`Y`Wci`fgY`Wcbj`Ybcf`"Zcfa`U`gi`fj`Ymg`a`UmU`gc`VY`i`gYX`"F YgdcbgYg`]b`h`Y`dUgh`Uj`Y`YX`hc`WX`Ub[`Yg`]b`Wci`fgY`a`UhYf]U`gZ`]bWUgg`UW]j`]h]YgZ`UbX`UggYgga`Ybty"

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Gi Va]gg]cb`cZ5ggYgga YbhHUg_g

Hi fb]hb`Gi Va]gg]cb

Ʒmci`YbWci`bhYf`U`dfcV`Ya`k`Yb`U`H`Ya`dh]b[`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`h`fci`[`\`Hi`fb]hb`z`d`YUgY`
H`Y`d`l`cb`Y`9I`H`f`b`U`Gi`ddcfh`cb`-`,`)``%`cf`Ya`U`H`Ya`cb`YI`H`f`b`U`H`f`gi`ddcfh`i`bgk`"YXi`"Ui`"Gi`ddcfh`
`l`ci`fg`UfY`,`.\$`\$Ua`-`%`\$`.\$`\$da`cb`k`YY`XUmg`UbX`-`.\$`\$Ua`-`i`.\$`\$da`cb`k`YY`YbXg`f`l`*)`XUmg`U`m`Y`Uf`l`"Ʒmci`
UfY`i`bUV`Y`hc`gi`Va`]hmc`i`f`Ugg][`ba`Ybh`Xi`Y`hc`U`Z`U`h`k`]h`Hi`fb]hb`mci`a`Um`Udd`m`Z`f`Ub`YI`H`f`bg]cb`z`Vi`hmc`i`
a`i`gh`f`Y`h]b`mci`f`h]W`Y`h`bi`a`VY`f`Z`ca`9I`H`f`b`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`
]b`W`i`X`Y`U`g`Y`j`]X`Y`b`W`hc`gi`ddcfh`mci`f`YI`H`f`bg]cb`Udd`]W`h]cb"Ʒmci`Ya`U`9I`H`f`b`U`Gi`ddcfh`mci`k`j`
Ui`h`ca`U`h]W`m`f`Y`W`j`Y`U`h]W`Y`h`bi`a`VY`f`z`Vi`h]Z`mci`H`Y`d`l`cb`Y`mci`k`j`b`Y`Y`X`hc`gd`Y`W`Z`W`m`U`g`_`Z`f`cb`Y`
Hi`fb]hb`U`gc`d`fc`j`]X`Y`g`i`d`X`U`H`Y`g`i`cb`h`Y`j`f`g`m`g`h`Ya`g`h`U`h`g`i`cb`H`k`]h`Y`f`"

;`Yb`Y`f`U`m`z`Ugg`Y`gga`Y`bh`h`U`g`_`g`a`i`gh`V`Y`gi`Va`]h`Y`X`Y`Y`W`f`cb]W`m`j`]U`Y`]h`Y`f`Hi`fb]hb`cf`U`A`cc`X`Y`
Ugg][`ba`Y`bh`h`b`]b`g`h`U`b`W`g`k`Y`f`Y`h`l`g`]g`b`c`h`i`d`c`g`g]V`Y`z`]h`k`j`V`Y`g`h`U`H`X`i`cb`mci`f`W`ci`fg`Y`g`A`cc`X`Y`g`]h`k`]h`
U`h`f`b`U`h]`Y`gi`Va`]gg]cb`X`Y`h]`g`"

:`cf`]b`Z`c`fa`U`h]cb`cb`l`ck`hc`gi`Va`]h`Ugg][`ba`Y`bh`g`cb`]b`Y`j`]U`A`cc`X`Y`.\`h`td`g`#`g`h`X`Y`b`h`i`bgk`"YXi`"Ui`#`ack`!
gi`Va`]h`Ugg][`ba`Y`bh`a`cc`X`Y`"

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

D`U[]Uf]ga]g'i g]b['hY'k cfXg'cf]XYUg'cZchYfg'UbX'dfYgYbh]b['hYa 'Ug'mci f'ck b" #WUb'hU_Y'a Ubm Zcfa gž Zca 'XY]VYfUHY'WXUhf]b['hc'UWV]XYbhU`mWcdm]b[Zca 'U'gci fW'k]h'ci hUW_bck 'YX[Ya Ybh'

I BGK '[fci dg'd`U[]Uf]ga]bhc'hY'Z`ck]b['WUHY[cf]Yg.

7cdm]b[.i g]b['hY'gUa Y'cf'j Yfmg]a]Uf'k cfXg'hc'hY'cf][]bU`hYI hcf]XYU'k]h'ci hUW_bck 'YX[]b['hY'gci fW'cf'i g]b['ei chU]cb'a Uf_g" 'H\]g'U'gc'Udd'Yg'hc']a U[Ygž UfhUbX'XYg][b'dfc YWgž Ug'k Y`Ug dfYgYbhU]cbg'k \YfY'gca YcbY'dfYgYbhg'UbchYf'g']XYUg'cf'k cfXg'k]h'ci hWYX]h'

#Uddfcdf]UHY'dUfUd\fUg]b[.7 \Ub[]b['U'Zk 'k cfXg'UbX'd\UgYg'k \]Y'a cghm'fYU]b]b['hY'cf][]bU'gfi W' fY'UbX'#f'dfc[fYgg]cb'cZ]XYUg'cZhY'cf][]bU'Z'UbX']bZcfa U]cb'k]h'ci hUW_bck 'YX[Ya Ybh' 'H\]g'U'gc'Udd'Yg']b'dfYgYbhU]cbg'k \YfY'gca YcbY'dUfUd\fUgYg'UbchYf'g']XYUg'cf'k cfXg'k]h'ci hWYX]h'UbX'hc d]Y]b['hc[YhYf'ei chYg'UbX'dUfUd\fUgYg']bhc'U'bYk 'k \c'Yžk]h'ci hUddfcdf]UHY'fYZfYbW]b["

7c`i g]cb. 'k cf_]b['k]h'chYfg'Vi hdUgg]b['cZhY'k cf_'Ug'U'dYfgcb'g']bX]j]Xi U'k cf_"7c`i g]cb'U'gc]bWi XYg'dfcj]X]b['mci f'k cf_'hc'UbchYf'g'hi XYbhVYZc'fY'hY'Xi Y'XUHY'žcf'Zc'f'hY'di fdcgY'cZhYa d'U[]Uf]g]b['UhUbmi]a Yž'dUm]b['UbchYf'dYfgcb'hc'dYfZcfa 'Ub'UWUXYa]WUg_žghU']b['cf'UW'ei]f]b[UbchYf'dYfgcb'g'UWUXYa]Wk cf_'UbX'Wcdm]b[]žcZ]f]b['hc'Wca d'Yh'UbchYf'dYfgcb'g'k cf_'cf'gYY_]b[dUma YbhZc'Wca d'Yh]b['UWUXYa]Wk cf_"

#Uddfcdf]UHY'W]h]cb. 7]h]b['gci fW'g'k \]W\Uj Y'bhVYYb'fYUXžk]h'ci hUW_bck 'YX[]b['hY'"gYWcbXUfm' gci fW' Zca 'k \]W_bck 'YX[Y'cZhYa '\Ug'VYYb'cVh]bYX"

8i d']WU]cb'f'gY'Zd'U[]Uf]ga "L'gi Va]h]b['mci f'ck b'k cf_ž]b'k \c'Y'cf']b'dUfžk \YfY']h'Ug'dfYj]ci g'm VYYb'dfYdUfYX'cf'gi Va]h]YX'Zc'f'UbchYf'UggYgga Ybhcf'Wci fgY'Uhl BGK 'cf'UbchYf'i b]j Yfg]m'

7cffYW'fYZYfYbW]b['dfUW]W'g.

- DUfUd\fUg]b[žgi a a Uf]g]b[žYggUmk f]h]b['UbX'h]a Y'a UbU[Ya Ybh
- 5ddfcdf]UHY'i gY'cZUbX'Uhf]Vi h]cb'Zc'f'U'fUb[Y'cZa UHYf]U'g']bWi X]b['hYI hž]a U[Ygž Zcfa i 'UY'UbX WcbW'drg"

#X]j]Xi U'Ugg]ghUbW']g'Uj U]UV'Y'cb'fYei YghZca 'H\Y'@YUfb]b['7YbhY'f'f'hd. ## k k "Wi bgk "YXi "Ui #"
Gh XYbhg'UfY'U'gc'fYa]bXYX'h.UhWfYZ 'h]a Y'a UbU[Ya Ybh]g'Ub]a dcfUbhidUfhicZgh XmiUbX'cbY'cZhY]XYbh]ZYX'Wli gYg'cZd'U[]Uf]ga]g'dccf'h]a Y'a UbU[Ya Ybh'Gh XYbhg'g'lc'i 'X'U'ck 'gi Z]WYbh]a Y'Zc'fYgYUfW'ž'XfUž]b['UbX'dfcdYf'fYZYfYbW]b['cZgci fW'g']b'dfYdUf]b['U'UggYgga Ybh]h'a g"

I BGK '@]VfUfm'U'gc'\Ug'hY'9@G9'hc'Uj U]UV'Y'hc'Ugg]ghmci 'k]h'mci f'g'hi XmiUhl BGK "'9@G9']g XYg][bYX'hc']b]f'cXi W'bYk 'gh XYbhg'hc'g'hi Xn]b['Uhl BGK 'Vi h]h'WUb'U'gc'VY'U']fYUhfYZYg\Yf'Xi f]b['mci f'gh Xn'

7ca d'Yh]b['hY'9@G9'h'hc'f]U'UbX'ei]n'k]`YbUVY'mci 'hc.

- UbU'mgY'hc'd]Wgž'd'Ub'fYgdcbgYg'UbX'cf[Ub]gY'fYgYUfW'Zc'f'UWUXYa]Wk f]h]b['UbX'chYf'UggYgga Ybh]Ug_g

- i bXYfgHUbX'mci f'f][\hg'UbX'fYgdcbg]V]]hYg'Ug'U'gh XYbhUhl BGK
- VY'Uk UfY'cZd'U[]Uf]ga ž'Wcdmf][\hžI BGK 'Gh XYbh7cXY'cZ7cbXi WñUbX'5WwdfUV'Y'I gY'cZ I BGK '⇒H'F Ygci fW'g'Dc`]Wñ
- VY'Uk UfY'cZñY'ghUbXUfXg'cZVY\Uj]ci f'YI dYWñX'cZYj YfñcbY']b'hY'I BGK 'Wca a i b]m
- `cWñH'gYfj]W'g'UbX']bZcfa Uhcb'UVci hl BGK 'UbX'I BGK '@]VfUfm

Gca Y'cZñYgY'UfYUg'k]`VY'ZJa]]Uf'ñ&

] i b g'U'Dc'b

5 WUXYa]WbZcfa Uh]cb`

: cf`YggYbh]U`ghi XYbh]bZcfa Uh]cb`fY`Uh]b[`hc.

- fYei Ygh]Zc`fYI hYbg]cb/
- `UhY`gi Va]gg]cbg`[i]XY`]bYg/
- fYj]Yk `cZa Uf_g/
-