



H\Y'I ? 'dYhfc`'Wf]g]g'a Um'VY`YUg]b[ž'Vi h'k]`'h\Uh
 UZZYWh'h\Y'a Uf_YhZcf'h\Y'' '\$' %&`VYUf]b[

H\Y'I ? 'Z'Y`Wf]g]g'a Um'VY`YUg]b[ž'Vi h'U'k]bhYf'cZX]gWcbhYbh'Wci`X'↑gh
 VY`VY[]bb]b[

≠h\YfY`Uj Y`VYYb`bc`ei Yi Yg`Uh'dYhfc`'ghUh]cbg]b'h\Y'I ?]b`fYW`bh
 XUmgž]h]g'dfcVUV`m'VYWUi gY`h\Ym`Uj Y`fi b`ci h'cZ'Z'Y''

Bck`Df]a Y`A]b]ghYf`6cf]g`æ\bgcb`gUmg`h\Y`Z'Y`Wf]g]g]'g`VY[]bb]b[`hc
 YUgYž`UbX`k YffY`YUf]b[`g]a]`Uf`cd]h]a]ga`Zfca`h\Y`]bXi ghfm"

H\Y`DYhfc`'F`YhU]`Yfg`5ggcW]Uh]cb`gU]X`U`gi fj Ym'cZ']hg'a Ya VYfg`g\ck YX
 '+i`cZ'ghUh]cbg`k YfY`ci h'cZ'[Ug`!`k` \]W`a Um'bch'gci bX`[fYUh'Vi h'k Ug
 Ub`]a dfcj Ya Ybh'cb`h\Y`k YY`YbX"

H\Y`Z'Y`Wf]g]g]'g`UZZYWh]b[`DYcd`Y`8U]`m`j Ygž'Vi h']h]g`U`gc`UZZYWh]b[
 ^cVg.`hU]`Xf]j Yfgž`XY`j Yfm`Xf]j Yfgž`UbXž`cZ`Wci fgYž`j]hU`k cf_Yfgž
]bWi X]b[`Ya Yf[YbWm'k cf_Yfg"

H\Y`6f]h]g\`A`YX]WU`5ggcW]Uh]cb`fY`Wca`a YbXYX`h\Uh'h\Y`[cj Yfba Ybh
 XYg][bUhY`dYhfc`'ghUh]cbg`Ug`U`df]cf]hmZcf`h\YgY`k cf_Yfg"

H\Y`6f]h]g\`[cj Yfba Ybh'di h'h\Y`6f]h]g\`a]]hUfm'cb`\UfX`ghUbXVmž`k]h\
 hfU]bYX`dYfgcbbY`fYUXm'hc`a`cj Y`Z'Y`Zfca`fYZ]bYf]Yg`UbX`d`UhZcfa`g`hc
 ZcfY`Wci fhg`k`YfY`]h]g`bYYXXYX"

H\Ym`U`gc`Ubbci bW`X`dc`]W]Yg`hc`UXXfYgg`h\Y`dfcV`Ya`Uh`h\Y`YUfh'cZ
 h\Y`Wf]g]g.`U`g\cfhU[Y`cZ`hfi W`Xf]j Yfg"

5g`k Y``Ug`YbWci fU[]b[`fYh]fYX`<; J!ei U`]ZYX`Xf]j Yfg`hc`fYhi fb`hc`k cf_ž
 h\Ym`Uj Y`U`gc`cZYfYX`hYa`dcfUfm]]gUg`hc`) ž\$\$\$`ZcfY][b`Xf]j Yfg"

H\Uh]g`↑gh`U`ZFUWh]cb`cZ`h\Y`%\$`\$`\$`\$`Xf]j Yfg`6f]hU]b`bYYXgž`UW`cfX]b[`hc
 h\Y`F`cUX`HfUbgdcfh`5ggcW]Uh]cb"



H\Y`dfYg]XYbh'cZ'h\Y`6f]h]g\`7\Ua VYfg'cZ`7ca a YfWV`Wca dUfYX`h\Y`
hYa dcfUfmj]gU`gW\Ya Y`hc`UXX]b[`Zi Y`hc`U`Z]fY"

Gi dd`m\WU]bg]b`gYj YfU`]bXi ghf]Yg`fYa U]b`ZfU[a YbhYX`VYWUi gY`cZU`
g\cfhU[Y`cZi ? ``cffiXf]j Yfg``#i]g`U`dfcV`Ya `h\Uh`\Ug`VYYb`VfYk]b[`Zcf`
mYUfg`Vi h]g`bck`fYUW]b[`U`h]dd]b[`dc]bh`Zcf`a Ubm`fYUgcbg. `6fYi]h`h\Y`
dUbXYa]W`XYa UbX`Zcf`cb`]bY`g\cdd]b[`z`ck`k U[Yg`z`U`g\cfhU[Y`cZ`
Xf]j]b[`hYUW\Yfg`z`UbX`a cfY"

H\Y`dYhfc``Wf]g]g`a Um`VY`YUg]b[`z`Vi h`h\Y`i ? `k]bhYf`cZ`X]gWcbhYbh`Wci`X`
VY`↑ gh`VY[]bb]b[`Ug`Xfj] Yf`g\cfhU[Yg`h\fYUhYb`hc`hf][[Yf`a`cfY`gi`dd`m`
WU]b`Wf]gYg]b`h\Y`fi`bi`d`hc`7`f]gha Ug"

H\Y`i ? `dYhfc``Wf]g]g`a Um`VY`YUg]b[`z`Vi h`k]`h\Uh`UZZYWh`h\Y`a Uf`_Yh`Zcf`
h\Y`" \$' %&`VYUf]b[3

6YUf]b[g`UfY`Ub`]a dcfhUb`h`dUfh`cZ`a cXYfb`a UW]bYfm`UbX`Yei]da Ybh`z`
UbX`]hg`Xck bghfYUa `]g`k]XY`mi`gYX`]b`]bXi ghf]U`Ui hca Uh]cb`z`\][\!YbX`
Yei]da Ybh`z`fcVch]Wg`z`Ui hca cV]`Y`a Ubi ZUWh`f]b[`UbX`ch\Yf`Z]Y`Xg``#`
fYW`bh`mYUfg`z`Xi Y`hc`h\Y`XYW]bY`]b`XYa UbX`Zfca`Xck bghfYUa`
]bXi ghf]Yg`gi W`Ug`Ui hca cV]`Yg`UbX`a UW]bY`hcc`g`z`Ug`k Y`Ug`h\Y`
UX`↑ gha Ybh`cZ`]bXi ghf]U`ghfi Wh`fY`z`h\Y`d`UgY`cZ`hfUb`gZcf`a Uh]cb`UbX`
i`d[fUX]b[`z`h\Y`d`Ug]b[`ci`h`cZ`VUW`_k UfX`d`fcXi Wh]cb`WUdUW]hm`\Ug`
WU]b[YX`h\Y`fY`Uh]cbg\]d`VYhk`YYb`gi`dd`m`UbX`XYa UbX`"H\Y`bi`a`VYf`cZ`
VYUf]b[`]bXi ghf]Yg`\Ug`XYW]bYX`"Z`mci`UfY``cc_]b[`Zcf`" \$' %&`VYUf]b[`cf`
[Yh`a`cfY`]bZcf`a Uh]cb`UVci`h`" \$' %&`VYUf]b[`z`d`YUgY`gYbX`Ub`Ya U`
hc`[gU`Yg4`Yf\]WYUf\]b\[`Wca`](#)

8i Y`hc`WU]b[Yg`]b`Wcbgi`a Yf`XYa UbX`z`]a dcfh`UbX`Yi dcfh`WcbX]h]cbg`z`
UbX`j Uf]ci`g`]bj Ygh][Uh]cbg`cb`h\Y`XYj Y`cda Ybh`cZ`" \$' %&`VYUf]b[`z`h\Y`
Wcb`gh`cZ`" \$' %&`VYUf]b[`]g`WcbghUb`h`m`WU]b[]b["`HU_]b[`]bhc`UW`Wci`bh`h\Y`
W`ffYbh`a Uf`_Yh`a UW`cY`Wcbca]WdUfUa YhYfg`z`j U`i`Y`WU]b`Ub`U`mg]g`z`
WU]bbY`dUf`hbYfg`z`XYa UbX`UbX`gi`dd`m`z`h\Y`Wcb`gh`cZ`" \$' %&`VYUf]b[`k`]`
U`gc`VY`UZZYWhYX`hc`U`W`f`hU]b`Yi`hYbh`" #i]g`Ygh]a UhYX`h\Uh`h\Y`Wcb`gh`cZ`
' \$' %&`VYUf]b[`k`]`"bW`fYUgY`g][\h`m`Zfca`bYi`h`a`cb`h`"

H\Y`df]W`cZ`" \$' %&`VYUf]b[`Wcb]bi`Yg`hc`VY`UZZYWhYX`Vm`ZUWh`c`fg`gi`W`Ug`
a Uf`_Yh`XYW]bY`a`ca`Ybhi`a`z`j`Uf]ci`g`cddcfhi`b]h]Yg`UbX`WU`Yb[Yg`
<ck`Yj`Yf`z`Xi`f]b[`h\Y`ZcfYWUgh`dYf]cX`Zfca``&\$&&`hc`&\$&) `z`h\Y`[`cVU`



' \$' %& VYUf]b['gU`Yg'a Uf_Yh]g`YI dYWHYX`hc`Wcb]bi`Y`hc`VY`UVcj`Y`
Uj`YfU[`Y`"H\Y`[`fck`h\`fUHY`k`]"`Wcb]bi`Y`hc`]bWfYUgY`" `h]g`YI dYWHYX`h\`Uh`
`b`h\Y`gYWcbX`\`U`ZcZ`h\]g`mYUfz`h\Y`df]W`cZ` \$' %& VYUf]b[`k`]"`]bWfYUgY`
hc`U`Wfhu]b`YI`hYbh`

H\Y`a`Uf_Yh`hfYbX`cZ` \$' %& VYUf]b[3

H\Y`Wcgh`cZ`fUk` `a`UhYf]U`g`]g`gh]"`h\Y`V][`[`Ygh`Wcb`Wf`b`Zcf`a`Ubi`ZUWhi`fYfg`"
F`Uk` `a`UhYf]U`g`UW`W`i`bh`Zcf`UddfcI`]a`UhY`m`*`\$!`*`&I` `cZ`VYUf]b[`
a`Ubi`ZUWhi`fYfg`fYj`Ybi`Y`"H\Y`df]W`cZ`fUk` `a`UhYf]U`g`Zcf`VYUf]b[`g`
Zi`Whi`UhYg`Wcb]bi`ci`g`m`UW`W`fX]b[` `hc`a`Uf_Yh`YWcbca`]W`WcbX]h]cbg`"Gi`W`
Zi`Whi`Uh]cbg]b`fUk` `a`UhYf]U`df]W`g`UfY`VYWca`]b[`U`fYU`W`U`Yb[`Y`Zcf`
Wca`dUb]Yg`hc`a`U]bhU]b`Wca`dYh]h]j`YbYgg`UbX`Ybgi`fY`gi`ghU]bUV`Y`dfcZ]hg`"
5g`\][` \!`[`fUXY`ghY`Y`UbX`U`cm`ghY`Y`UfY`h\Y`a`U]b`fUk` `a`UhYf]U`g`i`gYX`hc`
a`Ubi`ZUWhi`fY`" \$' %& VYUf]b[`z`VYUf]b[`df]W`g`UfY`\][` \m`Wc`ffY`UhYX`k`]h\`
[`cVU`ghY`Y`df]W`hfYbXg`"H\Y`fY`Zc`fY`Z`Zi`Whi`Uh]cbg]b`h\Y`df]W`cZ`fUk`
a`UhYf]U`g`\Uj`Y`Vfci`[`\h`W`U`Yb[`Yg`Zcf`VYUf]b[` `a`Ubi`ZUWhi`fYfg`hc`
Wca`dUfY`df]W`g`UbX`ei`U`]hm`hc`a`Ubi`ZUWhi`fY`VYUf]b[`g`" `b`UXX]h]cbz`h\Y`
VYUf]b[`g`fYei`]fY`fY[`i`Uf`a`U]bhYbUbW`hc`Uj`c]X`ZU]i`fYg`UbX`YI`hYbX`
h\Y]f`gYfj`]W`"ZY`z`k`\]W`Zi`fh\Yf`]bWfYUgYg`a`U]bhYbUbW`Wc`ghg`"
H\Y`fY`Zc`fY`Z`ZUWhc`fg`gi`W`Ug`fUk` `a`UhYf]U`df]W`Zi`Whi`Uh]cbg`UbX`fY[`i`Uf`
a`U]bhYbUbW`Wc`ghg`UfY`YI`dYWHYX`hc`\]bXYf`h\Y`[`fck`h\`cZ`h\Y`VYUf]b[`
a`Uf_Yh`"

H\Y`a`Uf_Yh`XYa`UbX`cZ` \$' %& VYUf]b[3

H\Y`[`cVU`VYUf]b[`a`Uf_Yh]U`i`Y`]b`&\$&\$]g`%&'`" `(`V)`]cb`I`"G`"Xc`Ufg`
UbX`]g`YI`dYWHYX`hc`fYUW`%)`" `*`&V)`]cb`I`"G`"Xc`Ufg`Vm`&\$`+`z`UbX`h\Y`
Wca`dci`bX`Ubbi`U`[`fck`h\`fUHY`k`]"`U`gc`]bWfYUgY`ghYUX]m`"

5`VYUf]b[`]g`U`a`YW`Ub]WU`Y`Ya`Ybh`h\`Uh`gi`ddc`fhg`fY`Uh]j`Y`a`cj`Ya`Ybh`
UbX`\Y`dg`fYXi`W`Zf]Wh]cb`WUi`gYX`VYhk`YYb`a`cj`]b[`dUfhg`"6YUf]b[`g`UfY`
k`]XY`mi`gYX`]b`j`Uf]ci`g`]bXi`ghf]Yg`gi`W`Ug`Ui`hca`cV]Yg`z`k`]bX`hi`fV]bYg`z`
Wcbghfi`Wh]cb`a`UW`]bYfm`z`a`]b]b[` `a`UW`]bYfm`z`U[`f]W`hi`fU`Yei`]da`Ybh`z`
UbX`a`UW`]bY`hcc`g`" `h]g`i`gYX`]b`Ui`hca`cV]Yg`hc`Ybgi`fY`ga`cch`Xf]j`]b[`
cZ`Ui`hca`cV]Yg`z`Y`YWhf]Wj`Y\]WYg`f9J`E`UbX`ch`Yf`hmd`Yg`cZ`j`Y\]WYg`fgi`W`
Ug`][`\h`Wca`a`YfW]U`j`Y\]WYg`UbX`\YUj`mj`Y\]WYg`gi`W`Ug`hfi`W_g`E`"8`i`Y`
hc`h\Y`]bWfYUg]b[`i`h]nUh]cb`cZ`VYUf]b[` " \$' %& VYUf]b[`]b`j`Uf]ci`g`YbX`!
i`gY`]bXi`ghf]Yg`z`fc`]"`b[`a`]"`g`UbX`Y`YWhf]Wj`Y\]WYg`z`h\Y`[`cVU`" \$' %&



VYUf]b['a Uf_Yh`Ug`VYWca Y'a cfY`UbX'a cfY`ja dcfhUbh`H\Y
XYj Y`cda YbhicZ`hYW\bc`c[m`\Ug`ja dfcj YX`h\Y`cj YfU``YZZ]W]YbWmicZ
VYUf]b[`dfcXi Wg`]b`h\Y`Z]Y`X`UbX`YI hYbXYX`h\Y`dfcXi Wg`h\Y`Z`]ZY"

5Vci h`9f]W6YUf]b[`@]a]hYX

G]bW`h\Y`YghUV`]g\ a YbhicZ`9F`7`695F`B: `@A`#98`]b`&\$%`z`9f]W6YUf]b[
7c`z`@hX``\Ug`YghUV`]g\YX`dUfhbYfg\]dg`k]h`gca Y`X]ghf]Vi hcf`g`k`c`\Uj`Y
Ui`h\cf]nYX`k`cf`X!fYbck`bYX`a`Ubi`ZUWhi`fYfg`z`gi`W`Ug`Gk`YX]g\`G?:
VYUf]b[g`z;`Yfa`Ub`:`5;`VYUf]b[g`UbX`#B5`VYUf]b[g`z`UbX`gc`cb``K`Y`\Uj`Y
a`cfY`h\Ub`,`mYUfg`cZ`YI`dcfh`YI`dYf]YbW`WUb`\Y`d`mci`Z]bX`h\Y`]XYU`
di`fW`Ug]b[`gc`i`h]cb``J`Uf]ci`g`VfUbXg`cZ`VYUf]b[g`\Uj`Y`UVi`bXUb`h`ghc`W_g`z
]Z`mci`UfY`]b`hYfYghYX`z`d`YUgY`ZY`Y`ZfY`Y`hc`Wc`bhUWhi`g"

@cc_]b[`Zcf`h\Y``\$`%&`VYUf]b[`cf`[`Yh`a`cfY`]bZcfa`Uh]cb`UVci`h`Ubm`ch\Yf
VYUf]b[g`z`d`YUgY`gYbX`Ub`Ya`U]`hc`gU`Yg4`Yf]WYUf]b[`Wca`