

7ci fgY Cj Yfj]Yk

GHJZZ7cbHJWh8YHJ]`g

7cbj Ybcfg

BUa Y	9a U]`	5j U]`UV]`]hm	@cWUh]cb	D\cbY
A]WXUY`A UbYZJY`X	a UbYZJY`X4 i bgk "YXi "Ui	6i g]bYgg^\ci fg	C Z]WY^) %*U <]`a Yf 6i]`X]b[\$(\$)(++\$* *

GWXcc`7cbHJWh =bZcfa Uh]cb

9b[]bYYf]b[*\DXi glf]U``HfU]b]b[-- *\DXi glf]U``lfU]b]b['ei Ygl]cbg'

LBGK Gh Xm5VfcUX - gh XmUVfcUX gh XYbhYbei]f]Yg flcf]bVci bX gh XYbhgŁ

<u>I BGK '91 WXUb[Y</u>'-ghi XYbhYl WXUb[Y'Ybei]f]Yg'fZcf']bVci bX'ghi XYbhgŁ'

LBGK : i h fY Gh XYbhg - dch bh U`gh XYbh Ybei]f]Yg Y"["UXa]gg]cbgž ZYYgž dfc [fUa gž WfYX]h lfUbgZ f

D\cbY.

fŽ*%&Ł-',),)\$\$ - Bi WYi g Gh XYbh<i V

fŽ*%%&£'-',) '+**%'-'9b[]bYYf]b['=bXi ghf]U`'HfU]b]b['

fŽ*%%&L-',) " %+- '-1 BGK 'Gh Xm5VfcUX'UbX'I BGK '91 WXUb[Y'fZcf']bVci bX'gh XYbhgL'

7 ci fgY 8 YHJ]`g I b]hg cZ7 fYX]h** Gi a a UfmcZh\Y 7 ci fgY

5XX]h]cbU`7ci fgY ±bZcfa Uh]cb

H\]g;H\Yg]g;5;Wti fgY;i gYg;WtbfUa]bUfYX;g]fY;fYa YX]Uf]cb;Ug;U;j Y\]WY;fc;XY;]j Yf;fh\Yg]g;dfc;YWf;YUfb]b[cVYWf]j Yg";9bj]fcba YbfU;`dc;i f]cb;]g;U;a Ufcf;h\fYUfifc;\i a Ub;UbX;Ybj]fcba YbfU;\YU;fh,[cvU;m";7]j];
Yb[]bYYf]b[;dfc;YWg;cZhYb;\Uj;Y;fc;fY;g]fY;WtbfUa]bUf]cb;VYZcfY;dfc;WYX]b[;k]h, Wtbgffi;Wf]cb;"
F Ya YX]Uf]cb;cZWtbfUa]bUfYX;g]fYg;]g;U;a i 'fjX]gW]d']bUfmYbXYUj ci f;fYei]f]b[;Yb[;U[;Ya YbficZWj]j;z
Ybj]fcba YbfU;UbX;WXYa]WU;Yb[]bYYfgz;gi fj Ymcfg;UbX;gW]Ybf]gfg;fV]c;c[]gfgz;WXYa]gfg;UbX;Ybj]fcba YbfU;
gW]Ybf]gfgt;H\Yg]g;5;k];;ZcW;g;cb;WtbfUa]bUffX;g]fY;WXUfUWff]gUf]cb;UbX;Xyj;Y;cda YbficZWtbWfdfi;U;g]fY;a cXY;g;Gi VgYei Ybfimz;H\Yg]g;6;k];;ZcW;g;cb;fYa YX]Uf]cb;cdf]cbg;UggYgga YbfiUbX;fYa YX]Uf]cb;UWf]cb;dfUbg;]b;fh;Y;Zc;ck]b[;fhyfa;"6ch;Wti fgYg;k];;fYei]fY;Udd;]WUf]cb;cZa;UffyfUfi;fY;*\df[Ufi;fY;*\df[Ufi;fY];Ylfbfih\fci [\ci_hh\YibX;fX];Uffmci;k];YXY]WUff;Uff;fY;*\df[Ufi;fY];Yk]b[;cZ;]fYfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];Yk]b[;cZ;]fYfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];Yk]b[;cZ;]fYfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY];YlfUfi;fY;*\df[Ufi;fY];YlfUfi;fY];YlfUfi;fYY_"

5ggYgga Ybh

5ggYgga Ybh'tUg_	K Y][\h	8iY'8UhY	7ci fgY`@YUfb]b[Ci HWca Yg`5ggYggYX
%"'H\Yg]g) \$1		

H\YfY`UfY`bc`Zcfa U`fYei]fYa Ybhg`k]h\`fYgdYWhrc`fYdcfhghfi Wh fY"'\dignormali hc`XYj Y`cd`Ub`cdhja U`ghfi Wh fY"'\dignormali hc`Xyj Y`cd`Ub`cdhja Ybhgžg]hYa cXY``WcbWhdgžZl fh\Yf`]bj Yghj[Uhjcb`ghfUhY[]Yg`UbX`fYa YX]Uhjcb`UWhjcbg`hc`a]hj[Uhjb['h\Y`f]g_'h\Y WcbhUa]bUhjcb`dcgYg"'\dignormali f`gi Va]gg]cbž\ck Yj Yfž]g`]bX]j]Xi U``k cf_"'\dignormali hc`a Umi gY`fYgci f\Wg`[YbYfUhYX Vmmci f`[fci d`fY["'Z][i fYg&Vi hmci `Wbb`[YbYfUhY`mci f`ck b`UbX`mci `Xc`bch\Uj Y`hc`UX\YfY`hc`[fci d`WcbgYbgi g"`Gi Va]hmci f`dXZZ]Y`j]U`Hi fb]hjb`]b`A ccX`Y`Vm)`da :: f]XUmcZK YY_-'-''\dignormali wUb`a U_Y`mci f`gi Va]gg]cb`YUf`]Yf`]Z]h]g`a cfY`\Wcbj Yb]Ybh''@UhY`gi Va]gg]cbg`k]``VY`dYbU`]gYX`Vm)`i `dYf`XUm'`H\YXYUX`]bY`Zcf`UVgc`i hY`ZJ]`fhYfc`[fUXY&]g`)`XUmg`UZhYf`h\Y`gi Va]gg]cb`XYUX`]bY''`GdY\JU``\Wcbg]XYfUhjcb`fYei Yghg`UfY`hc`VY`a UXY`j]U`A ccX`Y''

5ggYgga Ybh& 5gg][ba Ybhg UbX dfYgYbhUh]cb

5ggYgga Ybh`Yb[h\. J Uf]YX

Gi Va]gg]cb`bchYg. '5gg][ba Ybhgʻgi Va]hhYX`UgʻdXZj]UʻHi fb]hJb" 'DfYgYbhUhJcb`gi Va]hhYX`UgʻA D(ʻj]U A YX]Uʻ; U``Yfm'i

8YUX`]bY'Zcf'UVgc`i hY'ZU]`. "C bY'k YY_'UZhYf'gi Va]gg]cb'XYUX`]bY

A Uf_g fYh fbYX. "Hk c k YY_g UZhYf gi Va]gg]cb XYUX`]bY

H\]g`Wca dcbYbhcZWci fgY`UggYgga YbhWcbg]ghg`cZhk c`Ugg][ba Ybhg`k cfh\`&\$i `YUW\`UbX`U`dfYgYbhUh]cb k cfh\`%\$i "`

5ggYgga Ybh'Wf]hYf]U

5ddfcdf]UhY. '8cYg'h\Y'gi Va]gg]cb'UX\YfY'hc'fYei]fYa Ybhg3'< Ug'h\Y'gh XYbhi bXYfghccX'k \Uhik Ug Yl dYWYX'cZh\Ya ']b'h\]g'Ugg][ba Ybh3'=g'h\Y']bZcfa Uh]cb'dfYgYbhYX'fY'Yj Ubhhc'h\Y'hUg_3

7cffYWh '=g'h\Y']bZcfa Uh]cb'dfYgYbhYX'ZUWh U``m'WcffYWricf'UWW fUhY3'8cYg'h\Y'WcbhYbhicZh\Y'gi Va]gg]cb fYZYWrifYU`]mm3'=g'h\Y'gi Va]gg]cb'ZYY'cZa YUb]b[`Ygg'ei U`]hUh]j Y'\mdYfVc`Y3

DfcZYgg]cbU`. '€j'h\Y`glfi Wi fY`UbX`ei U`]mcZj cWU``XY`]j YfmUbX'j]gi U``U]Xg`cZdfcZYgg]cbU``glUbXUfX38cYg'h\Y`gi Va]gg]cb'[jj Y'h\Y`]a dfYgg]cb']hk Ug`dfYdUfYX`VmU`dfcZYgg]cbU`3

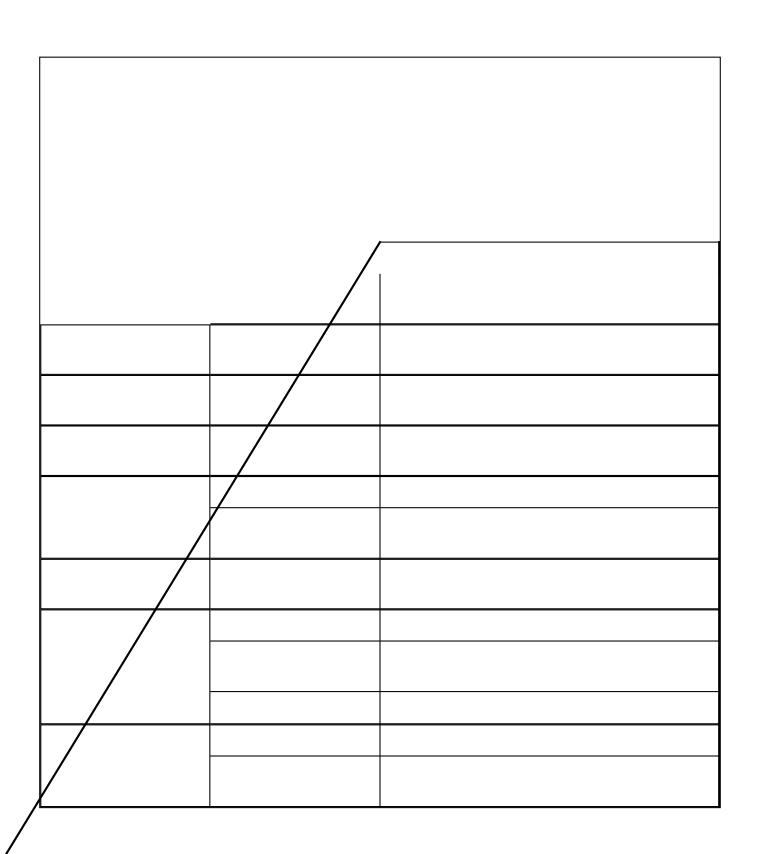
9b[U[YX.'=g'h\YfY'Yj]XYbWY'cZYb[U[Ya Ybhk]h\'h\Y'hUg_'VYmcbX'VUg]WfYei]fYa Ybhg3'<ck 'XYYd`m'\Ug h\Y'ghi XYbh']bj Ygh][UhYX'fYgci fWrg'Uj U]`UV'Y'hc'dfcXi WY'h\Y'gi Va]gg]cb3

5XX]h]cbU`XYhU]`g

5gg][ba Ybh'% 'H\]g`Ugg][ba Ybh'fYei]fYg`mci 'hc`fYdcfhcb'h\Y`f]g_g`g]hY`WcbhUa]bUh]cb'dcgY`hc`WJj]`
Yb[]bYYf]b['dfc^YWg"'I g]b['WcbhYa dcfUfmYI Ua d`Ygž'XYgWf]VY`\ck ']bgi ZZ]WJYbhWcbg]XYfUh]cb'cZ'W\Ya]WU`
WcbhUa]bUh]cb'cZh\Y`Ybj]fcba Ybh\Ug`X]gfi dhYX`Yb[]bYYf]b['k cf_g`cf'dfcXi WYX`ghfUbXYX`UggYhg`UbX
\ck 'UXYei UhY'd`Ubb]b['Wci `X`\Uj Y`Uj c]XYX`h\Y`g]h Uh]cb" '8

5gg][ba Ybh'& 'H\]g'Ugg][ba Ybh'fYei]fYg'mci 'hc 'XY`]j Yf'Ub 'Yl YW hj Y gi a a UfmfYj]Yk 'cZU'g]hY WX UfUWYf]gUhjcb 'hfU]b]b['gcZhk UfY'dUW_U[Y'fH9A DC Ł"'H\]g WUb 'ZcW' g'cb 'UbmUgdYWhcZh\Y'gcZhk UfY'Zfca hYW,b]WD''UgdYWhg cZh\Y']bHYfZJWW' hc ']kg 'YZYWhj YbYgg'Ug'U'hfU]b]b['hcc'"' \\
gcZhk UfY'UbX']kg'di fdcgYz'&LWca a Ybhg'cb'dcg]hj Y'UgdYWhg'cZh\Y'gcZhk UfY'UbX'' L'gi [[Ygh]cbg'Zcf]a dfcj Ya Ybhg'h\Uh'Wci 'X'VY'a UXY"'H\Y'H9A DC 'gcZhk UfY'dUW_U[Y']g'Uj U]'UV'Y'Uh \\
\hd_#df'k YV\$' "[YcgmbHYWWca #Ya dc# YcZcfa #'H\Y'H9A DC 'I gYf'; i]XY'Uj U]'UV'Y'cb'h\Y'g]hY'g\ci 'X'VY \\
\wcbgi 'hYX"'Gi [[YghYX'h]a Y'Wca a]ha Ybh—'\%\$'\ci fg"'H\]g'gi Va]gg]cb'\Ug'U'cbY'dU[Y'']a]h''H|hY'dU[Yz' fYZYfYbWrg'UbX'UddYbX]Wrg'WUb 'VY']bWi XYX'VYmcbX'h\Y'cbY'dU[Y'']a]h''H\YfY'UfY'bc'gdY\W]W \\
fYei]fYa Ybhg 'Zcf'ghfi Wh fY'cf'k cfX'cf'WkUfUWhYf'Wci bh''Gi Va]hiUg'U'dXZj]U'Hi fb]hjb'cb'A ccX'Y'Wn) 'da : f]XUmcZK YY_+"'@UhY'gi Va]gg]cb'k]'`VY'dYbU']gYX'Vm) i 'dYf'XUm''H\Y'XYUX']bY''Zcf'UVgc'i hY'ZJ]''fhYfc [fUXYL']g') 'XUmg'UZhYf'h\Y'gi Va]gg]cb'XYUX']bY'''GdYW]U'`Wcbg]XYfUhjcb'fYei Yghg'UfY'hc'VY'a UXY'j]U A ccX'Y"

DfYgYbHJhjcb. DfcXi WY UbX gi Va]hU j]XYc dfYgYbHJhjcb ci h]b]b['mci f'dfcdcgU``Zcf'U`XYHJ]YX g]hY]bj Ygh[Uhjcb Zcf'[fci bXk UhYf'WcbHJa]bUhjcb]b h\Y`ZWhjcbU``gi Vi fV`cZ8 Uf`]b[hcb"'DfcXi WY`U`) 'a]bi hY A D('j]XYc dfYgYbHJhjcb k]h\ j]gi U``U]Xg"'H\Y`gHi Wh fY`UbX`WcbhYbhcZmci f'dfYgYbHJhjcb ']g`]b mci f WJdUV`Y`\UbXg"'H\YfY`UfY`bc 'gdYWjZWfYei]fYa Ybhg`Zcf'bi a VYfg`cZg`]XYg`h\ci [\`cbY`g`]XY`dYf'a]bi hY`]g ghJbXUfX"'Gi Va]hh\Y`Z]Y`hc mci f'a YX]U`[U``Yfm]b`A ccX`Y`Vm) 'da ': f]XUmcZK YY_'%\$"'Nci 'WJb'a U_Y`mci f gi Va]gg]cb YUf`]Yf`]Z]h]g'a cfY`Wcbj Yb]Ybh'`\dghfi Whjcbg`Zcf'gi Va]hh]b['j]XYc`k]```VY`gi dd`]YX"'`@UhY gi Va]gg]cbg'k]```VY`dYbU`]gYX`Vm) i 'dYf`XUm''H\Y`XYUX`]bY`Zcf'UVgc`i hY`ZJ]``fhYfc`[fUXYE`]g`) 'XUmg'UZhYf h\Y`gi Va]gg]cb'XYUX`]bY"'GdYW]U``Wcbg]XYfUhjcb'fYei Yghg'UfY`hc`VY`a UXY`j]U`A ccX`Y"



FYgci fWYg

DfYgWf]VYX F Ygci fWYg

• @YWfi fY`gYf]Yg`Vm[cj Yfba YbhUbX`]bXi glfmYl dYffg"`Mci `k]``\YUf`Zfca `dfcZYgg]cbU`g`UVci h j Uf]ci g`UgdYWfg`cZg]hY`fYa YX]Uf]cb"`G`]XYg`UbX`fYWcfX]b[g`Uj U]`UV`Y`cb`A ccX`Y"

Gi Va]gg]cb cZ5ggYgga YbhHUg_g

D`YUgY`fYZYf`hc`h\Y`A ccX`Y`dU[Y`cZh\Y`Wci fgY`Zcf`Z fh\Yf`[i]XUbW\`cb`UggYgga Ybhigi Va]gg]cb"

I BGK `\Ug`U`ghUbXUfX``UhY`gi Va]gg]cb`dYbU`hmcZ

•)ı 'dYf'XUmž'Zcf'U``'UggYgga Ybhg'k \YfY'U'dYbU'hm'Udd`]Ygž'WUddYX'Uh'Zjj Y'XUmg'f1%&\$`\ci fg\z'UZhYf k\]WX'U'ghi XYbh\WUbbchgi Va]h'Ub'UggYgga Ybhž'UbX'bc'dYfa]hhYX'j Uf]Uh]cb"

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

6Yk UfY "5b" Ugg][ba Ybhh\Uh]bWi XYg"d`U[]Uf]gYX"a UhYf]U``k]```fYWY]j Y"U"\$ı ': U]`žUbX`ghi XYbhg`k \cd"\U[]Uf]gY\"a UmZU]``h\Y'Wci fgY"'Ghi XYbhg`k \cd"\U[]Uf]gY\"UfY\"U`gc"`]UV`Y'hc"X]gW]d`]bUfm'UWf]cbž]bWi X]b[YI Wi g]cb'Zfca 'Ybfc`a Ybh'

 $D`U[]Uf]ga ~]g'hY'i gY'cZUbch\Yf'dYfgcb'g'k cf_'cf']XYUg'Ug']Zh\Ymk YfY'mci f'ck b'''K ~Yb']h]g'bYWYggUfmcf XYg]fUV'Y'hc'i gY'ch\Yf'dYcd'Y'g'a UhYf]U`'mci 'g\ci `X'UXYei UhY`mUW_bck `YX[Y'k \cgY'k cfXg'cf']XYUg'h\Ym$

5 WUXYa]W = DZcfa Uhjcb

:]bU`'9l Ua]bUh]cbg.

:]bU`YI Ua g`]b`H' `&\$&&`k]```VY`\Y`X`cb`]bY`VYlk YYb`&) h\`Bcj Ya VYf`!`, h\`8YWYa VYf`&\$&&`]bWi g]j Yž`UbX gi dd`Ya YbhJfmYl Ua g`VYlk YYb`- h\`!`% h\`>Ubi Ufm&\$&' `]bWi g]j Y"'Mci `UfY`fYei]fYX`hc`VY`Uj U]`UV`Y`cb h\YgY`XUhYg"`D`YUgY`Xc`bchhc`a U_Y`UbmdYfgcbU``cf`lfUj Y``UffUb[Ya Ybhg`Xi f]b[`h\]g`dYf]cX"'

57589A = 7.58J = 7.9

- ? YmiGtUZztc '7 cbtUWiZcf '5 WUXYa]W5 Xj]WY flc[']b 'k]th 'mci f 'n=8 'UbX dUggk cfXt '\text{htdg.#|btfUbYtiW| Yb["i bgk "YXi "Ui # YmlgtUZItc!WcbtUWiXi f]b[!mci f!gti X]Yg!Utli bgk
- <u>? Ymil_BGK_'8 UhYg'</u>! 'Y["'7 Ybgi g'8 UhYžYI Ua 'XUhYgž``UghiXUmhc 'Xfcd'U'Wci fgY'k]h\ci h UWUXYa]\#Z|bUbW]U```]UV]`]miYhW''
- 7 J 9B 'Ghi XYbhi=bhfUbYhrflc[']b 'k]h\ 'mci f'n=8 'UbX dUggk cfXŁ '\hadg.#|bhfUbYh'W| Yb["i bgk "YXi "Ui #ahi XYbh]bhfUbYh'
- Gh XYbh@ZY 'Uh7 J 9Bž]bWi X]b['Gh XYbh GcW]Yh]Yg. \(\frac{1}{2} \) Htdg. #k k k "i bgk "YXi "Ui #Yb[]bYYf]b[#M] \(\frac{1}{2} \)! UbX!Ybj]fcba YbHU\!Yb[]bYYf]b[#gh XYbH\]ZY \(\frac{1}{2} \)
- GdYV)JU``7 cbg]XYfUhjcb. \https://https://www.https://https://https://https://https://www.https://ht

