

IEST5003

5XXfYgg]b['9bj]fcb a YbhU`'ggi Yg. 'DUHk Umg'hc '7 \Ub[Y!
A U_]b[

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

7ci fgY`Cj Yfj]Yk

GHJZ7cbHJW`8YHJ`g

7cbj Ybcfg

B Ua Y	9a Uj`	5j Uj`UVj]m	@cWjhcb	D\cbY
@ji fU`A W@ji W`Ub	`Ui fU"a WUi W`Ub4 i bgk "YXi "Ui	VmfYei Ygh	A cfj Yb`6fck b &* -	d`YugY`i gY Ya Uj`

GWcc`7cbHJW`bZcfa Uhjcb

GWcc`cZ<i a Ub]hYg`UbX`@Jb[i U[Yg

@cWjhcb. `GWcc`C ZWZA 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 Uj]. [\U`4 i bgk "YXi "Ui](#)

7ci fgY'8YHJ]g

7fYX]hDc]bfg '* '

Gi a a UfmicZ'h\Y'7ci fgY

h'h]g'Wci fgYžmci 'k]''cc_Uh\ck 'mci 'WUb'Udd'miH\Y'ZUa Yk cf_g'UbX']bg][\hg'mci '\Uj Y'[U]bYX']b'mci f
dcgh[fUXi UH\Ybj]fcba YbhUbX'gcV\Ylmigh X]Yg'hc'h\Y'Ybj]fcba YbhU']ggi Yg'mci 'WfY'UVci ha cgh'H\Y
Wci fgY'i gYg'Ub']bHfX]gWd']bUfmUddfcUW\]b'k \]W\mci 'UfY'YbWci fU[YX'hc'UfHbX'hc'h\Y'Wca d'YI]micZ
Ybj]fcba YbhU']ggi Yg'UbX'hc'XYj Y'cd'YZYW\j Y'dfcdcgU'g'Zcf'UW\cb''K \]Y'h\Y'Wci fgY'hc'i W\Yg'cb'U'k]XY

5ggYgga Ybh

5ggYgga YbhHUg_g

5ggYgga YbhHUg_	K Y][\h	8i Y'8UH	Gh XYbh@YUfb]b[Ci hWta Yg'5ggYggYX
K YY_mF YZYW]cbg'	' \$i	Bch5dd']WUVY	%ž&ž'
7 UgY'Gh XmDfYgYbhU]cb'	&\$i	Bch5dd']WUVY	' ž(
:]bU`F Ydcfh) \$i	%&#\$, #&\$&%\$*. \$\$'DA	%ž&ž' ž)

5ggYgga Ybh8YHU]`g

5ggYgga Ybh% 'K YY_mF YZYW]cbg

GHUfhXUH. Bch5dd']WUVY

8YHU]`g.

K YY_mg\cfhk f]HYb'gi a a Uf]Yg'ZcfX]ghUbwW'UbX'cb!WJa di g'gh XYbhgžk]h'g\cfhcb']bY'ZYXVUW_[]j Ybž Zcf-'k YY_g'r &) \$'k cfXg'dYf'k YY_"

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

H\fc] [\ci h\Y Wci fgYžmci 'k]`dfcXi W'g\cfhFYZYW]cbg'U]a YX'hc'XYdYb'mci f'Yb[U[Ya Ybhk]h'k \Uh mci '\Uj Y`YUfbYX']b'hY'A 9A 'UbX'hc'YbWci fU[Y'mci 'hc'XYj Y'cd'mci f'WYU]j]mUbX'g_]`']b'Udd'm]b['mci f'YUfb]b[g'hc'fYU!']Z'g]h U]cbg" 'Mci 'k]`dcghmci f'fZYZYW]cbg'cb'A ccX'Y'YUW'k YY_'hY'XUmVY'Zcf'WUgg"

Hi fb]h]b'gYH]b[. H\]g]g'bchU'Hi fb]h]b'Ugg][ba Ybh

5ggYgga Ybh&. '7 UgY'Gh XmDfYgYbhU]cb

GHUfhXUH. Bch5dd']WUVY

8YHU]`g.

' \$'a]bg'WUgg'dfYgYbhU]cb'cf'ZcfX]ghUbwW'cbY'k YY_'YUX]b['Ub'cb']bY'Zcfi a "'K f]HYb[fci d'ZYXVUW_k]` VY'[]j Yb"

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

H\]g'Ugg][ba Ybhk]`YbWci fU[Y'mci 'hc'ig'Y'hY'a cghfY'Yj Ubh'hYcf]Yg'Zca 'hY'Wci fgY'fYUX]b[g'hc'UbU'mgY'UbX'YI d'U]b'Ub'Ybj]fcb'a YbhU`]ggi Y'mci 'UfY'dUgg]cbUH'UVci h'9UW [fci d'f'f']bX]j]Xi Už XYdYbX]b['cb'bi a VYfg'k]`VY []j Yb'hY'fYUX]b[g'Zca 'U'dUfh]W'Uf'k YY_'UbXž]b'hUhk YY_žk]`YUX'U ZcW'gYX'X]gW'gg]cb'Udd'm]b['cbY'cf'k c'WcbW'dhg'Zca 'hY'fYUX]b[g'hc'U'WUgY'gh'XmcZ'hY]f'Wc]W'" 'b mci f'dfYgYbhU]cbžmci 'k]`hYUW'ig'hY'_YmY'Ya Ybhg'cZmci f'hYcfm#ZUa Yk cf_'UbX'YbWci fU[Y'hY'WUgg

hc'fYZYVh'cb'k \Uh]h\Y'dg'h\Ya'hc'gYY'jb'h\Y'WUgY'ghi Xmf

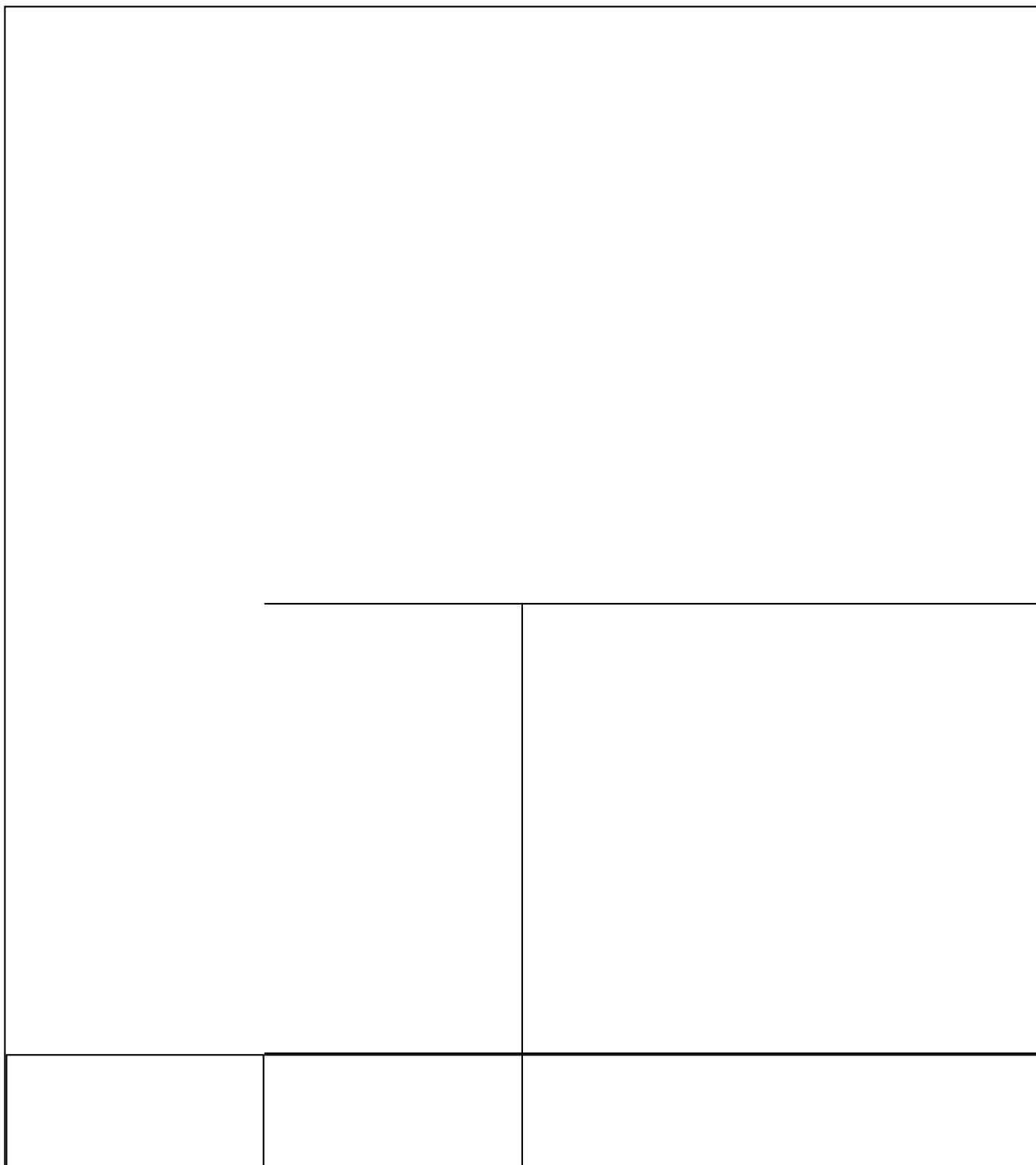
Hi fb]h]b'gYH]b[. 'H\]g']g'bchU'Hi fb]h]b'Ugg][ba Ybh

5ggYgga Ybh' . :]bU'F Ydcfh

8YHJ]g.

Gh XYbtg'k]'VY'fYei]fYX'hc'gi Va]hU'&\$\$\$'k cfx'Z]bU'fYdcfhVUgYX'cb']bj Ygh[Uh]cb#JbU'mg]g'cZUb
Ybj]fcba YbU']ggi Y'cZH.Y]f'WXc]W"

K f]hYb'ZYXVUW_k]'VY' []j Yb"



		ϕ'h]g'gYa]bUfžk Y'k]''cc_ UhhY'UfhUbX'gWYbW cZVXUb[Y'a U_]b[" < ck 'Xc'k Y'gi ghU]b'ci fgY'j Yg k \]Y'a U_]b['VXUb[Y3'K \UhXc'k Y'k Ubh'hc'fUf[Yh UbX'k \m3'K \Uh]g'U'hYcfmicZVXUb[Y'UbX'k \miXcYg]hia UhhYf3'K]h'Ub'YmY'hc'mci f'Z]bU'fYdcfmgžk Y'k]' gdYW]Z]W]m'cc_ UhVXUb[Y!a U_]b['UbX'Ug_]b['ck UWUXYa]Wgfi X]Yg'UbX'fYgYUfW!]bZcfa YX'k cf_ 'WUb Vc'bf]Vi h'hc'Ybj]fcb a YbU'\YU]b[]]b'h'Y'k cfX
K YY_ , . % > i 'm! '&' > i 'm		

Gi Va]gg]cb 'cZ5ggYgga YbhiHUg_g

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

Ʒmci 'YbWci bHYf'U'dfcV'Ya 'k \Yb'UHfYa dh]b['hc'gi Va]hmc i f'Ugg][ba YbhiHfci [\ 'Hi fb]h]bž'd'YUgY
HY'Yd\cbY'9I HYfbU'Gi ddcfhcb'-' ,) " ' ' %cf'Ya U] 'hYa 'cb'YI HYfbU'HY'fgi ddcfh4 i bgk "YXi "Ui "'Gi ddcfh
\ci fg'UfY' , .\$Ua '—%\$.\$\$da 'cb'k YY_XUmg'UbX'-. .\$Ua '—) . \$\$da 'cb'k YY_YbXg'fI *) 'XUmg'U'mYUfI" Ʒmci
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 UmUdd'mZcf'Ub'YI HYbg]cbž'Vi hmc i
a i ghfYhU]b' mci f'h]W_Yhbi a VYf'Zca '9I HYfbU'Gi ddcfhfU'cb['k]h'Ubmc'hYf'fY'Yj UbhXcW a YbfgL'hc
]bWi XY'Ug'Yj]XYbVW'hc'gi ddcfhmci f'YI HYbg]cb'Udd']W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmci 'k]
Ui 'ca U]WU'mfYW]j Y'U'h]W_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY' mci 'k]'bYYX'hc'gdYW]WU'mUg_ 'Zcf'cbY"
Hi fb]h]b'U'gc'dfcj]XYg'i dXUH'g'cb'h.Y]f'gmghYa 'ghU'g'cb'Hk]HYf"

; YbYfU'mž'UggYgga YbhiHUg_g'a i ghVY'gi Va]hYX'Y'YWfcb]WU'mj]U'Y]h'Yf'Hi fb]h]b'cf'U'A ccX'Y
Ugg][ba Ybhi' Ʒ]bg]h]bVW'g'k \YfY'h.]g]g'bc]h]dcgg]V'Yž]hk]'VY'gh'UH'X'cb' mci f'Wci fgY'g'A ccX'Y'g]h'k]h
U'HYfbU]h] Y'gi Va]gg]cb'XYhU]g"

: cf]bZcfa Uh]cb'cb'\ck 'hc'gi Va]hUgg][ba Ybhi'cb']bY'j]U'A ccX'Y. \h]dg.#gh XYbhi bgk "YXi "Ui #ck!
gi Va]hUgg][ba Ybhi'a ccX'Y

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`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]hYg'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
-

5 WUXYa]W**ϕ**Zcfa Uh]cb