

BIOM9541



7 ci fgY`Cj Yfj]Yk

GHJZ`7cbHJW`8YHJ]`g

7cbj Ybcfg

BUa Y	9a U]`			

BUa Y	9a U]			

7ci fgY'8YHJ]`g

I b]hg'cZ7 fYX]h*`

Gi a a UfmicZ`hY'7ci fgY

9j Yf'k cbXYfYX`lck `@cfX'cZ`hY'F]b[g'cf'5j UHf'k YfY`WYUH'X3' <ck `UH`YH'g'a][\hUbU`mgY`hY V]ca YW'Ub]Wg'cZ`hY]f'a cj Ya Yb'hg'hc`ja d'fcj Y'dYfZ'cfa UbW'3'c'f'UVci h`lck `UXj UbW'g']b'k YUfUV'Y h'VW'bc'c[m'z'd`l'cbY`Uddg'UbX'ga Ufh[Ufa Yb'hg'W'Ub`VY'i gYX'hc`XYH'W'z'UbU`mgY`UbX'd'fYX]W'h]b'f'f]Yg UbX`\YU'h`]ggi Yg'cf'Yj Yb`\Y'd'dYcd'Y'k]h`Duf_]bgcb'f]X]gYUgY'k U`_k]h`W'cbZ'XYbW'3

H\]g'W'ci fgY`]b'f'cXi W'g'gh XYb'hg'hc`hY'a Y'h'cXg'i gYX']b`hY`UbU`mg]g'cZ`i a Ub'a cj Ya Ybh]b'a YX]W'bY UbX`\YU'h'z]b'W'i X]b[`Udd']W'h]cbg']b'gdcf'hV]ca YW'Ub]Wg'UbX'a i gW`cg_Y`YH'U'a cXY`]b["A Y'h'cXg'hc UbU`mgY`VcX'mgY`a Ybh'UbX'`c]b'h_]bYa U'h]W'g'z'c]b'h_]bY'h]W'g'z'k cf`_UbX'd'ck Yf'z'a i gWY`Z'cfW'g'UbX UggcW]UH'X`YbYf[m'W'c'ghk]`VY`W'c] YfYX"

5dd']W'h]cbg'cZV]ca YW'Ub]Wg']b`W]b]W]z'cW'W' dU'h]cbU`UbX'fYW'YU'h]cbU`UfYUg'k]`VY'd'fYgYb'h'X"<][\`][\hg]b'W'i XY`UW'W'gg'hc`B'Y'i f'cgW]Yb'W'F YgYUfVX`'5i g'h'fU']Uf]g'h'U'h'!cZ`hY!Ufh' 8'a c'h]cb`W'W'd'h'fY`UV`Z'cf'hY A c'7 Ud`UV'cf'U'c'f'mgY'gg]cbg'"`b`W]gY`cZ'7'c'J`-8'f'Yg'h'f]W]cbg'z']`bY'gg'cf'a]gUXj Ybh'fY'z'cd'h]cbg'k']` VY`Uj U]UV`Y`Z'cf'gh XYb'hg'hc`d'Ufh]W]d'Ub'h'fYa c'h'm'k]h`XYX]W]h'X'cb']bY'gi ddcf'h'd'fcj]XYX'Z'cf'&&&"C'i f Z'c'W'g']g'hc`cZ'Y'f'hY`VY'gh'd'c'gg]V'Y`YUfb]b[`UbX'h'UW]b[`YI d'Yf]Yb'W'k]h`U`Z'c'W'g'cb`\UbX'g'cb`UbX']b! d'Yf'gcb`YUfb]b[`YI d'Yf]Yb'W'g'k \YfY'd'c'gg]V'Y"

7ci fgY'5]a g

H\Y`U]a g'cZ`h]g'W'ci fgY`UfY`hc.

- % 8Yj Y'cd'i bXYfghUbX]b[`cZ`hY`Z]Y'X'cZ`i a Ub'a cj Ya YbhgW]Yb'W'UbX'X]j YfgY`Udd']W'h]cbg']b a YX]W'bY'z`\YU'h`UbX'gdcf'h'
- &"`b'f'cXi W'g'gh XYb'hg'hc`hY`z' bX'Ua Yb'U'g'cZ'Ub'U'ca m'UbX'V]ca YW'Ub]Wg"
- ' " 8Yj Y'cd'z' bX'Ua Yb'U'i bXYfghUbX]b[`cZ' 8'a c'h]cb`W'W'd'h'fY'z[U]h'UbU`mg]g'UbX'a i gW`cg_Y`YH'U` a cXY`]b["
- (`b'f'cXi W'g'gh XYb'hg'hc`UXj UbW'g']b'k YUfUV'Y`UbX'a cV]Y`h'VW'bc'c[]Yg'Z'cf'V]ca YW'Ub]W]`UbU`mg]g'cZ`i a Ub'a cj Ya Ybh'
-)" 9bUV'Y'gh XYb'hg'hc`W]h]W`m'Uddf]gY`h'VW'bc'c[]Yg'i gYX'Z'cf'V]ca YW'Ub]W]`UbU`mg]g'cZ`i a Ub a cj Ya Ybh'
- *" D'fcj]XY`Ub`Yb[U[]b[`Ybj]f'c'ba Ybh'Z'cf'gh XYb'hg'hc`gY'z'cf[Ub]gY`hY]f`YUfb]b[`UbX'XYj Y'cd'h'Ua W'c`UV'cf'U'h]cb'g_]`g'Z'cf'Yb[]b'Y'f]b[`d'f'c`Y'W'g"

7ci fgY`@YUfb]b[`C'i h'W'ca Yg

5Z'Y'f'gi W'W'gg'z`m'W'ca d'Y'h]b[`h]g'W'ci fgY'z'm'ci `g`l'ci `X`VY`UV'Y`hc.

@YUfb]b[`C'i h'W'ca Y	95`GHU[Y`%7'ca d'Y'h]b'W]Yg
%`5'bU`mgY`\i a Ub'a cj Ya Ybh'i g]b[`a YW'Ub]W]`d'f]b]W]d'Yg	D9`%`%z'D9`%`&z'D9`%"
&"`8Yg][b'UbX'd'YfZ'cfa `YI d'Yf]a Ybh'g'h'U'h'Yj U'i U'h'\i a Ub a cj Ya Ybh	D9`%`%z'D9`%`&"%z'D9`%`(`z'D9` "%z'D9` ""*
' "'`7]h]W]`m'UbU`mgY`YI d'Yf]a Yb'U`ci h'W'ca Yg']b`V'f'c'UX'Y'f'W'c'b'h'I h	D9`%`(`z'D9`%)`z'D9`%`"

ei]nnYg'k]h']bWb'hj Yg" 'C b']bY' \Y'd' UbX' WUgg' Wc' \UVcfUhc'b']g' Z' fh' Yf'dfcj]XYX' UbX' YbWc'i fU[YX' hc XYj Y'cd' Yb[]bYYf]b["YUXYfg\]d' UbX' h'Ua k cf_ 'g_]"g"

Gi [[YghYX' UddfcUWX' hc' "YUfb]b["'H\]g' Wc'i fgY' fYei]fYg' mci' hc' i bXYfgHUbX' h'Y' YW'i fY' a UHf]U' UbX' h'Yb Udd'm'h'Y' _bck' YX[Y' hc' V]ca YWU' Ub]W' Udd']W]h'cbg" 'h']g']a d'cftU'bh'hc' i bXYfgHUbX' h'Y' Z' bXUa YbH' Wc' bW' d'hg' Ug' gccb' Ug' d'cgg]V' Y' UbX' hc' Ug' _Z'cf' \Y'd']Z' mci' 'Xc' b'chi bXYfgHUbX' "7 ca d' YH' U' h'Y' YW'i fYg' UbX]Z' gca Yh']b[']g' i bWYUf'z'd' YUg' Y' Ug' _ei Ygh'cbg" A U_ Y' gi fY' mci' fYj]Yk' "YW'i fY' b'ch'g' UbX' fYUX' U' "a UHf]U' h'Uh]g' gi [[YghYX' cf' \UbXYX' ci h' 7 Ugg' d'Uf]W]d'U]h'cb' h' fci [\ 'U' h'Y' bXUbW' U' h' hc' f]U' g'z' UVcfU'hc' f]Yg' UbX [fci d' k cf_]g' YI d'YWYX' UbX' k]' "U' c'k' Z'cf' U' h' f]U' h'j' Y' a Y' h'c' Xg' c'ZU'Vgc'fV]b[' h'Y' fY' Yj Ubh]]b'Z'ca U]h'cb"

Bc' d'fYj]ci g' V]ca YWU' Ub]W]g' YI d'Yf]YbW' 3' B'ch'U' d'fcV' Ya "5g' d'Uf]hc'Z' h']g' Wc'i fgY' mci' U'gc'] Yh'UWY'gg' hc' Ub' cb']bY' b' h'fcXi Wc' f'm'6]ca YWU' Ub]W]g' Wc'i fgY' Z'cf' mci' f'fY'Z'fYbW"

5XX]h]cbU' 7ci fgY' bZ'ca U]h'cb

6]ca YWU' Ub]W]g']g' h'Y' gh' Xmc'Z' h'Y' Y'Z'Y'W'hc'Za YWU' Ub]W]d' \Ybca YbU' f'Z'cfW'g'z'j Y'c'W]h'Y'g'z' U'W'W' Y'fU]h'cbg'z' YbYf[]Yg'z'd'ck Yf'z'a ca YbH'U'z'a ca Yb'hg'z'Z']W]h'cb'z'Z'U]h']i Y' UbX' Z'U]i fY'c'cb' \i a Ub' VcX]Yg" 'h'fY']Yg'cb' Ub i bXYfgHUbX]b['c'Za YWU' Ub]W]g' UbX' Udd']Yg' h'Y' Z' bXUa YbH'U'g'c'Za YWU' Ub]W]g' hc' h'Y' g'f'i W'i fY' UbX' Z' bW]h'cb'c'Z h'Y' \i a Ub' VcXn'

6]ca YWU' Ub]W]g']g' i gYX']b' U' X]j YfgY' fUb[Y' c'Z'X]g'W]d']bYg']bW'i X]b['V]c'c[n'z'Yf[cbca]W]g'z'Yb[]bYYf]b[z' d' \mg]c'c[m'z'a YX]M]b'Y'z' UbX' a YWU' Ub]W]d' \mg]W]g' "A Ubmid'fc'Z'Ygg]cbU'g' - Yb[]bYYfg'z'XYg][bYfg'z'd' \mg]W] h'YfUd]g'hg'z'cfU' UbX' c'f'h'cd'UYX]W]gi f[Y'cbg'z'W]fX]c'c[]g'hg'z'UbX' UY'f'cg'd'U'W' Yb[]bYYfg' - i gY' d'fU'W]W] Udd']W]h'cbg'c'ZV]ca YWU' Ub]W]g'"

6]ca YWU' Ub]W]g' \Ug' Udd']W]h'cb']b' U' "U'fY'Ug'c'Z' \YU' h' W]fY' UbX' a YX]W]d'fc'V' Ya 'gc'j]b['h'Uh'fYei]fY d' \mg]W]d' a Ub]di' U]h'cb'" 'h'ia Um'VY' h'Y' a U'c'f'U'fY'U'c'Z'Wc' bW'fb']b' gca Y']b'gh'UbW'g'fY" ["U'f]h'Z'W]U' 'c']b'hg'z' d'fc'g'h'Y]h'W]g' UbX' c'f'h'cg'Yg'z'a YWU' Ub]ga' g'c'Z'd' \mg]W]d']b' f'm'c'f']h'ia Um'VY' U'j]h'U' UX' b'W'hc' Ub'c'h'Y'f'U'fY'U'fY" ["XYg][b'c'Z'Ub']a d' Ub' h'U'V'Y' d'U'W'a U_ Y'f'c'f'gd'Y'W]U']gh'gi f[]W]d'hc'c'g'c'"

H\]g' Wc'i fgY' Wc'j Yfg']b' XYd'h' h'Y' a Y' h'c' Xg' i gYX']b' h'Y' Ub'U' mg]g'c'Z' h'Y' V]ca YWU' Ub]W]g' c'Z' h'Y' \i a Ub a i gW' 'cg_ Y' h'U' 'g' mg' h' a "A Y' h'c' Xg' hc' Ub'U' mg' Y' Vc'X' mg' Y[a Y' bh'UbX' 'c']bh']b' Ya U]h'W]g'z' c']bh']b' Y]h'W]g'z' k cf_ UbX d'ck Yf'z'a i gWY' Z'cf'W'g' UbX' Ugg'c'W]U' h'Y' X' YbYf[m'Wc' g' h'k]' VY' Wc'j Y'fYX' "5dd']W]h'cbg'c'ZV]ca YWU' Ub]W]g']b' W]b]W]z'c'W'W' d'U]h'cbU' UbX' fY'W'Y'U]h'cbU' U'fY'Ug'k]' VY' d'fYg'Yb'h'X'"

5ggYgga Ybh

5ggYgga YbhUg_	K Y][\h	8i Y'8UHŸ	7ci fgY'@YUfb]b[Ci hŸa Yg'5ggYggYX
%"K YY_`mC b`]bY'E i]nnYg UbX'8]gW gg]cb'6cUfX'Dcghg	%"\$i	K YY_`m	%ž(ž*
&"CdYbG]a `A cXY` 8Ya cbghfU]hcbg	%"\$i	K YY_g'%ž' ž(/ '+	%ž&ž(ž*
' " `bXi gfm9b[U[Ya YbhUbX A cV]Y`HYWkbc`c[mF Ydcfh	%"\$i	K YY_`(`	%ž&ž' ž(ž) ž*
("7ca di h]h]cbU`@JVcfU]cfm F Ydcfh	%"\$i	K YY_`-`	%ž(ž*
) " `bX]j]Xi U`A ch]cb'7Udh fy Dfc`YWg	' \$i	K YY_g`*ž+'UbX`%\$	%ž&ž' ž(ž) ž*
*":]bU`9I Ua	' \$i	9I Ua `K YY_`	%ž&ž' ž(ž)

5ggYgga Ybh%" K YY_`mC b`]bY'E i]nnYg`UbX'8]gW gg]cb'6cUfX'Dcghg

8i Y'XUHŸ. `K YY_`m

K YY_`mDfc[fYgg`fHı E"H\Y`di fdcgY]g`hc`Ybgi fY`mci `UfY`a U_]b[`]ja Y`midfc[fYgg`h]fci [\`h\Y`cb`]bY
i b]hg" Mci `k]`bchY`hUhYUWk`cb`]bY`A`ccX`Y`i`b]h`Ug`U`bi`a`VYf`c`Zei`Ygh]cbg`Ya`VYXXYX`h]fci [\ci`h]h`
Mci`f`Ub]gk`Yfg`hc`h`YgY`ei`Ygh]cbg`k`j`VY`c[[YX`UbX`fYVf`fYX`]b`h`Y`[fUXY`Vcc_`"Mci`k`j`fYW]j`Y`cbY
WYX]h]f% E`Zc`f`YUWk`i`b]h]Zmci`V`a`d`Y`H`k`]h`U`g`V`f`Y`c`Z`U`h`Y`U`gh,`\$i`VY`Zc`f`mci`f`g`W`Y`X`i`"YX`"UVcfU]cfm
WUgg`c`Z`h`Y`g`Ua`Y`k`YY_`fl`d`hc`U`a`U`i`]a`i`a`c`Z`+`WYX]hgE`"h]g`YI`dYWYX`h`Uh]mci`V`a`d`Y`H`h`Y`cb`]bY
A`ccX`Y`i`b]h`VY`Zc`f`mci`f`"UVcfU]cfm]gYgg]cb`h`Uhk`YY_`"Mci`UfY`h`Y`b`YI`dYWYX`hc`Y`b`U`b`W`mci`f`Y`U`fb]b[
YI`dYf]Y`b`W`V`m`X]g`W`gg]b[`h`Y`k`YY_`g`A`ccX`Y`V`b`h`b`h`k`]h`mci`f`XYa`cbghfU]cf`U`h`h`Y`"UVcfU]cfm]gYgg]cb`"

MUmUbX'6cc`flı E]g`U`][\h\YUfHŸ`UggYgga Ybh`Uhk`j`U`ck`mci`hc`g`UfY`mci`f`f]i`a`d`g`UbX`ZU]i`fYg
k`]h`mci`f`V`"YU[i`Yg`Vmidcg]b[`mci`f`fYgi`hg`hc`h`Y`WUgg`A`ccX`Y`Zc`fi`a`"H\Y`di`f`dcgY]g`hc`Y`b`U`b`W
6€A`-`)(`%Yb[U[Ya Ybh`H\YfY`k`j`VY`h`fY`c`ddc`f`h`b]h]Yg`h]fci [\ci`h`h`Y`g`Ya`Y`gh`f`hc`d`U`f]h]d`U`h`]b`h`Y
MUmUbX'6cc`UggYgga Ybh`MUmUbX'6cc`c`ddc`f`h`b]h]Yg`k`j`U`dd`Y`U`f`]b`h`fY`c`Z`h`Y`g`c`Z`k`U`f`Y
`UVcfU]cf]Yg`fG`@%ž`G`@&`UbX`G`@ E`Mci`k`j`VY`[]j`Y`b`h`Y`c`ddc`f`h`b]h]mci`g`UfY`mci`f`f]i`a`d`l`cf`ZU]i`fY`k`]h
mci`f`V`"YU[i`Yg`cb`h`Y`X]g`W`gg]cb`V`c`U`f`X`"9UWk`dcghdi`V]g`Y`X`VY`Zc`f`h`Y`X`Y`U`X`]b`Y`k`j`Y`U`fb`mci`cbY
WYX]h]f% E`"8cbffia`]gg`ci`h`

5ggYgga Ybh&`C dYbG]a `A cXY`8Ya cbghfU]hcbg

8i Y'XUHŸ. `K YY_g'%ž' ž(/ '+

5HŸ`b`X`U`b`W`Zc`f`U`"G`c`Z`k`U`f`Y`@`UVcfU]cfm]gYgg]cbg`fG`@%ž`G`@&ž`G`@ `UbX`G`@(`E]g`V`a`di`g`cfm`":`U]i`fY`hc
U`h`Y`b`X`h`Y`"UVcfU]cfm]WUgg`k`j`a`Y`U`b`h`Uh]mci`W`b`b`ch`f`Y`W]j`Y`U`[fUXY`Zc`f`Ub]mci`Z`h`Y`Ugg][`ba`Y`b`g
Uggc`W]U`h`X`k`]h`h`g`UggYgga Ybh`V`a`d`cb`Y`b`h`

H\Y`Zc`f`g`c`Z`k`U`f`Y`"UVcfU]cf]Yg`d`f`c`j`X`Y`mci`k`]h`U`b`c`ddc`f`h`b]h]mci`U`b`U`mg`Y`U`b`X`g`]a`i`U`h`Y`i`a`U`b

a cj Ya Ybh'Mci 'k]''VY]bffcXi W'X'hc'h'Y'UbU'mg]g'cZ\i a Ub'a cj Ya Ybhi'g]b['C dYbG]a ž'U'Z'YY'mUj U]'UV'Y
gcZk UfY''Mci 'k]''i gY'h'Y'' 8 'A c7 Ud'XUH'mci 'Wc''YWH'Xi f]b['h'Y''UVcfUhc'fmigYgg]cb'UhBYi F 5 ']'b'k YY_'&
Ug'k Y''Ug'gUa d'Y'XUH'dfcj]XYX'hc'dYfZc'fa 'j Uf]ci g'UbU'mgYg'cZ\i a Ub'a cj Ya Ybh'Mci 'k]''VY'UggYggYX
VUgYX'cb'mci f'a cXY''UbX'mci f'[fci d'fYgdcbgYg"

H\Y'a Uf_'VfYU_Xck b'ZcfYUWX 'GcZk UfY '@UVcfUhc'fmif&") i 'Łk]''VY'Ug'Z''ck g.

- A cXY'ei U']hmf%) i 'Ł
 - \$'Zcf'bc'a cXY'
 - \$") 'Zcf'k cf_]b['a cXY''k]h'a U'cf'Yffc'fg
 - %'Zcf'k cf_]b['a cXY''k]h'a]bcf'Yffc'fg
 - %) 'Zcf'k cf_]b['a cXY''k]h'ci h'Yffc'fg
- ; fci d'fYgdcbgYg'f% 'Ł'
 - \$'Zcf'a]b]a U''YZcf'h
 - \$") 'Zcf'gca Y'YZcf'hž'Vi ha cfY'fYei]fYX
 - %'Zcf'[ccX'YZcf'hfB'ch'U''[fci d'a Ya VYfg'k]''fYW'j Y'h'Y'gUa Y'a Uf_Ł

"C b]bY': 'YI]V'Y '@YUfb]b[''Gh XYb'g'k]''VY'fYei]fYX'hc'gi Va]h'h'fci [\ 'A ccX'Y'U'k cf_]b['XYa c'cZ'h]Yf
a cXY''i g]b['Dck Yfdc]bh]bg'h'UX'cZUH'Y'bX]b['U'gYgg]cb'UbX'k]''gi Va]h[fci d'fYdcf'g'hc'h'Y'XYX]WUH'YX
cb]bY'gi ddcfhXYa cbgfUhc'f"

5ggYgga Ybh' . : ħXi ghfmi9b[U[Ya Ybh'UbX'A cV]Y'HYW'bc'c[mF Ydcfh

GHUfhXUH'. 'K YY_'"

8i Y'XUH'. 'K YY_'(

Mci f'h'Ua 'a i ghW'ccgY'VY'hk Y'Yb'6YHU'h'g'h]b['h'Y'GD@N5 'a ch]cb'Udd'f5dd'Y'i gYfg'cb'm'Ł'cf'
ħj Ygh[U]b['h'Y'UWW'fUW'micZUb'ch'Yf'\YU'h'Udd'fU''d\cbY'i gYfg'Ł' C b'm'cbY'fYdc'fhidYf'h'Ua ']'g'fYei]fYX
UbX'g\ci X'Zc'W'g'cb'Y]h'Yf.

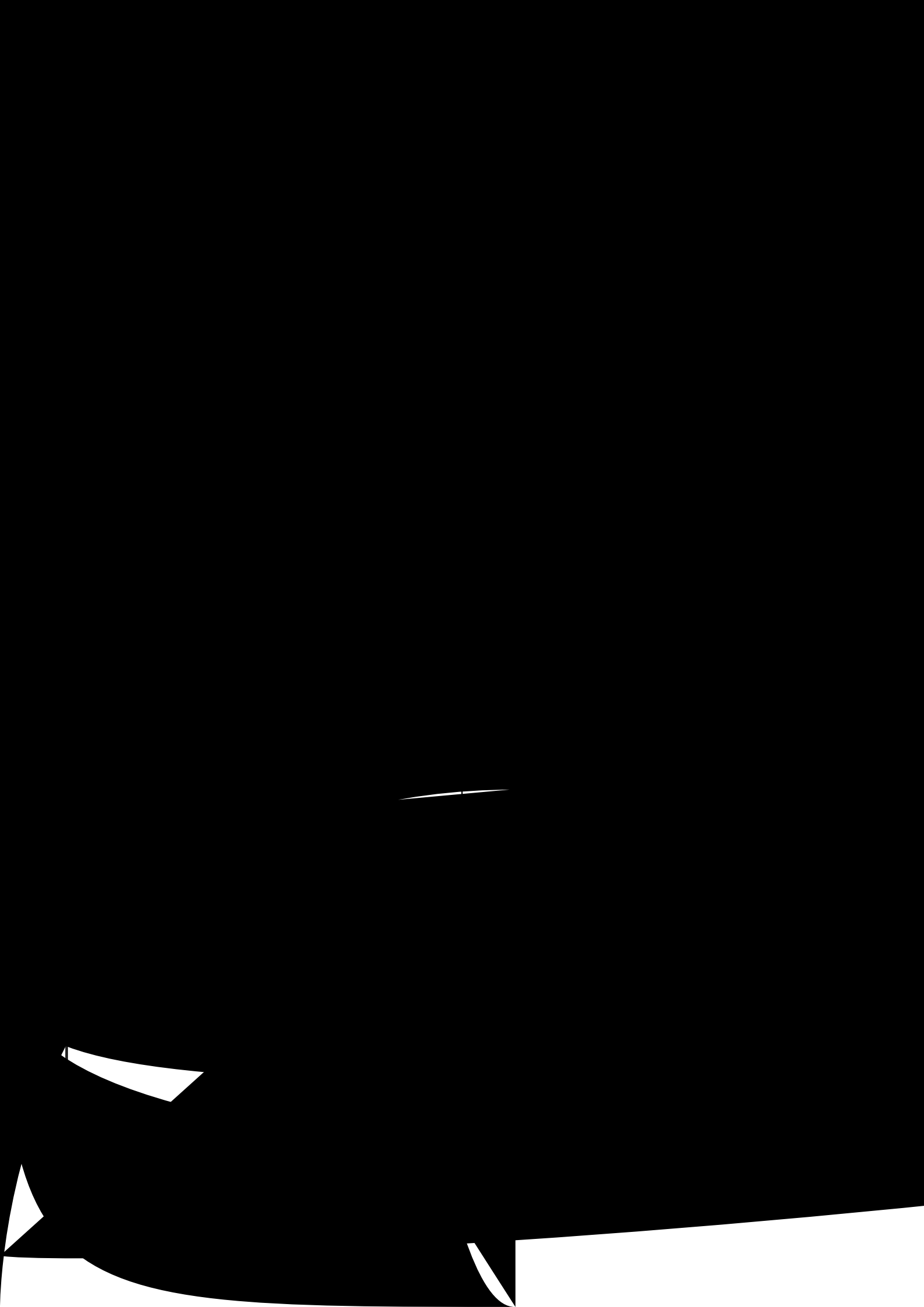
6YHU'h'gh'h'Y'GD@MN5 'A ch]cb'f%\$i 'Ł

Gh XYb'g'k]''VYHU'h'gh'h'Y'GD@MN5 'A ch]cb'a cV]Y'd\cbY'Udd'UbX'dfcXi W'U'g\cf'h'fYdc'fh'Zcf'GD@MN5"

hY'Wci fgY'UbX'k]''VY'cdYb!Vcc_''Mci 'k]''VY'dfcj]XYX'k]h'Ub'Yei Uhcb'g\YYhXi f]b['hY'YI Ua žk \]W
k]''VY'a UXY'Uj U]UV'Y'hc'mci 'k Y''VYZcfY'hc'hY'YI Ua 'gc'mci '_bck 'k \Uh'hc'YI dYW'A Uf_g'k]''VY
Uk UfXYX'Zcf'Wc'ffYW'Ubgk Yfg'UbX'Zcf'hY'ei U]hmcZmci f'k cf_]b[žk \]W'k]''\Uj Y'hc'VY'd\chc[fUd\YX'UbX
i d'cUXYX'Xi f]b['hY'YI Ua 'dYf]W'k]''\Uj Y'hc'VY'd\chc[fUd\YX'UbX

K YY_% '%&GYdHya VYf
! '%* 'GYdHya VYf

K YY_% '%&GYdHya VYf ! '%* 'GYdHya VYf		



F Ygci fWg

DfYgWf]VYX`F Ygci fWg

C b`]bY` : `YI]V`Y`@YUfb]i b[`ghi XYb]g`UbX`H\i fgXUm@UVcfUhc`fmghi XYb]g`g\ci `X`Vf]b[`hY]f`ck b`Ud]cd W`ca di hYf`hc`GcZk UfY`UbX`7ca di hU]cbU`@UVcfUhc]fYg`k]h`C dYbG]a `UbX`c`hYf`W`fY`gcZk UfY`]bg]U`YX" CdYbG]a `UbX`c`hYf`W`fY`gcZk UfY`]g`Uj U]`UV`Y`cb`hY`G5A) % `W`ca di hYfg`UbX`hYgY`k]`VY`i gYX`Zcf`hY Hi YgXUm]UbX`K YXbYgXUm`UVcfUhc`fm]gYgg]cbg`"

F YW`ca a YbXYX`F Ygci fWg

H\Y`fYW`ca a YbXYX`VUW`[fci bX`hY] hZcf`h`]g`W`ci fgY`UfY.

- F cVYf]gcbz`8"; "9`YhU`"F YgYUfW`a Yh`cXg`]b`V]ca YW]Ub]Wg":]fgh]f`f`gYW`bX`E`YX]h]cbz`<i a Ub ?]bYh]Wg`z`&\$\$(`f`f`&\$%`*`E`"
- K]b]h]fz`8`5`"6]ca YW]Ub]Wg`UbX`a`c]h`f`W`b]f`c`c`Z`i a Ub`a`c] Ya Yb]h`H`]fX`YX]h]cbz`>c`b`K]Ym`/Gcbg`z`b`W`z`&\$\$)`"

C`hYf`i gYZ`f`fYZ`fYbW`Vcc`_g`h`U]hUfY`Y`X`]b`hY`I`BGK`@]VfUfm]UfY.

- 9bXYfYz`>"8`"UbX`>"8`"6fcbn]bcz`b]f`cXi`W]cb`hc`V]ca YX]W`Yb[]bYf]b[`z`H`]fX`YX]h]cbz`5W]UYa]W DfYgg`z`&\$%`&"
- A Yf]Ua`z`>"@`UbX`@`; "?"fU][Yz`9b[]bYf]b[`a`YW]Ub]Wg`z`G]I`h`YX]h]cbz`>c`b`K]Ym`/`Gcbg`z`&\$\$`,`"

Gh XYb]g`gYY`_]b[`UXX]h]cbU`fYgci fWg`W]b`U`gc`c`V]U]b`Ugg]g]h]UbW`Z`ca`h`Y`I`BGK`@]VfUfm]U] [\htd.##\]VfUfm\]i`bgk`"YXi`"Ui`#`](#)

5XX]h]cbU`fYU]b[g`UbX`fYW`ca a YbXYX`k`YVg]h]g`k`]`VY`]g]h`X`cb`A`ccX`Y`k`Y`b`f`Yei`]fYX`"

7ci fgY`9j`U`i`U]cb`UbX`8Yj`Y`cda`Ybh

Gh XYbhZYXVUW`_`Ug`Y`dYX`hc`g`UdY`UbX`XYj`Y`cd`h`]g`W`ci`fgYz`]bW]X]b[`ZYXVUW`_`c`V]U]bYX`Z`ca`c`b!]bY`Yj`U`i`U]cbg`Ug`d`Uf]cZ]I`BGK`'g`a`m]l`dYf]YbW`d`f`c`W`gg`"M`ci`f`ZYXVUW`_`]g`a`i`W`UddfYW]U]h`X`UbX`hU`_`Yb`j`Yfm]gYf]ci`g`m`"7`cb]h]bi`U`]a`d`f`c]`Ya`Yb]g`UfY`a`UXY`hc`h`Y`W`ci`fgY`VUgYX`]b`d`Uf]c`b`gi`W`ZYXVUW`_`UbX`h`]g`Y`d`g`i`g`hc`]a`d`f`c]`Y`h`Y`W`ci`fgY`Z`c`Z`h`i`fY`gh`XYb]g`"b`Z`ca`U`gh`XYbhZYXVUW`_`]g`U`gc`g`ci`[`h`ZYei`Ybh]m]h]fci`[`h`ci`h`h`Y`gYa`Yg]h]f`UbX`i`gYX`hc`Ugg]g]h]b`h`Y`d`f`c`[`fYgg]cb`c`Z`h`Y`W`ci`fgY`"

@UVcfUhc`fmK`cf`_g`h`cd`b`Z`ca`U]cb

Gh XYb]g`k`]`VY`f`Yei`]fYX`hc`g][`b`7`C`J`-`8`%`g`UZ`XYW]Uf]h]cbg`VY`Z`c`fY`U]h]bX]b[`Ub]m]Z]W]!`h`!`Z]W]`UVcfUhc`fm`gYgg]cbg`UhBYi`F`5`g]g]h]U]h]c`Z`h`Y]U]f]h]A`c`7`Ud`UV`z`k`h`]W]`]bW]`XYg`Yj`]X]YbW`c`Z]`UW]b]U]h]cb`"

Gi Va]gg]cb'cZ5ggYgga YbhiHUg_g

@UVcfUhcfmfYdcfng'UbX'a U'cf'Ugg][ba Ybht'k]''fYei]fY'U' [Bcb'D'U\[\]Uflga'8YWUfUhc'b'7cj'Yf'G\YYH'](#)

5gg][ba Ybht'g\ci'X'VY'gi Va]H'X'cb'h'a Y''5'XU]mdYbU'micZ) i' cZ'hY'a Uf_g'Uj U]UV'Y'Zcf'hUh
Ugg][ba Ybhk]''Udd'mZcf'k cf_'fYW'j YX'UZ'Yf'h'Y'Xi Y'XUH''5bmiUgg][ba Ybhia cfY'h'Ub') 'XUmg''UH'k]''bch
VY'UW'W'dh'X''H\Y'cb'mYI Ya dh]cb'k]''VY'k \Yb'df]cf'dYfa]gg]cb'Zcf''UH'gi Va]gg]cb'\Ug'VYYb'[fUbh'X'Vm
h'Y'7ci fgY'W'cfX]bUhc'f''9I h'bg]cbg'k]''VY'[fUbh'X'cb'mcb'a YX]W'cf'W'a dUgg]cbUH'[fci bXg'i bXYf
YI hfYa Y'W'fW'a g'U'bv'W'g''

5 WUXYa]W< cbYgmiUbX`D`U[]Uf]ga

D@5; =F =GA

6Yk UfY`5b`Ugg][ba YbhUUh]bWl XYg`d`U[]Uf]gYX`a UHf]U`k]`fYW]j Y`U`\$i : U]žUbX`gh XYbhtg`k \c d`U[]Uf]gY`a UmZ]`hY`Wci fgY`Gh XYbhtg`k \c`d`U[]Uf]gY`k]`Uj Y`hY]f`bUa Yg`YbHYfYX`cb`U`d`U[]Uf]ga fY[]ghf`UbX`k]`VY`]UV`Y`hc`X]gW]d`]bUfmiUW]cbž]bWl X]b[`Yl Wl g]cb`Zca `Ybfc`a`Ybh`
#]g`Yl dYWYX`hUUhU`gh XYbhtg`a i ghUUhU`h]a Yg`gi Va]hY]f`ck`b`k`cf`_`Zcf`UggYgga Ybh`Gi Va]h]b[`hY`k`cf`_`cf`]XYUg`cZgca YcbY`Y`gY`k]h]ci hWYUfmiUW_bck`YX[]b[`hY`gci fW`cZVcffck YX`a UHf]U`cf`]XYUg`]g d`U[]Uf]ga "

5`UggYgga Ybhtg`k \]Wl`mci `UbX`]b`a i gh`Uj Y`U`[Bcb`D`U\[\]Uf\]ga`8YWUfU\]cb`7cj`Yf`G`YYH`H\\]g`\]g`Zcf`Vch`\]bX\]j`\]Xi`U`UbX`\[fci`d`k`cf`_`5HUVW`\]h\]c`mci`f`Ugg\]\[ba YbhVYZcfY`gi Va \]h\]b\[`\]h\]c`hY`7`ci`fgY`7`ccfX\]bUhc`f`cf`Uh\]hY`GVXcc`C`Z\]W"](#)

D`U[]Uf]ga `]g`hY`i`gY`cZUbchYf`dYfgcb`g`k`cf`_`cf`]XYUg`Ug`]ZhYmik YfY`mci`f`ck`b`K` \Yb`]h]g`bYW]ggUfmicf`XYg]fUV`Y`hc`i`gY`chYf`dYcd`Y`g`a`UHf]U`mci`g`lci`X`UXYeI`UH`mUW_bck`YX[Y`k`l`cgY`k`cfXg`cf`]XYUg`hYm`UfY`UbX`k` \YfY`mci`Zci`bX`hY`a`f`]j`]b[`hY`Wca`d`YH`fYZYfYbW`XYH]`gž]bWl X]b[`dU[Y`bi`a`VYffg]H`Y`@YUfb]b[`7`YbHY`dfcj`]XYg`Z`fH`Yf`]bZcfa`U]cb`cb`k` \UhWcbgh]h`H`g`D`U[]Uf]ga `Uh` \Hdg`#]gh XYbhi`bgk`"YXi`"Ui`#]U[]Uf]ga

K Y'UW_bck`YX[Y'hY'6YXY[U'dYcd`Y`k \c`UfY`hY`hfUX]hcbU`W gfcX]Ubg`cZhY`UbXg`cb`k \]W`I`BGK
? Ybg]b[hcb`Wla`di`g`]g`cWU`hYX"

