## 

=bgd]fUh]cb'< YU`h\WUfY'Ubbci bW'g'BY]`'7Ua dVY`'/ \$' - /g
XYdUfhi fY'Ug'bcb!YI YW'h]j Y'X]fYWhcf'U\YUX'cZ'h\Y'&\$&)
5; A ž'YZZYWh]j Y'\* bY'\* ž'&\$&) "</pre>



A Y`Vci fbYž'5i ghfU`]U'!' $\pm$ b'U'a cj Y'h\Uh'\Ug'gh]ffYX'h\Y'k UhYfg']b h\Y'WcfdcfUhY'fYU`a  $\check{z}'\pm b$ gd]fUh]cb'<YU`h\WUfY'; fci d'D@7 fYWYbh`m'Ubbci bWYX'h\Uh'BY]`'7Ua dVY`` $\check{z}'$ U'j U`i YX'bcb!YI YW'h]j Y X]fYWhcf $\check{z}'$ k]``'bch'gYY\_'fY!Y`YWh]cb'Uh'h\Y'i dWca ]b['&\$&) '5bbi U`; YbYfU``A YYh]b["'H\]g'bYk g $\check{z}'$ k\]WX'gi fZUWYX'cb' $\check{z}$ bY'\* $\check{z}'$ &\$&)  $\check{z}$ fU]gYg'ei Ygh]cbg'UVci h'h\Y'Zi hi fY'`YUXYfg\]d'XmbUa ]Wg'k]h\]b'h\Y cf[Ub]nUh]cb $\check{z}'$ k\cgY'ghcW\_'h]\W\_Yf']g'; 6. $\prec$ 7"

BY]``7Ua dVY`` g`XYW]g]cb`Wca Yg`Uh`U`h]a Y`k \Yb`bcb!Yl YW h]j Y X]fYWhcfg`fB 98 gŁ'd`Um`Ub`]bWfYUg]b[`m`d]j chU``fc`Y`]b`[i]X]b[ WcfdcfUhY`[cj YfbUbWY`UbX`ghfUhY[]WX]fYWh]cb"`B 98 gž`Ug Yl d`U]bYX`Vm`<mark>7 \ U\W\</mark>Z`UfY`a Ya VYfg`cZ`U`Wca dUbmg`VcUfX`k \c c\ZYf`]bXYdYbXYbh`Wci bgY``k]h\ci h`VY]b[`a]fYX`]b`h\Y`XU]`m

cdYfUh]cbg"'H\Y]f']bdi h']g'Wfi W]U`ž'YgdYW]U``m'k \Yb'X]gW gg]cbg hi fb'hc'gYbg]h]j Y'a UhhYfg'`]\_Y'Yl YW h]j Y'Wca dYbgUh]cb'cf'h\Y Yj U`i Uh]cb'cZ'WcfdcfUhY'ghfUhY[]Yg"

## H\Y`Fc`Y`cZBcb!9IYW h]jY'8]fYWhcfg

Gcžk \ UhiYl UWhimiXcYgiUibcb!Yl YWih]j YiX]fYWhcfiXc3iH\ Ymidfcj ]XY Uij Uii UViYigci bX]b[iVcUfXiZcfiYl YWih]j YiX]fYWhcfgžiWcbhf]Vih]b[h\Y]fii bV]UgYXiYl dYfh]gYihciYb\ UbWi[cj YfbUbWidfUWh]Wig" 5\W\cfX]b[ihci5\W\cibh]b[i=bg][\hgžB98giUfYiYggYbh]UiiZcf a U]bhU]b]b[iUW\cibhUV]i]hmiUbXihfUbgdUfYbWhik]h\]b cf[Ub]nUh]cbg":H\ YmiYbgi fYiWca di]UbWik]h\ iiY[UiighUbXUfXg k\]iYiUigcicj YfgYY]b[iWf]h]WUiiUfYUgigi WXiUgif]g\_ia UbU[Ya Ybh UbXi]bhYfbUiiWcbhfcig"

B98g']bXYYX'k YUf'a Ubm'\Uhg"'H\Ym'gWfi h]b]nY'a UbU[Ya Ybh dYfZcfa UbW'UbX'Yj U`i UhY'f]g\_g VY'h\Ym'Z]bUbW]U`ž'cdYfUh]cbU`ž cf'fYdi hUh]cbU`"'K ]h\'h\Y]f'X]gh]bWh'dYfgdYWh]j Yž'h\Ym'WUb W\U``Yb[Y'a UbU[Ya Ybh'XYW]g]cbg'UbX'ZcghYf'VU`UbWXX X]gW'gg]cbg"'H\]g'gma V]ch]WfY`Uh]cbg\]d'VYhk YYb'YI YW'h]j Y'UbX bcb!YI YW'h]j Y'X]fYWhcfg'dfca chYg'Wca dfY\Ybg]j Y'XYW]g]cb! a U\_]b[ž'Ug'B98g'\Y`d'dfYj Ybh'WcbZ]Whg'cZ']bhYfYgh'UbX']bhYfbU`V]UgYgž'Ybgi f]b['ZU]f'fYdfYgYbhUh]cb'cZ'j ]Yk g']b'a YYh]b[g"

 $\label{thm:condition} $$H\Y'UXj\ UbhU[\ Yg'cZ'\ Uj\ ]b[\ 'bcb!Yl\ YW'\ h]j\ Y'X]fYWhcfg'ghfYhW.\ 'ZUf\ VYmcbX'h\ Y'VcUfXfcca "'H\ Ym']bhfcXi\ WY'ZfYg\ 'dYfgdYWh]j\ Yg'h\ Uh\ WUb'`YUX'hc']bbcj\ Uh]j\ Y'gc`i\ h]cbg'UbX'YbWci\ fU[\ Y'U'W'\ `hi\ fY'cZ\ UWWci\ bhUV]`]hm'''H\ Y]f'dfYgYbWY'WUb'U`gc'VY'dUfh]W'\ `Uf`m\ fYUggi\ f]b[\ 'Zcf'ghU_Y\c`XYfgž'cZZYf]b[\ 'U'gYbgY'cZ'ghUV]`]hmž\ YgdYW]U``m'Xi\ f]b[\ 'WX\U``Yb[\ ]b[\ 'h]a\ Yg''$ 

## @cc\_]b['5\YUX

H\Y`]a dUWhcZBY]``7Ua dVY`` g`XYdUfhi fY`a Um`fYgcbUhY`k Y``
VYmcbX`=bgd]fUh]cb'<YU`h\WUfY g`YI YW' h]j Y`gi ]hY'''<]g`UVgYbW'
dfca dhg`U`fYZYWh]cb'cb`\ck `B98g`WUb`YZZYWh]j Y`m`[i]XY
cf[Ub]nUh]cbg`h\fci [\`h\Y`a i f\_mk UhYfg`cZ'[cj YfbUbWY''K\]`Y
h\Y`7ca dUb]Yg`5Wh`cZ`&\$\$\*`]b`h\Y`I ? `XcYg`bch`YI d`]W]h`m

 $X]ZZYfYbh]UhY`VYhk YYb`YI YW'h]j Y`UbX`bcb!YI YW'h]j Y`X]fYWhcfgž Vch\`g\UfY`h\Y`gUa Y``Y[U``cV`][Uh]cbg`UbX`f]g_g"`H\]g`a YUbg`h\Uh Yj Yb`h\ci [\`B98g`Xcb h`Yb[U[Y`]b`XUm!hc!XUm`cdYfUh]cbgž`h\Ym gh]```\c`X`g][b]Z]WUbh`k Y][\h`]b`ghYYf]b[`h\Y`Wca dUbm`hck UfXg`]hg ghfUhY[]W[cU`g"$ 

5g'h\Y'gYUfW\'VY[]bg'Zcf'U'gi WWYggcf'k \c'WUb'Z]``'7Ua dVY``g g\cYgž'h\Y'Ya d\Ug]g'cb'Z]bX]b['U'WUbX]XUhY'k \c'WUb'Vf]b[ib]ei Y']bg][\hg'UbX'ZcghYf'Wcbghfi Wh]j Y'X]ggYbh'k]``'VY dUfUa cibh"'=h'[cYg'k]h\cih'gUm]b['h\Uh'bcb!Yl YW'h]j Y'X]fYWhcfg d`Um'U'Wfi W]U`'fc`Y']b'g\Ud]b['U'Wca dUbmg'Zihi fYž'YgdYW]U``m']b dfcj]X]b['`Y[]h]a UWm'UbX'ghUV]`]hm'h\Uh'UfY'dU]bghU\_]b[`mj U`i YX]b'cif'Wca d`Yl 'UbX'Yj Yf!Yj c`j]b['Vi g]bYgg'`UbXgWUdY"

 $K ]h\ 'h\ Y \cdot ghU\_Y g'\ ][\ \ \check{z}'U```Y mY g'k ]```VY \cdot cb ' \neq p d ]fUh]cb' < YU`h\ WUfY Ug']h'bUj ][ UhY g'h\ ]g'hfUbg]h]cbU``d\ UgY'''K ]```h\ Y m'Z]bX'h\ Y'f][ \ h ]bX]j ]Xi U``hc'WUffm'h\ Y'hcfW\ Zcfk UfX3'Cb`m'h]a Y'k ]```h\'`'''$ 

8 Y hU]`g	
Cfh	AY`VcifbYž5ighfU`]U
EiY``Yb	<ul><li>k k k "h]dfUb_g"Wca</li></ul>
	• VX U VWV Wc "i _
	<ul><li>UVWci bh]b[]bg][ \ hg"cf[</li></ul>

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