

# 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 ZWZ`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 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`gcVYImigh X]Yg`hc`h\Y`Ybj ]fcba YbhU`]ggi Yg`mci `WfY`UVci ha cgH`H\Y  
Wci fgY`i gYg`Ub`]bHfX]gWd`]bUfmUddfcUWk`]b`k \]Wk`mci `UFY`YbWci fU[ YX`hc`UfHbX`hc`h\Y`Wca d`YI ]micZ  
Ybj ]fcba YbhU`]ggi Yg`UbX`hc`XYj Y`cd`YZYWj Y`dfcdcgU`g`Zcf`UW]cb`"K \]Y`h\Y`Wci fgY`hci WYg`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`]WUV`Y	%ž'&ž'
7 UgY`Gh XmDfYgYbhU]cb`	&\$i	Bch5dd`]WUV`Y	' ž(
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## 5ggYgga Ybh8YHU]`g

5ggYgga Ybh%`K YY\_`mF YZYW]cbg`

GHUfhXUH. `Bch5dd`]WUV`Y

8YHU]`g.

K YY\_`mg\cfhk f]hYb`gi a a Uf]Yg`Zcf`X]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]h]cbg`"Mci `k ]`dcghmci f`fYZYW]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`]WUV`Y

8YHU]`g.

' \$`a ]bg`WUgg`dfYgYbhU]cb`cf`Zcf`X]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`i gY`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`fcb`]bX]j ]Xi U`ž 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`d]g`Zca `hY`fYUX]b[ g`hc`U`WUgY`gh`XmcZ`hY]f`W`c]W`" `b`mci f`dfYgYbhU]cbž`mci `k ]`hYUW`i`g`hY`\_YmY`Ya Ybhg`cZmci f`hYcfm`Z]Ua Yk`cf`\_`UbX`YbWci fU[ Y`hY`WUgg`"

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

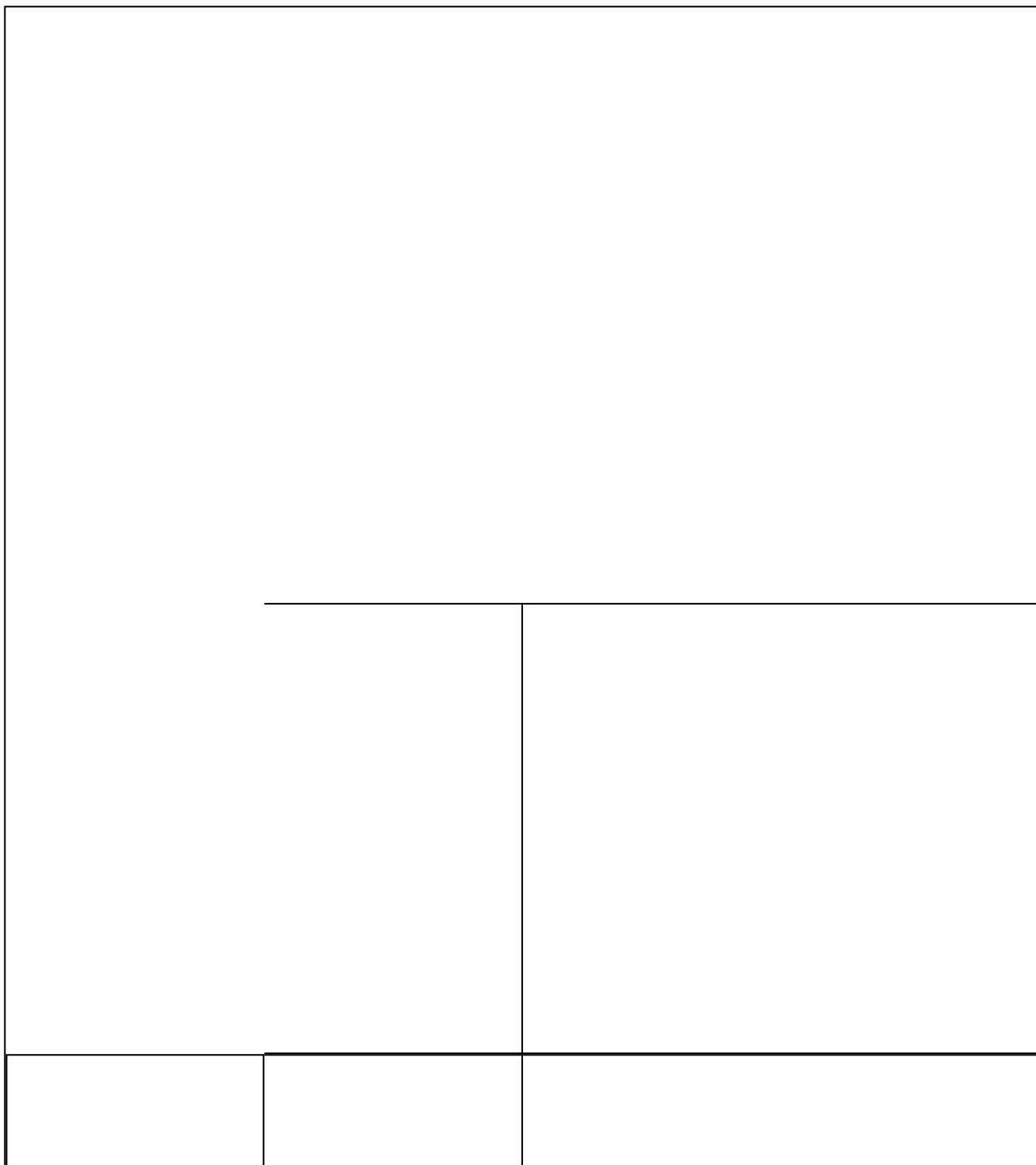
Hi fb]h]b'gYH]b[ . 'H\]g'g'bchU'Hi fb]h]b'Ugg][ ba Ybh

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 \mB'K \Uh]g'U'hYcfmicZVXUb[ Y'UbX'k \mXcYg ]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 ]fcba YbU'\YU]b[ ]]b'hAY'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'UH'Ya 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] 'H'Ya 'cb'YI HYfbU'HY'f'gi 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'm'YUfI" 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'm'Zc'f'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'UbmcH'Yf'f'Yj UbhXcW a YbHgE'hc  
]bWi XY'Ug'Yj ]XYbVW'hc'gi ddcfhmc i f'YI HYbg]cb'Udd' ]W]h]cb" Ʒmci 'Ya U] '9I HYfbU'Gi ddcfhmc i 'k ]  
Ui 'ca UH]W]m'f'YW]j Y'U'h]W\_Yhbi a VYfž'Vi h]Zmci 'HY'Yd\cbY'mci 'k ]'b'YX'hc'gd'YW]W]m'Ug\_ 'Zc'f'cbY"  
Hi fb]h]b 'U'gc'dfcj ]XYg'i dXUH'g'cb'H'Y]f'gmgh'Ya 'ghU'hi g'cb'Hk ]HYf"

; YbYfU'mž'UggYgga YbhiHUg\_g'a i ghVY'gi Va ]HYX'Y'YW'f'cb]W]m'j ]U'Y]H'Yf'Hi fb]h]b'cf'U'A ccX'Y  
Ugg][ ba YbH' 'b]bg]UbVW'g'k \YfY'H'g ]g'bc]hd'cgg]V'Yž'hk ]'VY'gh'UH'X'cb'mci f'Wci fgY'g'A ccX'Y'g]H'k ]H  
U'HYfbUH] Y'gi Va ]gg]cb'XYHU]g"

: cf]bZ'fa UH]cb'cb'\ck 'hc'gi Va ]hUgg][ ba YbHg'cb]bY'j ]U'A ccX'Y. \h'hdg.#gh XYbhi bgk "YXi "Ui #ck!  
gi Va ]hUgg][ ba YbH'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'5W'WdhUV'Y'I gY'cZ  
I BGK '⇒H'F Ygci f'W'g'Dc`]W'h
- VY'Uk UfY'cZh'Y'ghUbXUfXg'cZVY\Uj ]ci f'YI dY'W'X'cZYj Yfmcby`]b'h'Y'I BGK 'W'a a i b]m
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5 WUXYa ]W**≠**Zcfa Uh]cb