Cb<sup>·</sup>h\Y<sup>·</sup>ch\Yf<sup>·</sup>\UbXž<sup>·</sup>h\Y<sup>·</sup>dfcXi Wh<sup>·</sup>\c<sup>·</sup>Xg<sup>·</sup>U<sup>·</sup>a cfY<sup>·</sup>ZUj cfUV<sup>·</sup>Y<sup>·</sup>fUh]b[<sup>·</sup>cZ

<ckYjYfžbchU``ZYYXVUW\_`\Ug'VYYb`[`ck]b["`Cb`8YkU`hg`cZZ]W]U` g]hYžh\Y ∞Vg]hY L%\YUXd\cbYg fYWY]j YX U a YfY &"\* ci hcZ) ghUfg`VUgYX`cb`\*%`fYj]Ykg"`IgYfg`\UjY`aYbh]cbYX`WcbbYWh]j]hm ]qqi Yq`k ]h\`6`i Yhcch\`UbX`WcbWYfbq`fY[UfX]b[`cj YfU```Xi fUV]`]hm" BYjYfh\Y`Yggžh\YfY`UfY`dcg]h]jY`bchYgžYgdYW]U``mfY[UfX]b[ VUhhYfm`cb[Yj]hmUbXgcibXeiU`]hm"

## IgYf:YYXVUW\_

H\YgY`\YUXd\cbYg`bch`cb`m`UfY`fYg]ghUbh`hc`Xi ghž`k UhYfž`UbX gk YUhž Vi h h Ym U gc ZYUhi fY Ub ]a dfYgg]j Y ' \$!\ci f VUhhYfm ]ZY U`cb[ 'k ]h\ 'UWh]j Y 'bc]gY 'WUbWY ``Uh]cb" 'Df]WY X 'Uh'`, ) "\$\$ 'cb' 5 a Uncbžh\YmUfY'V]`YX'Ug'U'ga Ufh'W\c]WY'Zcf'UbmcbY'k cf\_]b[  $b^{+}hY^{+}WcbghfiWhcb^{+}ZYX^{+}$ 

Ybj]fcba Ybhg"

AÅI]WcžAÅI]Wc′!'H\Y'kcf`X'cZ'WcbghfiWh]cb'UbX']bXighf]U`'kcf\_ ]g`cZhYb`Z]``YX`k]h\`bc]gY`h\Uh`WUb`VY`Vch\`U`X]ghfUWh]cb`UbX`U \UnUfX"`=b`fYgdcbgYž8YkU`h`\Ug`WfUZhYX`]hg``]bY`cZ`\YUXd\cbYg hU]`cfYX`hc`a YYh`h\Y`XYa UbXg`cZ`dfcZYgg]cbU`g`k \c`bYYX`fY`]UV`Y Ui X]hcfm'dfchYWh]cb'UbX'qi dYf]cf'qci bX'ei U`]hm''5WWcfX]b['hc 6][6Ub[AYI]₩cž8YkU`hg`≈Vg]hY!DfcZYgg]cbU``L%`\YUXd\cbYg ghUbX'ci h'Zcf'h\Y]f'Xi fUV]`]hm'UbX'dYfZcfa UbWY']b'W\U``Yb[]b[

DfcZYgg]cbU`\YUXd\cbYgžZcWg]b[ cb'dYfZcfa UbWYž Xi fUV]`]hmž'UbX'bc]qY'WUbWY``Uh]cb"

#### $5fY'8YkU'h/ = \frac{1}{2} - \frac{1}{2} \times Vg h' < YUXd \ cbYg$ K cfh h Y < mdY3I gYfFYj Yk g = bgXY

("'`cih`cZ`)`ghUfg`cb`5aUncbž`Wca]b[`Zfca`cjYf`%ž\*\$\$`fYj]Ykg" GcaY`WighcaYfg`W]hYX`dYfZcfaUbWY`X]dg`]b`Xighm`WcbX]h]cbgž dfcadh]b[`VimYfg`hc`kY][\`h\Y`\YUXd\cbYg`YZZYWh]jYbYgg U[U]bgh`h\Y]f`gdYW]Z]Wkcf\_`Ybj]fcbaYbhg"

## DfcXiWhFUb[YCjYfj]Yk

8 Yk U`h`cZZYfg`U`fUb[Y`cZ`acXY`g`hc`gi]h`X]ZZYfYbh`bYYXg"`5dUfh Zfca`h\Y`&Vg]hY!DfcZYgg]cbU``L %ž`h\Ym`\UjY`h\Y`&Vg]hY! DfcZYgg]cbU``L %Gž`k \]W\`]g`h\Y`gc`Y`acXY``cZZ]W]U``m`fUhYX`cb`h\Y]f g]hY"`5XX]h]cbU``mž`h\Y`&Vg]hY!Dfc`L&`dfYgYbhg`Ub`id[fUXYX W\c]WY`Uh`` %&- "--ž`dfca]g]b[`(\$`\cifg`cZ`VUhhYfm``]ZY`UbX YUfb]b[`U`a]IYX`fYj]Yk`fUh]b[`cZ`(`cih`cZ`)`ghUfg`Zfca`%')`igYfg"

: cfih\cgYik \cidfYZYfik ]fYXicdh]cbgži8Yk Uihi\Ugihk cihmdYgicZ \YUXd\cbYgžiX]gh]b[i]g\YXiVmih\Y]fiWcbbYWhcfg.icbYiWca dUh]ViY k]h\iUii ") a a i⁄UW\_iUbXiUbch\YfiZcfi5ddiYi@][\hb]b[iWcbbYWh]cbg" H\]gij Uf]YhmiYbgi fYgih\Uhih\YfY giUigi ]hUViYidfcXi WhiZcfibYUfim Yj Yfmik cf\_Yf gidfYZYfYbWYgiUbXifYei]fYa Ybhg"

# 6YmcbX<sup>°</sup>8YkU<sup>°</sup>h

: cf'h\cgY'YI d`cf]b['U`hYfbUh]j Ygž'MUI U`]bhfcXi WYg`i`hfUh\]b'YUf dfchYWh]cb`\YUXd\cbYg`h\Uh'UfY'dYfZYWh'Zcf'ei]Yh]b['bc]gY`]b a i`h]d`Y`g]hi Uh]cbg"'H\YgY`\YUXd\cbYg`VcUgh'U`bc]gY`fYXi Wh]cb fUh]b['fBFFŁcZ'')`X6`UbX`UfY'WYfh]Z]YX`U[U]bgh'5BG=G'"%ghUbXUfXg"'Bch'cb`m'Xc'h\Ym'YZZ]W]Ybh`m'V`cW\_``ci X`gci bXg`Zfca Ybj]fcba Ybhg``]\_Y`Wcbghfi Wh]cb`g]hYg`UbX`gdcfhg`Yj Ybhgž'Vi h'h\Ym U`gc`ZYUhi fY`Xi fUV`Y`XYg][b'Y`Ya Ybhg`gi W\`Ug`U`a YhU``\YUXVUbX UbX`UX^i ghUV`Y'dUXg`Zcf'U`Wca ZcfhUV`Y'Z]h"

K Y][\]b[`]b`Uh'A gh'&"\$\$`dci bXgž'h\YgY`\YUXd\cbYg`U`gc`dfca ]gY Xi fUV]`]hm`UbX`Wca Zcfhž'a U\_]b[`h\Ya `gi ]hUV`Y`Zcf`Vch\`UXi `hg`UbX W\]`XfYb"`K ]h\`U`[`ck ]b[`Uj YfU[Y`fUh]b[`cZ`(")`ci h`cZ`)`ghUfg`Zfca %ž( \* &`i gYfgž'h\Ym`dfYgYbh`U`ghfcb[`WUgY`Zcf`h\cgY`gYY\_]b[ fY`]UV`Y`Ui X]hcfm`dfchYWh]cb"`A cfY`XYhU]`g`UVci h`h\Y]f gdYW]Z]WUh]cbg`WUb`VY`Zci bX`\YfY" 5g`h\Y`bc]gY`Zfca`WcbghfiWh]cb`g]hYg`UbX`]bXighf]U``UfYUg dYfg]ghgž'W\ccg]b[`h\Y`f][\h`dfchYWh]jY`[YUf`fYaU]bg`WfiW]U`" K\Yh\Yf`mci`cdh`Zcf`8YkU`hg`jUf]YX`cZZYf]b[g`cf``cc\_`Y`gYk\YfYž ]bjYgh]b[`]b`eiU`]hm`\YUXd\cbYg`]g`YggYbh]U``Zcf`ghUm]b[`gUZY`UbX ZcWigYX`cb`h\Y`^cV"

8YhU]`g	
Cfh	AÅI]WCŽAÅI]WC
EiY``Yb	• k k k "V][VUb[a YI]Wć"Wća
	• k k k "Ua Uncb"Yg
	• Wc`ca V]U"mUI U"Wc

#### 6Ygi WXYb'G]Y'i bg'Ui Z'a Y]b!k ]Yb"bYh